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MATERIALS MANAGEMENT
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1.0 Introduction

1.1 General: For running any industry or business, we need a number of resources. These resources are popularly known as five M’s of any industrial activity i.e. Men, Machines, Materials, Money and Management. All these resources, which are basic inputs, are important but their relative importance depends upon the particular type of industry and also other environmental factors. Earlier, when many modern machines were not even known, whole activity was centered around one source, the men. But now the importance has by and large shifted from “men” to “machines” and in the recent environment, materials are the life blood of any industry or business and for their proper running, materials should be available at proper time in proper quantity at proper place. Such compelling considerations have led to holistic management concepts like Supply Chain Management.

1.2 Profitability: Basic goals of any industry are survival and earning profits to make adequate returns on capital employed (Investment). The profitability of any organization can be judged by a ratio known as “Rate of Return on Investment”, which is defined as profit earned per unit of investment-

\[
\text{i.e. Rate of Return (ROR)} = \frac{\text{Profit}}{\text{Capital Employed (Investment)}}
\]

\[
\text{ROR} = \frac{\text{Total Receipt (Revenue)} - \text{Total Expenditure}}{\text{Fixed Assets + Current Assets}}
\]

Different strategies for improving profitability (ROR) may be as under:-

(i) To increase total receipts: For this either sales have to be increased or the prices of the products sold have to be increased. Both these alternative are very difficult to achieve in present competitive market.

(ii) To reduce Expenditure: Majority of the expenditure of any industry is either on men or materials. The relative expenditure on men and materials vary from industry to industry but in most of the industries’ expenditure on materials is 45% to 70% of total expenditure. Therefore, two broad areas for reducing expenditure are men and materials. However, reducing expenditure on men is a very difficult task in today’s environment of tight labour laws and strong trade unions. Therefore the other area to be tackled remains reducing expenditure on materials. When we talk of expenditure on materials, it is relevant to point out here that there are two types of costs related to materials- “cost of materials” and “cost on materials” i.e. there is always some extra expenditure related to materials which is not actual cost of materials. It needs to be appreciated that we can very well tackle these extra costs (cost on materials) without
compromising the actual level of service (consumption) and achieve reduction in expenditure.

(iii) **Reduce investment in fixed assets:** As investment has already been made, there is very little scope for reducing expenditure on fixed assets.

(iv) **Reduce investment in Current Assets:** Current assets consist of mainly working capital and inventory. As a rough estimate, about 40% of current assets are generally tied up in inventories of raw materials, consumables, materials under different stages of production and finished goods. If we could reduce stocks of these different types of inventories, we can very well reduce investments in current assets and improve profitability.

1.3 **Functions of Materials Management Department**

(i) **Planning:** For materials there is invariably a need for planning. Apart from day-to-day activity a materials manager keeps a watch on the future activities of the organization, which may call for specific items’ procurement in turn. Planning plays a very important role in assessing the quantity of the material, funds availability for purchase/procurement and selecting the right source for supply.

(ii) **Procurement / Purchasing:** Procurement of an item does not necessarily mean purchasing. An item may be manufactured in the workshop or may be got transferred from another place as available. Alternatively, the item may be purchased from the market. There are two basic types of purchasing in business world - Purchasing for resale and purchasing for manufacturing or consumption. In our organization we are basically concerned with purchasing for manufacturing process or for consumption for maintenance and repair work.

(iii) **Warehousing (Store-keeping):** To make materials available when required and to avoid stoppage of work, it becomes necessary to maintain adequate stocks of a large number of items. It involves a considerable amount of planning to decide the items to be stocked, the locations where these stocks are to be maintained, such as warehouses (stores depots), stacking arrangements and handling equipments etc. to be provided. The procedure for receipt, inspection, issue and accountal of materials and so on have also to be in place. Proper methods of stocking and “preservation techniques” are to be thought of. In manufacturing organizations arrangements of warehousing are to be made not only for raw materials, spares and consumables but for finished products and partly processed materials as well.

(iv) **Inventory Control:** To maintain stocks of materials at the correct level is a tricky problem. For giving better services and to get price advantage it may be necessary to buy in bulk (Economy of scale). But this may mean blocking of substantial amount of money and the inventory carrying costs also go up. If we buy very frequently, cost of ordering goes up. In addition we may not get the quantity discounts. The risk of materials not available when required and the consequent additional costs to the
organization, have to be kept in view. Inventory control therefore, involves designing and following such policies, which will minimize sum total of various costs (the inventory carrying cost and ordering costs) related to materials in an organisation. Inventory control calls for right quantity, right quality, at right price from right source, at right place, at right time.

(v) **Surplus / Obsolete / Scrap Disposal**: During the process of manufacturing, production, track renewals and gauge conversion etc. Railways generate large quantities of scrap, collection and disposal of which also is a big task.

(vi) **Distribution**: Transportation and distribution of raw materials, spares, consumables as well as finished products is an important activity as it involves substantial costs. Efficient & responsive distribution system is very necessary for giving a good service. In the Railways, we are basically concerned with distribution of raw materials, spares and consumable, as the finished product is not in the material form but in transportation service itself. Movement of material for Railway indenters may be by Road Transport, wagons, parcel vans, per bearer etc.

(vii) **Value analysis and cost reduction**: Value analysis talks about value of an item in use, in terms of primary function and cost of the material to achieve the function. It is possible to keep the primary function of the product unchanged and reduce the cost of the material. Value of an item can also be increased by increasing the function and keeping the cost as unchanged. Value analysis may be gainfully applied for high annual usage value items like “A” category items, further details of which are available in subsequent para.

1.4 **Objectives of Materials Management Department**

(i) Ascertaining the needs of various departments in the matter of Stores and materials.

(ii) Preparing a correct estimate of the quantities of stores to be purchased or manufactured in Railway workshops each year.

(iii) Obtaining stores of the desired quality at competitive prices.

(iv) Ensuring supply of stores in the required quantity in the most efficient, economical and expeditious manner.

(v) Maintaining an economic level of investment in inventories.

(vi) Receipt, inspection, stocking and distribution of stores to the various consuming points as and when required.

(vii) Identifying and arranging disposal of scrap and other obsolete material within the shortest possible time to the best advantage of the Railway.

(viii) Developing ancillary industries and indigenous sources of supply to replace imports and

(ix) Maintaining a constant touch with the market to ensure steady flow of material.

1.5 **Organisation of Stores Department**: The Indian Railways net work is owned and managed by the Central Government. Operations are controlled and directed by the
Railway Board under the over-all supervision of the Minister of Railways. The network of Railways is divided into 17 zonal railways each under the control of a General Manager. Each Railway zone is organized on the divisional pattern of working.

In addition there are modern Production Units- viz. Chittaranjan Locomotive Works, Chittaranjan (Electric Locomotives); Integral Coach Factory (Integrated coaches), Chennai ; Diesel Locomotive Works (Diesel Locomotives), Varanasi; Rail Wheel Factory, Bengaluru; Diesel loco Modernisation Works, Patiala; Railway Coach Factory, Kapurthala.

On a Zonal Railway, General Manager is assisted by Additional General Managers and Heads of different departments such as Controller of Stores, Chief Engineer, Chief Optg. Mgr., Chief Comml. Mgr., Chief Mech. Engineer, etc.

1.5.1 Materials Management Organisation in Railway Board

![Diagram]

(Fig. I)

In Railway Board, Member (Mechanical) looks after the materials management function and Additional Member (Railway Stores) is the head of Railway Stores Directorate.

There are Executive Directors, Directors/Joint Directors and Deputy Directors in this Directorate.

The functions of Railway Stores Directorate in Railway Board are summarized below:-
(a) **Policy Formulation:** For efficient materials management on Railways, the directorate frames and issues policy guidelines to all Zonal Railways and production units on stores and purchase matters including coordinating various activities related to materials management.

(b) **Inventory Control:** Railway Board evolve policies for efficient inventory management of Indian Railways. For this, integrated materials budget is processed by this Directorate. They also monitor inventory performance of Railways and production units by getting periodic returns from the Railways and issue directives from time to time.

(c) **Centralized Purchase:** Railway Stores directorate also handles high value purchases. Some of the items are centralized for purchase through Railway Board only:

- Complete units of Rolling Stock,
- Wheel, Tyres & Axles (WTA) including Imports,
- Petroleum products including oils and lubricants (POL),
- Selected critical items for which manufacturing capacity is less than Railways’ demands. These items are centralized for purchase through Railway Board to ensure equitable distribution as per needs of Railways e.g. Composite brake blocks, special steel and
- Processing of all cases initiated by Zonal Railways where the purchase is beyond the competence of General Manager i.e. costing more than Rs. 50 crores per item.

(d) **Liaison with other Ministries:** Some of our purchases are being done through Directorate General of Supplies and Disposals. In cases of imports, sometimes we may require clearance from Ministry of Industry and DGFT. To maintain good liaison with DGS&D and other Ministries, Railway Stores Directorate has posted one JA/SG Grade officer in Board who is designated as Railway Liaison Officer (RLO).

(e) **Coordination for supply of steel:** For ensuring continuous supply of steel from main producers to various Railways and production Units, Railway Stores Directorate has posted one Director at Kolkata who coordinates with steel plants in drawing Rolling programme and monitors supply of steel to various Railways and Production Units. Director (Iron & Steel), Kolkata also plans and coordinates supply of steel to various wagon builders.

**1.5.2 Materials Management Organisation at the Zonal and Depot level**

![Organizational Chart]

```
General Manager

↓

Additional G.M.

↓

Controller of Stores
```
The problems on Railways are more complex than those of a manufacturing organisation as there are thousands of indenters spread over a large geographical area. The Railways, therefore, have to plan locations of various warehouses (Stores depots) with care. Normally, stores depots are located adjacent to major workshops and are known as attached depots. In addition, stores depots for materials of general nature that are required by most of the indenters are situated at one or more locations from where the supplies can be affected. These are called General Stores Depots.

Stores Depots are generally under the supervision of gazetted officers of the stores department referred to as Depot officers. A Depot officer is responsible to the Controller of Stores for efficient maintenance of stock of stores and for prompt service to the indenters in his territory. The depot officer is assisted in his work by Assistant Depot Officers and other senior staff viz. Depot Material Superintendents (DMS).

The work in a Stores depot consists of –
1. Receipt and inspection of stores
2. Storage and issue of materials
3. Dispatch of materials
4. Disposal of surplus stores and scrap materials.
The depot is divided into different wards and sections for stocking different types of materials and to deal with the work mentioned above.

The purchase function is centralized in the Zonal Headquarters i.e. the office of the Controller of stores except for items of small value those can be directly purchased by the executive officers and the depot officers. The Controller of Stores is assisted by Chief Materials Managers (CMMs) and Dy. CMMs. Dy. CMMs are administrative in-charge of different purchase sections as well as stores depots. The purchase sections are under the charge of purchase officers in different grades called Senior Materials Manager and Assistant Materials Manager.

The function of inventory control is basically a part of every stocking organisation. For evolving suitable policies and monitoring the progress a separate cell named inventory control cell exists which functions in the headquarters under the Controller of Stores.

1.5.3 Organization at Divisional level

(Fig. IV)

(a) **Administrative and Technical Control of Sr. DMM/DMM:** As with other branch officers, the Divisional Materials Manager (DMM) works under the administrative control of the DRM in respect of day-to-day working. For technical and procedural matters, DMM is directly responsible to COS and nominated CMM/Dy.CMM.

(b) **Duties of Divisional Materials Manager:**

(I) **Ensuring availability of Materials:** The Divisional Materials Manager should monitor availability of imprest and non-imprest items, vital/safety/passenger amenity items besides tickets, stationery and forms. He should also monitor expeditious receipt of non-stock items, requisitioned through him.

(II) **Ensuring economy in use of materials and making users aware of the need of such economy:** With a view to controlling any wasteful and un-warranted
consumption of material and also to keep the consumption of material within the budgetary provisions, he should take adequate steps.

(III) **Review of sanctioned imprest:** Regular inspection of the stocks available with imprest holders should be carried out by the Divisional Materials Manager to ensure that the imprest limits are realistic and are regularly reviewed/revised wherever necessary. The excess stocks should also be identified during such visits for further redistribution in the Divisions and, if necessary, to other Divisions or for return to the feeding stores depot.

(IV) **Local Purchase:** It should be ensured that stores are purchased at reasonable rates and following precautionary measures are taken during local purchase of stores-

(i) Scrutiny of firms (Likely suppliers)
(ii) Formation of approved list of suppliers, issue of bulletins etc.
(iii) Local purchase as per the laid down procedure
(iv) Physical verification of material on its receipt, before it is ultimately handed over to the consumer.

(V) **Distribution of material from Stores Depots:**
(i) Monitoring and ensuring smooth movement of material within the division.
(ii) Attending the Divisional Control Room from time to time to monitor the movement of material and sort out problems, if any by coordinating with concerned branch officers.
(iii) To plan, develop and head the Divisional Stores Depot to be created in near future.
(iv) Transportation and distribution of materials by road transport within the divisional jurisdiction.
(v) Storage and distribution of direct delivery items.
(vi) Identification of bulk items for storage within the Division for continuous availability so as to improve service levels.
(vii) Co-ordination with feeding depots for timely distribution of stock items to consuming points.

(VI) **Scrap Generation and Disposal:**
(i) Identification and monitoring of scrap disposal on the division with a view to expedite the same.
(ii) Assisting the Auction Conducting Officer in organising public auction for disposal of scrap including proper security as well as arrangement for collection of cash towards security deposits during auction.
(iii) Monitoring progress of return of scrap to nominated depot.
(iv) Disposal of low value items like waste paper, empty drums, etc.
(v) Coordinating deliveries of sold line scrap within the division and attending to complaints and submission of completion reports.
(vi) Monitoring payment of Sales tax/Commercial tax, etc. to State Authorities by Sr.DENs on the scrap sold from the sites wherever such taxes are payable.

1.6 Stores Depots

For facility of work, there should ordinarily be (i) A locomotive depot attached to serve the main Loco workshop (ii) C&W stores depot attached to C&W shops (iii) Signal Stores Depot attached to Signal shops (iv) Electrical Stores Depot attached to Elect. Shops (v) P. Way depot for stocking P. Way & Bridge material (vi) Stationery depot (vii) Scrap yard (viii) General Stores Depot (ix) Electric Loco Stores Depot (x) Diesel Loco Stores Depot (xi) Printing Stores depot attached to Railway Printing Press.

2.0 Classification of stores

All materials are basically divided into two broad categories viz. Stock and Non-Stock. The stock items are those items for which there is a regular demand, regular drawl or consumption and there is a regular recoupment. Non-stock items are required occasionally and not on regular basis. The Stores Department is required to give a service of making thousands of items available to the indenters when required. There are approximately one lakh eighty thousand such items all over the Railways stocked in 259 stores depots. To give this service we have to maintain stocks of a large number of items known as "Stock items" whereas for other items, which are not frequently required or having one time requirement, no stocks are maintained. These items are purchased as and when required to meet specific demands and are called "Non-stock items". The stock items are classified further as under.

2.1 Ordinary Stores: These are generally such items of stores for which there is a regular turn over caused by a constant demand.

2.2 Emergency stores: The stores depots are also required to stock certain items of stores even though they do not have a regular turn over. These are emergency stores and comprise of items which do not ordinarily wear out or require renewal but which are required to be kept in stock to meet emergency due to breakage or unanticipated deterioration. These items are not readily available in the market and as such would require a long time for procurement in case they are not stocked.

2.3 Surplus Stores: Stores, which have not been issued to any user for past 24 months or more, are classified as Surplus Stores. These are of two kinds- ‘Moveable surplus’ and ‘Dead surplus’. Initially they are classified as Moveable surplus but if no use is anticipated on any railway in coming 24 months the items are classified as Dead Surplus which are to be disposed off.

2.4 Special Stores: The items of stores required for works and other special purposes i.e. other than for ‘operation’ or ‘ordinary maintenance and repairs’ are called
"Special Stores". Generally such items are dispatched directly to the users without being stocked in a stores depot.

2.5 Custody Stores: Stores which have been purchased for special works and charged to such works but left in the custody of stores department are called custody stores. These stores chiefly consist of items obtained for the mechanical department for construction of rolling stock sanctioned under the capital or revenue programme. Directly the stores are received and paid for, the cost is at once debited to the works concerned. Instead of the stores lying in the workshops until they are required, the stores depot should keep them in safe custody, proper numerical records being maintained by it.

2.6 Inactive stores: Items which have no issues for last 12 months, and stocks exists are called inactive or non-moving items. It is left to the reader to think what will happen if all items required by the railway are made as stock items or all the items are made as non-stock items.

2.7 Imprest Stores: These items are required for day-to-day operation of services and maintenance of the activity. Imprest stores may be either charged off stores or may be kept in capital account head also. Certain important units like loco sheds, TXR depots etc. require a large number of items for day-to-day repeat use, maintenance and operation of rolling stock, etc. Such items include consumable stores like cotton waste, oils, greases etc. as well as the spares required for rolling stock. The senior supervisor in-charge of the unit like running sheds, train examination depots; Chief Signal Inspector, Electric Foreman etc. are allowed to maintain stocks of nominated items of stores for this purpose. These stores are called imprest stores. The limits up to which the stocks are to be kept are also specified while sanctioning such items and are generally fixed as 2 or 3 months requirement. Imprest stores is like a standing advance of materials to meet the day-to-day requirement of repairs, maintenance and operation of rolling stock etc. On most Railways the imprest stores are charged off to the final head of account under revenue working expenses. However, these units maintain detailed accounts and monthly imprest schedules are sent by the imprest holders to the nominated stores depot for bringing their stocks to the sanctioned imprest levels. This system of imprest stores is useful in ensuring continuous availability of items, which are important and regularly required for day-to-day maintenance and operation. In case of non-compliance of demand for imprest stores, it lapses whereas for ordinary requisitions, the demand is kept pending for compliance as and when the material is received.
3.0 **Standard Nomenclature Lists**

The details of all items having possible use on Indian Railways are contained in booklets known as nomenclature lists. These books contain complete and unambiguous description of items, their code numbers (Known as Price List Numbers or PL Nos.), Specification or Drawing No., the unit of transaction and the depots on various Railways where the item is stocked. These details are elaborated further as under:

3.1 **Complete and unambiguous description:** The description of each item should be framed in such a way that it does not give rise to different interpretations. The objective behind is that the user should know what exactly he wants, the purchase officer should know what exactly is required to be purchased and the supplier in turn should know what is to be supplied. Otherwise the same item could be stocked at different places under different headings, e.g. washers being called as rings, washers, bushings, collects, grommets, spacers, etc.

3.2 **Describing an item:** The basic commodity method has been adopted in describing an item. In this system the basic commodity precedes the detailed description of the item. For example "Ordinary toilet soap" would under the method be described as "Soap, Toilet, Ordinary".

The basic commodity is soap. The word "toilet" specifies the kind of that commodity and "ordinary" further qualifies the toilet variety. It the basic commodity method is not used, the different kinds of soaps will find themselves listed in different places. In short the description should be arranged in the following order of precedence:

1. The mention of the basic commodity
2. The general variance in kind, use, size or shape
3. The particular kind or size.
4. The specification/drawing.

A few instances of how the items would have been described in these books are:

<table>
<thead>
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<th>Item description</th>
<th>Nomenclature book</th>
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<tr>
<td>Brass plated spirit level</td>
<td>Level, Spirit, brass plated</td>
</tr>
<tr>
<td>Taper shank twist drill</td>
<td>Drill, twist, taper shank</td>
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Once the items are properly described they would be arranged in their alphabetical order.

3.3 **End use of items:** In some books the purpose for which the item is used is also incorporated in the nomenclature list. For instance there are numerous grades of lubricating oils stocked and used for various purposes. This information is briefly
mentioned in the nomenclature not as a part of the description but say in remarks column - as this will greatly help the consumer.

3.4 Mention of makers name: The commercial brand or the proprietary make of the item will be avoided in the description. Rather than make or commercial brand, we need to mention specification and drawing reference for clarity.

3.5 Specification or drawing: Reference to a standard specification or in its absence the Railways drawing if any will be mentioned against each description. Specification and drawing references are not only useful to suppliers, including Railway manufacturing shops but also assist the Stores department in the purchase as well as inspection of supplies.

3.6 The unit: It is desirable that for each item all transactions should be in one and the same unit. This will avoid unnecessary references for clarifications and would also facilitate correct issues and receipts eliminating arithmetical errors in conversion from one unit to another. Some of the unit codes have been indicated as under:

   01 = Number,  02 = Pair,  03 = Set,  13 = Kilogram, 14 = Quintal, 15 = Metric Tonne, 22 = Metre and so on.

3.7 Material Code (P.L. No.): In order to recognise every item distinctly, each item appearing in the nomenclature book has been allotted a code number, which is also known as Price List number. These numbers enable unique identification of stock items and as a result of extensive standardisation all over the Railways, easy exchange of information on each item among the Railway Zones and Production Units is possible. While allotting these numbers, an opportunity has also been taken to group the items in a meaningful manner, so that group wise analysis of materials is also facilitated. Each stock item will have a unique PL number.

All stock items are having PL numbers but all PL numbers are not necessarily stock items. Unified lists are common to all Railways and facilitate easy exchange of information between the Railways. Disposal of Surplus Stores and Centralised Purchase becomes easier. In addition to PL no., depot, Unit, Vendor, Consignee etc. are also codified.

3.8 Eight digit coding of PL numbers (Semi Significant System):

```
   **          **          ***         *
   A           B           C           D
MAIN GROUP    SUB GROUP   SERIAL No.  CHECK-DIGIT
```

Part "A" consists of two digits representing the Main Group of stores to which an item belongs.
Part "B" consists of two digits representing Sub Group. Each Main group has been divided into several sub groups. The sub grouping for most of the rolling stock groups is on the basis of major assemblies of which the item is a part e.g. brake fittings, under frame, engine block, etc.

Part "C" consists of 3 digits and it is the Serial Number of the item. No significance is attached to this number.

Part "D" is the last digit, which has a special significance with reference to computerisation. This is the Check Digit. This digit is unique to a given number and it is intended to check the integrity of the number. Whenever the Computer encounters a code number during processing, it calculates the check digit on the basis of Modulus 11 and checks if the calculated digit tallies with the check digit shown in the document punched. If the two do not tally the voucher is rejected.

4.0  Requisitioning and Distribution of Stores

4.1 Placement of requisition: All issues from a Stores depot are made on written requisitions on the prescribed form by the indenter. These should be signed by a gazetted officer except imprest schedules. There are following types of forms in use:-

(1) Recoupment schedule for imprest stores (Form No. S -1830)

(2) Combined requisition and issue note (Form No. S-1313)

(3) Separate requisition form (Form No. S - 1302)

4.2 Points to be observed while placing requisition:

(a) It is very necessary that an indenter when he wants to indent materials refers to the standard nomenclature list and or list of Stock items to ascertain if any of the stock items can possibly be used to serve his purpose.

(b) Give correct code no.

(c) Give correct description

(d) Give correct specification /drg. with latest amendments, if any

(e) Give correct quantity in unit of accountal as shown in nomenclature list.

(f) Give correct Head of Account chargeable

(g) Confirm availability of funds (Duly noting the same in Liability register) and finance vetting wherever necessary.

(h) Give correct details of the consignee (who is to physically receive the material) and consignee code number.

4.3 Nominated depots: Booklet on guidelines to indenting departments, indicate items nominated to a certain depot. The requisitions on receipt in the nominated depot are scrutinised and registered. In case a non-stock item is demanded, the depot after
verifying should offer the nearest equivalent item that is stocked to the indentor, if it suits. If not, the requisition is forwarded to COS office for purchase and supply. Recurring demands are noted to make them Stock items.

Requisition for stock item is sent to the stocking ward. Requisition cum issue note is prepared in 6 foils by the indentor. Block copy is retained as office copy and remaining 5 copies are forwarded to the stores depot.

The stores depot sends two copies to the indentor along with material out of which one copy is returned back by the indentor duly acknowledging receipt of material. The other copy is sent by indentor to his divisional officer to compare with the copy sent by Accounts office with the summary of debits.

The two copies are sent by depot to the Accounts office for posting of which one is sent to the controlling officer of indentor along with debit summary.

One foil is retained as office copy in depot.

Separate requisition and issue forms are used for issue of material to workshops.

**4.4 Distribution of Stores to the Indentors:** On a zonal railway there are thousands of indentors situated all along the railway line, hundreds of kilometers away from the supply point. It is very essential that materials required by these indentors are received by them regularly to avoid any dislocation in their work.

The Railways Stores depots arrange distribution of these materials by one of the following methods: (i) Collection of materials by the representatives of the indentors- this is generally followed by the workshops where the stores depots are attached to the workshops. (ii) Delivery of stores by road through departmental or contracted private motor lorries for indentors situated nearby. (iii) Dispatch by rail parcels for consignments that do not form full wagon load. (iv) Dispatch of full wagon loads - This is generally resorted to when the demands are for quantities which will constitute a full wagon load for a consignee. (v) Through a stores line delivery system: Stores line delivery system is an important service run by the stores department so that every station on the entire railway system receives the supply of materials required by them. Materials are loaded station wise in the stores delivery vans and these delivery vans move from station to station as per a scheduled programme. The staff who accompany the delivery vans deliver the materials required at the station as well as collect certain items which are to be returned by the stations to the stores depots.

The advantages of the stores van service are safe service, less breakage and damage in transit, avoiding loss or pilferage in transit, reduction in cost of packing and collection of returned stores.

Due to aging of store vans and also due to rake load movement of traffic, it is becoming increasingly difficult to attach and detach the store vans very often. As such
small quantity of material to nearby indentors is being distributed by road transport. COS / CMM have been authorised to operate road contracts for the same.

5.0 Recoupment

5.1 Methods of Recoupment: There are three basic methods of Recoupment which are used on the Railway systems:

(i) Maxima- Minima System (EOQ / ROL System)

(ii) Annual Estimate System

(iii) Fixing a level for emergency items and recouping the items to this level on every issue.

5.2 Maximum- Minimum System: The terms maximum and minimum have special meaning when used in this context. Maximum is the quantity, which is most economical to order at a time. If we order large quantities at a time, large amount of money will be blocked and inventory carrying cost will be higher. As against this, if we order small quantity at a time we will have to order more frequently and ordering costs will go up. Maximum aims at a quantity which tends to minimise the total costs. For high value items this quantity has been fixed as 3 months requirements where as for low value items it has been fixed as 12 months requirements.

Minimum- Every item needs certain time for procurement. The time required from the point recoupment is initiated till the point material is inspected and accepted is known as lead-time. It will be easy to appreciate that at the time of recoupment the stocks available (Physical stock plus quantities on order) should be sufficient to meet the requirement during the lead-time. This quantity of material is known as "Minimum". This is also known as "Re-order level" or "Re-order Point". In other words, Minimum or a Re-order level is fixed considering the lead-time consumption and any safety stocks or buffer stocks (B.S.) we decide to keep.

In the maximum minimum system, a perpetual record is required to be kept. As soon as the stocks plus dues touch the minimum level, Recoupment is made for the quantity equal to one maximum. In the Railways shop manufactured items and a few typical depot stock items are recouped on this system. Majority of items follow annual recoupment system. Buffer stock is provided to meet unforeseen fluctuations in lead-time as well as fluctuations in consumption patterns.
5.3 Annual Estimate System: In annual estimate system, a fixed timetable is followed for Recoupment of the items as against the maximum- minimum system where items are recouped as and when they touch the minimum level. The period for which items are recouped is fixed and is called “Contract Period”. This contract period is generally 12 months. The interval between the dates fixed for sending the recoupment to the beginning of the contract period is known as the “Interim Period”. For the purpose of convenience, different contract periods are fixed for different groups of items so that some groups are recouped in January, some in February and so on. This system is advantageous in that it is possible to combine the demands of different depots and make one purchase. This reduces not only the ordering cost but gives a better
bargaining power. Inventory carrying cost can be kept low if order is placed with required number of phased deliveries.

5.4 Recoupment of Emergency Stores: The special characteristics of emergency stores is that the demand is not regular. An upper limit or emergency limit is fixed based on experience. This limit can also be rationally fixed with the use of statistical methods. Every time there is an issue, the item is recouped to bring the stock to this predetermined level.

5.5 Lead Time: The time taken from the date when the demand is registered to the date when the material is physically available for use is called lead time.

5.6 Buffer Stock: In spite of best calculations, there is a variation in lead-time and consumption pattern. To cater to the fluctuations of lead-time and/or consumption pattern, buffer stocks are required. It is generally one month to six months requirement depending upon the category of the item.

5.7 Purchase items & Shop manufactured items: While a very large number of items are purchased by the Railways, a substantial number of items particularly spare parts required for the rolling stock are manufactured in the Railway workshops by the Railways themselves. The manufactured items are recouped on maximum-minimum system. The maxima and minima levels are fixed in consultation with the Production Engineers who will be manufacturing and supplying the items. The work orders for manufacture and supply of items are prepared by the stores depots, when the minimum levels are reached. It is the responsibility of the stores depots to make the raw materials available for such manufacture.

6.0 Purchasing

The purchasing function is generally centralised in the headquarters office of the Controller of Stores. The recoupment or estimate sheets for stock items routed through the stores depots are received in the purchase office of the Controller of Stores for arranging procurement of all these items. The COS has full authority to scrutinize every demand, to question regarding quality of items and modify the quantities.

For small value purchases, however, the depot officers as well as Divisional Railway Managers have been delegated powers to do local purchase.

6.1 Agency for Purchase: Purchase of materials for Railway are arranged either as

(1) Direct purchase by the Railway Administration
(2) Purchase by the Railway Board, DLW, CLW, ICF, COFMOW, CORE
(3) Purchase through the agency of Central Purchase organisation of the Government such as The Directorate General of Supplies & Disposals (DGS&D)

6.2 Direct Purchase by the Railway: Items which are not arranged by the Railway Board and items which are not required to be purchased through the Central Purchase Organisations are procured by the Railway directly through the Controller of Stores. The C.O.S. arranges purchase through –

1. Global tenders involving worldwide sources that generally require Foreign Exchange.

2. Advertised Tender or Open Tender (Generally for items valuing over Rs 10 lakhs). For finalisation, Tender committee recommendations (Tender committee consisting of a stores officer, a user deptt. Officer and an accounts officer at appropriate level) are put up to the competent authority depending upon the value of the case.

3. Limited Tender/ Bulletin tender to approved / registered suppliers for demands of value upto than Rs 10 lakhs.

4. Special limited tenders are issued if the value of the case is more than 10 lakhs and it is desirable to go for limited tender instead of Advertised Tender due to vital or safety nature of item or urgency subject to finance concurrence and competent authority’s sanction.

5. Single tender if there is only one source of supply (PAC - Proprietary Article Certificate) or if the item is of very small value - from Cash imprest by Cash purchase or if any Emergency has arisen.

6.3 Stores Contracts: Stores contracts can be classified as - (1) Rate contracts (2) Running Contracts (3) Fixed Quantity Contracts.

Rate contracts: These are generalised contracts entered into with suppliers for specific items and identifying all terms and conditions including the price, but quantity and consignee are not identified /specified.

The contracts authorise specific orders being placed by nominated officers of Stores department for specific quantities, on the available terms, conditions and price without the need to go through the full procurement procedure. Thus, the rate contracts save lot of time in routine purchase work.

Running Contracts: These are similar to rate contracts, but here the quantities that can be ordered against specific orders are limited to a maximum quantity and minimum quantity.

Fixed quantity contracts: In these contracts, all terms and conditions including price, consignee and the quantity are identified at the first stage itself. Hence they are specific
even at the first stage. These contracts lack the flexibility of Rate and Running contracts.

6.4 Purchase by the Railway Board, DLW, etc: The requirements are consolidated in the COS’s office and the indents are placed on centralized purchase agencies such as Railway Board, DLW, CORE, ICF etc. duly certifying the funds. The Railway Board mainly arranges the procurement of Rolling Stock complete units and POL including fuel. In addition Rails, fish plates, cast iron sleepers, wheels, tyres, axles, imported steel, certain nominated critical items like composite brake blocks, etc are procured by Board.

6.5 Purchases through DGS&D: If DGS&D have entered into a rate or running contract, the railways are required to use the agency of DGS&D for such items.

6.6 Tender finalisation: The tenders are to be decided to either accept the suitable offer out of all the tenders received or reject or file them. All the tenders in which acceptable offer is less than or equal to Rs 10 lakhs can be decided by the respective purchase officer as per the purchase powers delegated to him but, if the acceptable offer is valuing more than Rs 10 lakhs, then the tenders have to be discussed by a tender committee consisting of 3 officers; one from Stores Department, one from Consuming Department and one from Accounts Department. Officers below the rank of Senior Scale cannot be the members of a tender committee except the Accounts member, who is generally one grade lower. Tender Committee is a recommending body and its recommendations may/may not be accepted by a competent Tender Accepting Authority. Some of the points to be kept in mind for deciding tenders are as under:

a. The offer should be technically suitable i.e., the material offered by the firm should be exactly as per our specification given in the tender enquiry. Offers of substandard materials are normally ignored.
b. Out of all technically suitable offers, lowest offer is examined for reasonableness of rates.
c. If the rate of lowest technically suitable offer is considered reasonable then it is to be seen whether delivery offered by the firm will meet our requirement with respect to delivery period and place of delivery.
d. After satisfying about (a), (b) & (c) above, we see that the firm is reliable and has satisfactory record of past performance.
e. Finally before accepting the offer, we see that all terms and conditions offered by the firm are acceptable. We normally, place all our purchase
orders as per "Indian Railways standard (IRS) Conditions of Contract". As per these conditions, we have the right to reject substandard materials, levy liquidated damages for delayed supplies, make risk purchases in case of default, etc.

6.7 Placement of Purchase Order: When the tenders have been decided, purchase officer records acceptance on the tender accepted by him and then the purchase case is passed on to the respective purchase section for preparation of purchase order. After the purchase order has been signed by the purchase officer, it is sent to Accounts Department for pre-check if value is more than Rs 4,00,000/-. All purchase orders issued against demands submitted by Stores Depots for stock items, availability of funds out of purchase grant is to be ascertained from Accounts Department. For this purpose, Accounts Department maintains an up-to-date liability register. At the time of issue of purchase order, value of purchase order is posted in the liability register and funds certificate is recorded on the purchase order. Finally, the purchase order is numbered. Purchase order Number consists of 16 digits out of which first 8 digits are same as Demand number or Tender No., 9th digit indicates mode of purchase, 10th to 14th digits are serial number which are allotted paying authority wise, 15th & 16th digit indicates serial number of the item, consignee, delivery date, if there are more than one item, consignee, delivery dates respectively in the purchase order. Purchase orders valuing more than Rs. 4.0 lakhs are pre-checked by finance to avoid any mistakes. After numbering, the purchase order is dispatched to suppliers by registered post A.D.

6.8 Contract Administration: The purchase activity is not over only on placement of purchase order. For getting the material in time, contract has to be properly administered. Immediately on placement of orders or after some time, we may get request from supplier for amending some of the clauses of the purchase order. All these requests have to be examined in proper perspective and amendments (or modification advices), if needed against the purchase orders are issued. For all the amendments, which may result into financial repercussions, we may have to take finance concurrence. If the supplier is not able to supply the materials within the stipulated delivery period, then as per law of contract, contract expires. Further extension has to be with mutual consent. Normally suppliers request for extension of delivery date and this is examined keeping all relevant factors in mind. As per IRS conditions of contract, we have right to recover liquidated damages for any loss or inconvenience suffered by us due to delays in supply of material. Sometimes, firms fail to supply the materials. As per IRS conditions of contract, if the firm fails to supply the material, we can purchase the material from the alternative sources at the risk and cost of the supplier i.e. if we pay any higher prices to the alternative source, the difference can be recovered from the defaulter. These purchases from alternative sources are known as risk purchases. In order to ensure that risk purchase is legally tenable, we have to follow certain procedures by which reasonable opportunity to make good the loss is given to the supplier and the risk purchase has to be arranged within a reasonable time (Which is normally 6 months for readily available items and 9 months for specific manufacturing items) from the date of breach of contract. Sometimes disputes may arise in the
execution of the contracts. If the dispute cannot be mutually settled, then as per IRS conditions of contact, it is to be referred to a sole arbitrator appointed by the General Manager and decision of the arbitrator will be final in such a case.

6.9 Supply of materials: Materials against purchase orders placed by Controller of Stores are supplied to the consignee mentioned in the purchase order.

6.10 Imported Stores and Indigenous Stores: In 1950-51, 23% was the proportion of imported stores out of all type of procurements and now it is only of the order of 3% to 5% by progressive indigenization.

7.0 Receipt & Inspection of Stores

The stores ordered by the Railways or by the Central purchase organisations are delivered either to a Stores Depot for the purpose of inspection and stocking in that depot or for onward dispatch to the user or are directly delivered to the user himself. In some of the purchase contracts the materials are inspected by the nominated inspecting authorities before dispatch of these materials. In these cases generally payments of 90% to 98% are released on proof of inspection certificate and dispatch. The balance payment is only released on final inspection by the consignee to whom the material is delivered by the supplier. In cases where such a clause for advance payment is not provided, 100% payment is made only after the material is received, inspected and accepted by the consignee and the bill is certified or receipt note granted. It is important that whether any inspection has been earlier carried out or not the consignee must inspect within reasonable time the materials properly and certify the bills or inspection notes. For inspection, the agency of test houses or Chemist & Metallurgist etc. may be employed. Pre inspection of materials is done by RITES/ RDSO/ DOI/ any other nominated agency. If after inspection the items are found to be not acceptable a rejection memo is issued indicating the reasons of rejection. If the stores are pre-inspected by an inspecting agency, then the consignee should arrange for the joint inspection and the finding of joint inspection will be final. The rejected material is returned to the supplier if no advance payment is made and after checking whether any ground rent is due etc. He is asked to tender fresh supplies to fulfill the contract.

8.0 RETURNED STORES

8.1 All the materials no more required by the consuming departments should be returned to the nominated stores depots for taking disposal action. Such materials are returned along with an Advice note for returned stores (form No. S-1539) prepared in 6 copies. The 6 copies are distributed in such a way that debits and credits can be raised by the Accounts department for the transaction satisfactorily.

8.2 Advice note for Returned Stores:

(a) As mentioned above the Advice Note for Returned Stores is to be prepared in six copies. The returning subordinate will retain one copy (1st copy) with him for his record.
Out of remaining 5, he will send 3 copies (2\textsuperscript{nd}, 3\textsuperscript{rd}, & 4\textsuperscript{th}) to the nominated Stores Depot either along with the material or along with R.R./P.W. Bill, if the material has been dispatched by Rail. At the same time he will send one copy (5\textsuperscript{th}) to the Stores Accounts office of the depot and last copy (6\textsuperscript{th}) to his controlling officer. The purpose of these 5\textsuperscript{th} & 6\textsuperscript{th} copies is to give advance information to Stores Accounts Officers and his controlling officer so that they can monitor for getting timely and proper credits for their returned materials. This procedure is explained in subparagraph (b) below.

(b) The controlling officers are required to maintain a Departmental Register of Advice Notes (S-1605) for keeping watch on the accountal of returned stores. As soon as 6\textsuperscript{th} copy of the Advice Note is received from the subordinate, it is entered in this Register (For convenience separate pages in the register may be allotted for each subordinate). At this stage, Advice Note is also scrutinized to see that it has been correctly prepared. If some information is found incomplete, further details are added in the Advice Note and then this is forwarded to the Stores Depot for getting credit particulars. Similarly Stores Account Office is also required to maintain an Accounts Register of Advice Notes (S-1622) to see that all the materials returned by various field subordinates are taken into books promptly and properly.

8.3 Valuation of Returned Store : The rate at which credit for returned stores is to be given depends upon whether the material is a Stock item or a Non-Stock item and also on its condition.

(a) Credits for stock items are granted depending upon their stock position in the Depot and their condition. If the item is not overstock, then credit for a new Stock item is granted at full Book Average Rate and at half of this for second hand serviceable materials. However, if the depot stock of an item has already been declared as Dead surplus, then credits at scrap rates are given even for new or serviceable Stock items.

(b) **Valuation of Non-Stock Items** - For Non-Stock items it is not certain whether they will be required for Railway use or not. Also, no separate book rate is maintained for them. Therefore, credit for all Non Stock items, whether new, second hand or serviceable, is granted at approximate scrap rate.

(c) Credit for second hand Rail released from line which could be supplied to new projects or to other administrations is given at 65% of the present market price of new rail.

(d) Valuation of plant and machinery :- In the case of serviceable plant and machinery, their value should be determined according to the following formula:

\[
\text{Price} = R - (N/L) \times (R-S), \text{ Where,}
\]

\[
R = \text{The present price of new machine}
\]

\[
N = \text{Age of the machine}
\]
L = The estimated life of the machine
S = Scrap value of the machine

9.0 **Surplus Stores**

When it is observed that items of Ordinary Stores have not been issued for a period of 24 months, they are then categorized as Surplus Stores. If it is anticipated that such items are likely to be used in the near future say next 24 months, it is called **Moveable surplus**. If it is established that these items will not be used on any Railway for another 24 months, it is then categorised as **Dead surplus**.

10.0 **INVENTORY CONTROL**

10.0 Improving Service level and Inventory Control: To ensure continuous availability of stores to user departments while keeping the stock levels at optimum level is one of the important objectives of Stores Department. Efficiency with regard to optimum stock levels is measured by working out inventory turnover ratio on every 31st March, which is worked out as under:

\[
\text{Inventory Turn Over Ratio} = \frac{\text{Total inventory balances in Rupees on 31st March}}{\text{Total value of stores issued during the year}} \times 100
\]

The target for inventory turn over ratio is generally kept around 15%. The efficiency with regards to service is worked out by compiling compliance percentage of materials against all requisitions received in Stores Department. The target for compliance is kept between 95% to 98%. For vital and safety items, the compliance is aimed at 100%.

In order to keep inventory turn over ratio and compliance figure at optimum level, selective inventory management method is used on Indian Railways. We classify the item in A-B-C category as well as vital, essential and desirable category. These are explained below. We also use standardization, variety reduction and extensive computerization for inventory management.

10.1 **A-B-C Analysis:** This analysis is based upon Pareto Principle according to which in many situations, majority of the activity (say 80%) is governed by very few (say to 20%) attributes. Hence, if in Stores all the Stock items are analysed in terms of their annual consumption - usage value, major part of total consumption value say 70% is represented by around 10% of total items, 20% of total annual usage value is controlled by 20 % of total items, and remaining 10 % of total consumption value is represented by a large number (say 70%) of small consumption value items. In Railways we have decided that all high consumption value items which represent 70% of total annual usage value, will be classified as "A" category, items which represent further 20% of
total usage value will be classified as "B" category and all remaining items representing 
10% consumption value will be "C" category. This analysis is done on the computer as 
explained below:

(a) First of all annual issue values of all the items which were issued from all the 
depots are added together to find total issues (in rupees) of the Railway,
(b) Then all the items are sorted in descending sequence of their issue value on the 
entire Railway (i.e. after adding issues of all individual depots),
(c) Then we go on counting the items adding issue value of the items to a " 
cumulative issue value" counter. When the value in this counter represents 70% 
of total issues after adding a particular item, all the items from top to this item are 
classified as "A" category items,
(d) This is further continued and when after adding issue value of an item to 
"cumulative issue value" counter, value in the counter is equal to 90% of total 
issues, we mark all items excluding "A" category items to the last item as "B" 
category items,
(e) All remaining items are classified as "C" category items.

For the purpose of Inventory control, "A" category items are most important. Therefore, 
they are closely monitored at highest level at very frequent intervals. In Railways, their 
stock levels, consumption forecast etc., are monitored at the level of COS /CMM every 
month. "B" category items are monitored at the level of CMM/Dy.CMM every quarter or 
every six months. Stock verification of "A" category items is carried out every six 
months; for "B" category items every year and once in two years for "C" category. To 
achieve better inventory turnover ratio, we intend to keep average stocks of 3 months, 
6 months and 12 months of "A", "B" and "C" category items respectively.

10.2 V-E-D Classification: A-B-C Classification is on the basis of consumption value 
of an item and does not give any importance to the criticality of the item and therefore, 
only A-B-C Classification is not adequate. Classification done on the basis of criticality 
of the item is known as V-E-D, where the items are classified as Vital, Essential and 
Desirable. Vital items are those items, which are very critical for the operations and do 
not permit any corrective time i.e. they cannot be procured off the shelf if they are not 
available. Essential items are comparatively less critical and work without them can be 
managed for a few days. All remaining items are known as Desirable items.

10.3 A-B-C / V-E-D matrix tackling the items on the basis of their consumption value 
and also criticality improves the service to the customer as well as we are able to 
control the inventory. We can design the stock levels in such a manner that is most 
desirable. For remaining items, service levels can be in between these two levels and 
average stock holdings can be designed accordingly.

<table>
<thead>
<tr>
<th>TYPE OF ITEM</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
</table>
Critical scrutiny of requirements for economy | Liberal & better compliance for reducing Stock Out Costs
---|---
Procurement not to be encouraged | Routine scrutiny

Standard Tools for Inventory control:

- By selective management (ABC/VED/XYZ /SOS/FSN etc),
- Management by exceptions (out of stock, inactive, surplus etc.),
- Designing appropriate recoupment policies,
- Rationalisation /Standardisation,
- Value analysis,
- Codification and computerization,
- Concept of classifying materials on market availability (R, N, D) for buffer stocks.

### 11.0 SCRAP DISPOSAL

#### 11.1 Scrap: The word scrap has a special meaning in the railway working. Apart from the worn-out and damaged parts and materials arising out of operation, production and maintenance in the Railway system, scrap also includes all items, which are no longer useful for the purpose for which they were originally procured. All such scrap is required to be expeditiously collected in the scrap yards and disposed off. During the year 2011-12, Railways disposed off scrap worth Rs. 4000 crores.

#### 11.2 The scrap accumulated in scrap depots are disposed off periodically by the Stores department, by adopting any one of the following methods:

- (a) Public auction
- (b) Tender Sales (Some times auction cum tender method is also adopted for better results)
- (c) Direct Sales
- (d) Sales to Employees
However, no such sale can be effected before the scrap and other obsolete items on sale are cleared by a Survey Committee. This committee consists of stores and technical officers who will inspect every materials proposed to be scrapped and sold barring a few exceptions like condemned rolling stock, turnings and borings, etc. The Survey Committee thus ensures that no material useful to Railway can be disposed off unless the same is inspected and cleared by an expert body. For rails and other P. Way material, Engg. Department does the necessary condition report and inspection and CTE/CE’s sanction is obtained for disposal.

11.3 Sources of Scrap:

(a) Railway Workshops
(b) Condemned Rolling stock such as wagons, coaches, locomotives, boilers, etc.
(c) Scrap permanent way materials such as released condemned rails and other P way.
(d) Inactive/surplus items being declared as scrap.

11.4 Location and layout of scrap yard: The location of scrap yards is determined largely on consideration of freight charges, space availability and proximity to the market for disposal. Arrangements should be made to see that double handling is avoided, as far as possible.

11.5 Formation of Lots: Scrap of a particular description (PL No. as classified in the Scrap schedule) received from different sources (in case of mixed scrap, after sorting) are placed in a particular lot. The idea of lot formation is to accumulate economic quantity of a particular item of scrap to be attractive to participants in auction. Therefore, a lot should not be too small. This should also not be too large as this will restrict auction virtually to a few rich parties only, on account of high value and will promote “Cartel” or “Ring formation”.

11.6 Lot Register: Once the lots have been formed for the purpose of auction sale, the details are entered into Lot Register which have columns for lot No., Description, Book Rate, Approximate Quantity, Rate secured at previous auctions, Name of the Purchaser, Rate at which auctioned, total value of stores and remarks.

11.7 Survey of Scrap and other Materials: Survey committee is the Committee of Senior scale or JA Grade officers of the Consuming Departments with Stores Depot Officer as convener member and major workshop officer as Secretary. This committee is a standing committee appointed by General Manager for the purpose of inspecting critically the condition of all Stores:

(a) That have deteriorated in value, for any reason,
(b) Broken or damaged in transit, or while in stock,
(c) Lying in the custody of the Stores Department for a long time and considered by Controller of Stores as having become unserviceable owing to obsolescence or other causes and
(d) Received as scrap from the line.

**Preparation of survey sheets:** Survey sheets on the prescribed proforma are prepared in which recommendations against each item are recorded by the Secretary of the Committee and signed by all members of the survey committee.

Some items are exempted from surveying by survey committee. These items are turnings and borings, waste paper, firewood, saw dust etc. Survey is not required for condemned rolling stock, rails and sleepers on line for which condemnation certificates given by Chief Work Shop Manager and Chief Track Engineer respectively are considered adequate. Lots of small value (Rs. 5000/- at present) are also not required to be surveyed for which depot officers have been given powers to scrap such lots.

### 11.8 Sale of Scrap Materials:

(a) Sale through Public Auction- By conducting public auction at regular intervals and putting the materials in those auctions.

(b) Sale through Tenders- By inviting tenders for the materials to be sold either through advertised tenders or by giving tender enquiries to likely purchasers.

(c) Direct Sale- Some materials may be sold directly at pre-determined rates to Railway employees and other government organisations. The rates are generally based on last auction rates.

(d) Quoting for Sale- For some of the items, we may submit quotations/tenders to other organisations if they have floated tenders for purchase of scrap.

### 11.9 Auction Sales:

Auctions are generally conducted departmentally. On the nominated date and time, auction is started. In order to restrict entries of undesirable elements, a system of refundable entry fee of Rs. 10,000/- is in place. Depot Officer who is of the rank of J A Grade, conducts the auction in the presence of a representative of Accounts Department. The decision to sell a particular lot during the auction is taken by the Depot Officer. For taking this decision, he fixes a Reserve Price of each lot in advance. This reserve price is fixed keeping in mind past sale rates, market trend and also condition of the lot. Depot officer has also discretion to accept below the reserve price by certain amount (normally 5%), if the bids to the reserve price are not coming and there are reasons for accepting the bids at lower rates.

### 11.10 Bid Sheet:

At the time of auction when the lot has been sold, a Bid Sheet is prepared which contains details of lot No., Brief description of the lot, Quantity sold, the rate at which sold, the earnest money realized and the total amount payable and special conditions, if any. Bid sheet is signed by the Auction Conducting Officer, Accounts Representative, Custodian DMS of scrap yard and the purchaser.
11.11 **Issue of Delivery Order:** When the balance sale value has been paid by the purchaser in full and he has fulfilled all the other conditions of sale, a Delivery order is issued to him by the Depot Officer. Delivery order is an authority for the purchaser to take delivery from the Scrap Yard. It specifies the date by which the delivery is to be taken. In case facility of installment has been allowed to the purchaser, delivery orders are also issued in installments for the quantity for which payment has been received. In such cases, we have to ensure that earnest money deposited is adjusted only at the end.
11.12 Scrap Disposal Flow-Chart:

- W/S
- Line
- Receipt (in Depot) S 2405-2407
- Unloading Sorting Accountal S 2402, 2406, 2407, 2409
- Formation of Lot Lot Register Survey S-2221-2229, 2408, 2410, 2411
- PW/CRS
- EMD Balance Bid ST DO S 2321(a & d) S 2334-2336 2424
- Condition Of sale GC/SP
- R.P
- Sale Auction Tender Tender cum auction Direct sale RGC S-2237-2240, S 2301-2308 S 2409-2412
- Delivery Depot, PW/CRS Other S 2321, 2323, 2423, 2430 to 2436
- Completion report S 2440, 2441
12.0 IMPORT

1.0 The New Exim Policy:

The new Exim Policy was introduced w.e.f. 1st April 1992. Imports/Exports can now be done freely except as regulated by the Policy, by means of Negative Lists. The Exim Policy 2002-07 is currently in vogue.

The Acts governing Foreign Trade in India are:

- Foreign Trade Development and Regulation (FTDR) Act,
- FEMA & Day to day regulations as per Exchange Control Manual of RBI

1.1 Negative Lists:

“Negative Lists”, are issued as a part of Policy. Negative List is issued in three parts as under -

(i) **Prohibited Items**: Prohibited goods shall not be imported/exported. Examples are;

- Tallow fat, poultry fats, and edible fats of animal origin.
- Animal rennet.
- Wild animals, their parts and products.
- Ivory.

(ii) **Restricted Items**: These items can be imported only against Import License & by the actual user, unless waived by Director General of Foreign Trade (DGFT), New Delhi (and its subordinate offices), Ministry of Commerce. Examples of such items are;

- Consumer goods.
- Cotton, woolen, silk, manmade & blended fabrics.
- Alcoholic beverages, wine, saffron, precious, semi-precious and other stones.
- Safety / Security related items.
- Fire arms, ammunitions.
- Paper for security printing, currency papers.
- Explosives.
- Chloroform, Hydro carbons.
- Seeds, plants and animals.
- Insecticides & Pesticides.
- Drugs & Pharmaceuticals.
- Chemical & Allied items.
- Items related to small scale sector.
- Aircraft & Helicopters.
- Natural rubber.
- Rare earth oxide.
- Naphtha
(iii) **Canalized Items:** These items can be procured only through Agencies specified in the Negative List. However CCI&E may grant a license to any other person to import/export. Examples are:
- Petroleum Product, Aviation fuel, Crude oil, Motor spirit, High speed diesel: **IOC**
- Nitrogenous, Phosphatic and Potassic, –Fertilizers, Potash: **MMTC & STC**
- Coconut oil, Palm Oil: **STC**
- Cereals: **FCI**
- Clove: **STC**

2.0 **Why Import? There are following main reasons:**
- Requirement exceeds indigenous manufacturing capacity; excess requirement is imported.
- Urgent requirement; DP of indigenous suppliers not suitable.
- PAC item of a foreign supplier (single source).
- Technical advantage.
- Cost advantage.

2.1 **What is being imported?**
- Diesel & Electric Locomotives & its parts and fittings.
- Diesel Components: Major Purchase By DLW: From USA, Canada. Governors: From USA/ Japan.
- Electric Loco Spares: By CLW / RB from USA , Sweden, Germany.
- Coaches (High Speed Bogies): By RB from France, Germany.
- EMU Spares
- Track laying & maintaining machines & Spares
- WTA: By RB. Wheels from Brazil, Poland, Japan, South Korea.
- Bearings: From Timken - USA, UK, SKF/ Sweden, FAG/Germany.
- Rails: From Poland, Brazil, UK, USA.
- Telecom Items: From Japan, USA.
- Machines (M&P): BY COFMOW – From Germany, Sweden, France, USA, Japan & its Spares by user Rlys.

2.2 **Level of Imports by IR:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Imports (Cr.)</th>
<th>Total (Cr.)</th>
<th>%age of Imports</th>
</tr>
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<tbody>
<tr>
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<td>18.40</td>
<td>81.60</td>
<td>23.0</td>
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<tr>
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<td>143.80</td>
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<td>440.10</td>
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<td>18651.00</td>
<td>3.2</td>
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<tr>
<td>2007-08</td>
<td>630.00</td>
<td>21982.00</td>
<td>2.9</td>
</tr>
</tbody>
</table>
3.0 Import Procedures

3.1 Pre-Tendering Stage:
- Important Points are as under-
  a) FOB price with details of freight & insurance.
  b) Purchaser’s right to place contract on FOB, FAS, CIF.
  c) Pre-dispatch inspection details.
  d) Packing details with approximate weight of the consignment.
  e) Essentiality Certificate

- Additional information on Indian Agents is required, in case the supplier wants to supply through the agent (Ref. Railway Board’s letter no. 89/RS(G)/779/6 dated: 22.01.2009)
  a) Relationship with the Principal, Agent/Associate/Sole Distributor.
  b) Agents’ IT PAN No.
  c) Capability; service only on the contract or in general, facilities available with the agent.
  d) Past Performance details of the Agent.
  e) Contacts of Agent.

3.2 Tender Invitation: While issuing Global Tenders, (especially against WB loans), tenders are required to be published –
- In all member countries of WB (Developed/ Developing).
- Send Tender Notice to local official representatives of such countries (Embassies or Trade Commission).
- News Papers of purchasing country.
- Follow World Bank bidding & contracting procedure, when required.

3.3 Currency of Bidding:
- Price in the bid to be in the currency of bidder.
- Price can be in US $ or any “widely used currency” in the International Trade.
- Expenditure incurred in India to be paid in Indian Rupees.

3.4 Currency of Payment:
- In which price was quoted by the successful tenderer.
- Purchaser reserves the right to pay in the currency of the “country of origin”, if price is quoted in any other currency.
- Rate of exchange as applicable on the “date of payment”.

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount 1</th>
<th>Amount 2</th>
<th>Rate</th>
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<td>1151.00</td>
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<tr>
<td>2010-11</td>
<td>1082.00</td>
<td>29099.00</td>
<td>3.7</td>
</tr>
</tbody>
</table>
3.5 **Bid Classification, after technical evaluation (WB funded procurement):**
- **Group A:** Offer for indigenous Equipment, with more than 20% indigenous input (Value addition).
- **Group B:** Imported item, available in India, on Rupee payment (These are no more foreign goods, since custom duty paid).
- **Group C:** To be imported (Outside Group A&B).
  - If C is costly, cheaper of A&B can be purchased. If C is lowest, A to be loaded with 15% price preference, then cheaper A & C to be accepted.

3.6 **Tender Finalization, Some Points:**
- Tender Committee level is decided based on landed Value of the offers.
- No Price preference is given to indigenous supplier against a foreign supplier.
- Agency commission is not to be taken as value added in India.
- 15% Price Preference to indigenous suppliers is available: Only against GT under WB funded procurements & provided value addition in India exceeds 30% of ex-factory price.
- No negotiation is allowed in case of WB aided purchases.

3.7 **Basis of calculating CIF Value:**
- Rate of exchange on date of tender opening (Commercial Bid).
- @ BC Selling rate as advised by SBI for the purpose of Rate of exchange.
- Add 10% for freight & 1% for insurance, if actual not available and quoted by the bidder.

3.8 **Agency Commission:**
- It is paid in non-convertible Indian Rupees at TT Buying Rate and as ruling on the date of contract finalization.
- It is a fixed amount.
- Railways reserve the right to retain commission till the Agent discharges his entire warranty obligations, satisfactorily.
- Commission if higher than 5%, will need consideration at AGM/GM’s level.

4.0 **Shipping Arrangements:**
- Contract should be made, preferably on FOB basis.
- Shipping to be arranged through “Shipping Coordination Committee”, SCI.
- Indian Flag vessel to be used.
- Age of the vessel to be < 15 years.
- Ship belonging to India-Burma-Bangadesh-SriLanka-Pakistan, Conference Lines.
- It facilitates payment of freight in Indian Rupees.

4.1 **Air Lifting is permitted only when:**
- It is Electronic / Sophisticated.
- In case of fragile goods.
- Urgent requirement.
- Consignment should move by Air India.
- FE can be released by GM with FA&CAO’s concurrence.
- Full powers for air freighting as per acceptance with COS/GM with FA&CAO’s personal concurrence.

5.0 Types of Import Contracts:

INCO terms- There are 13 INCO terms.

(i) FAS (Free Alongside Ship):
- Responsibility of foreign supplier ceases once he delivers material alongshore.
- Importer has to bear all charges of –
  - Loading the consignment into the ship
  - Freight charges from port of dispatch to port of entry.
  - Insurance charges.
  - Can choose Indian vessel for shipping the goods, to save foreign exchange to the extent of ocean foreign charges.

(ii) FOB (Free on Board):
- Supplier’s responsibility is to get the goods loaded into the ship.
- Freight & Insurance charges are to be borne by buyer.
- Buyer can choose Indian Flag ship & save foreign exchange to the extent of ocean foreign charges.

(iii) CIF (Cost Insurance Freight):
- Add the element of Freight & Insurance to FOB contract & it becomes CIF contract.
- Total price up to the port of destination is the contract price here.
- Supplier sometimes insists on their choice of vessel, which may not be Indian Vessel.

(iv) FOR (Free on Rail) [Only when Indian agent handles port clearance etc.]:
- This is not an INCO term.
- Supplier’s Agents directly deal with the Principals and Offers submitted by Indian Agent on FOR basis.
- All transactions, including cargo clearance at Indian Port are to be handled by the Agent.
- Consignment placed on FOR station of dispatch/destination as per the contract condition.

6.0 Pre-dispatch Inspection of Imported consignment:
- In case of pre-dispatch inspection, it is done by Railway Advisor (RA) attached to High Commission of India, London for supplies from Europe.
- RAs are also attached to Indian Embassies in Germany, Switzerland & France.
- RITES covers the rest of the locations.

7.0 Insurance Policies:
- All the imported cargos of IR are insured.
- Railway Board takes two open covers for insurance as under-

7.1 **FPA (Free Particular Average) Risk Cover:**
This insurance policy covers loss:
- When vessel is stranded, sunk or burnt, due to storm or act of God.
- Steel & Bulk cargo are covered under FPA.
- In items of this policy claim for total loss only are entertained & not for damage or short landing etc.

7.2 **All Risk Open Cover:**
This policy covers –
- All types of imported stores other than Steel & other Bulk Cargo.
- Covers risks of all sorts including loss/damage, theft & non-delivery of the consignments.
- Warehouse to warehouse risk cover is available.

8.0 **Payment in case of Import contracts:**

(i) **Relevant Considerations:**
- Supplier & Buyer have no intimate knowledge about each other hence, not sure of credit worthiness of each other.
- Both the parties are governed by rules of their respective countries, which are normally different sets of rules.

(ii) **Risks involved from the Contracting Party’s Points of view:**
- If seller sends goods without payment: There is a risk of non-payment or late payment.
- If buyer sends payment without receiving goods. There is a risk of non-supply or late supply.
- There is a clear need for protection of interests of both the parties i.e. the buyer and the seller.
- Solution is available in the form of Letter of Credit

8.1 **What is Letter of Credit (LC)?**
- An instrument to cover risk for both parties
- It is a commitment by Bank
- To place an agreed amount of money at Seller’s disposal
- On behalf of the Buyer
- Under precisely defined conditions

**Parties to a Letter of Credit (LC)**
- Buyer/Importer - Applicant
- Seller/Exporter - Beneficiary
- Buyer’s Bank - Issuing Bank
- Bank in Seller’s Country - Advising/Notifying /Negotiating Bank
8.2 Various types of LC:

(i) Revocable LC:
- It is a legally binding undertaking.
- However it may be cancelled or amended anytime by the buyer, but before the payment is made, without consultation or prior notification to the seller.
- As per UCPDC, all credits are revocable unless stated otherwise.
- Not preferred by the seller, obviously.

(ii) Irrevocable LC:
- Issuing Bank gives binding undertaking to the seller for making payment.
- Provided the seller complies with prescribed conditions in the LC.
- This LC cannot be cancelled or modified without the consent of all the parties concerned.

(iii) Revolving LC:
- When regular continuing shipments by seller is involved this type of LC is used.
- Amount once utilized is available again (like Imprest recoupment).
- The advantage of this type of LC is that fresh LC is not required to be obtained for each shipment, which is both time consuming and costly.
- The buyer may indicate maximum number of revolutions and maximum amount available under the credit, for a specified period.

(iv) Standby LC:
- It is similar to Performance Bank Guarantee but in the form of a LC.
- Issuing Bank assures the beneficiary that in the event of Buyer failing to pay, the beneficiary may request payment from the issuing Bank.

8.3 Opening of LC:

(i) Making of Application for opening of LC:
- Made by nominated Accounts Officer of the Railway.
- He makes the application and the guarantee for LC to the issuing Bank.
- Addressed to RBI and copied to SBI (the LC opening Bank) and the Importer (COS).
- It is a contract between the Bank and Importer.
- The application stipulates conditions for discharge of L/C and release of payment.
- Conditions not to be in contravention of Exchange Control Regulations.

(ii) Information in L/C Application:
- Beneficiary’s name and address,
- Value (not exceeding CIF value of Import License (IL), where applicable),
Price, Quantity of goods,
- Payment Terms, LC type etc., Insurance Terms,
- Description of goods (as per IL),
- Delivery/Sale terms (FOB, FAS, CF, CIF),
- Country of Origin certificate, from Chamber of Commerce of the seller's country,
- Port of shipment and Destination,
- Contractual Date of shipment and IL Validity date.

8.4 LC Negotiating Documents:
The seller is required to present following documents to the bank for negotiating and getting his payment:
- Bill of Lading/Airway Bill: Evidence of dispatch,
- Marine Insurance Policies,
- Signed Invoices,
- Country of Origin certificate,
- Packing List,
- Inspection Certificates, when required,
- Freight Note.
8.5 Issue and Utilisation of LC:

**Letter of Credit: Flow Chart**

- **L/C Issuance:**
  - Buyer
  - Application for opening L/C
  - Buyer’s Bank
  - L/C Notified
  - Bank in Seller’s Country
  - Seller

- **L/C Utilization:**
  - Buyer
  - Debit A/C & Send Documents
  - Issuing Bank
  - Seller
  - Document Submitted
  - Negotiating Bank
  - Payment Released
  - Goods Dispatched
  - Forward Documents
  - Reimburse
9.0 Agencies related with Import work:

Purchase office, Port consignee, Clearing agent, Bank (Indian/foreign), Supplier, Shipping company, Customs Department, Port authorities, Ultimate consignee, Insurance company, Indian agent of supplier.

12.0 Introduction to Supply Chain Management

1.1 What is Supply Chain Management:

Fierce competition in today’s global markets, the introduction of products with shorter life cycles, and the heightened expectations of customers have forced business enterprises to invest in, and focus attention on, their supply chains. This, together with continuing advances in communications and transportation technologies (e.g., mobile communication, Internet, and overnight delivery), has motivated the continuous evolution of the supply chain and of the techniques to manage it effectively.

In a typical supply chain, raw materials are procured and items are produced at one or more factories, shipped to warehouses for intermediate storage, and then shipped to retailers or customers. Consequently, to reduce cost and improve service levels, effective supply chain strategies must take into account the interactions at the various levels in the supply chain. The supply chain, which is also referred to as the logistics network, consists of suppliers, manufacturing centers, warehouses, distribution centers, and retail outlets, as well as raw materials, work-in-process inventory, and finished products that flow between the facilities (see Figure 1-1).
Definition of supply chain management is as follows:

Supply chain management is a set of approaches utilized to efficiently integrate suppliers, manufacturers, warehouses, and stores, so that merchandise is produced and distributed at the right quantities, to the right locations, and at the right time, in order to minimize systemwide costs while satisfying service level requirements.

This definition leads to several observations. First, supply chain management takes into consideration every facility that has an impact on cost and plays a role in making the product conform to customer requirements: from supplier and manufacturing facilities through warehouses and distribution centers to retailers and stores. Indeed, in some supply chain analysis, it is necessary to account for the suppliers’ suppliers and the customers’ customers because they have an impact on supply chain performance.

Second, the objective of supply chain management is to be efficient and cost-effective across the entire system; total systemwide costs, from transportation and distribution to inventories of raw materials, work in process, and finished goods, are to be minimized. Thus, the emphasis is not on simply minimizing transportation cost or reducing inventories but, rather, on taking a systems approach to supply chain management.

Finally, because supply chain management revolves around efficient integration of suppliers, manufacturers, warehouses, and stores, it encompasses the firm’s activities at many levels, from the strategic level through the tactical to the operational level.
What makes supply chain management crucial?

1. **Supply chain strategies cannot be determined in isolation.** They are directly affected by another chain that most organizations have, the development chain that includes the set of activities associated with new product introduction. At the same time, supply chain strategies also should be aligned with the specific goals of the organization, such as maximizing market share or increasing profit.

2. **It is challenging to design and operate a supply chain so that total systemwide costs are minimized, and systemwide service levels are maintained.** Indeed, it is frequently difficult to operate a single facility so that costs are minimized and service is maintained. The process of finding the best systemwide strategy is known as global optimization.

3. **Uncertainty and risk are inherent in every supply chain;** customer demand can never be forecast exactly, travel times will never be certain, and machines and vehicles will break down. Similarly, recent industry trends, including outsourcing, offshoring, and lean manufacturing that focus on reducing supply chain costs, significantly increase the level of risk in the supply chain. Thus, supply chains need to be designed and managed to eliminate as much uncertainty and risk as possible as well as deal effectively with the uncertainty and risk that remain.
Part I

Q No. 1 Answer briefly any five of the following:-

A) What are the advantages of standardisation?

B) What is the role of value analysis in Material Management?

C) What is the difference between a limited tender and a special Limited tender?

D) How Rails & P. Way items are condemned in the Railways?

E) What is the difference between a Tender committee and a Survey committee?

Q No. 2 Describe various methods of Inventory control in Indian Railways.

Q No. 3 Explain how a little saving in inventory may affect profitability of the organisation significantly and why? Give suitable example.

Q No. 4 (a) List various sources of scrap mobilisation. (b) How overage and underage wagons are condemned?

Q No. 5 Write short notes on the following:

(a) Pareto law of Mal-distribution    (b) Turnover Ratio
(c) Computerization in store applications    (d) Service level
(e) Fixation of Reserve price    (f) EOQ Model

Q No. 6 What is the difference between EMD and SD?

Q No. 7 Describe imprest stores?

Q No. 8 While describing an item for example, "Soap toilet ordinary" is written instead of "Ordinary toilet soap". Give reasons for your answer.

Q No. 9 Describe ABC and VED analysis.

Q No. 10 Write short notes:

A) Global tenders    B) Confirmed and irrevocable Letter of Credit

Q No. 11 Differentiate between:
A) FOB and FAS                      B) Bill of Lading and Bill of entry
C) Bankers buying and selling rates   D) Wharfage and demurrage

Q.12 Expand the following:
(a) DGFT                             (b) FERA
(c) MMTC                             (d) DGS&D

Q. 13 Describe different types of supply tenders.
Q.14 Describe briefly different types of supply contracts?
Q.15 Under what circumstances we can invite single tender?
Q.16 What are the functions of materials Management department on Railways?
Q.17 Describe the scheme of material codification on Railways.
Q.18 What is the difference between ordinary stores and emergency stores?
Q.19 Why do we provide buffer stock?
Q.20 Enlist different agencies of procurement?
Q. 21 Write a short note on valuation of returned Stores.
Q.22 Enlist any three INCO terms (full form).
Q.23 What is letter of credit and how it is opened?
Q.24 What is a PAC?
Q.25 Explain Turnover Ratio? Calculate turnover ratio based on following data -
Stock value as on 30.09.11- Rs. 20 Cr
Current total issues from 01.04.11 to 30.09.11- Rs. 100 Cr
Q.26 What is Economic Order Quantity (EOQ)? Explain with the help of diagram.
Q.27 Write full form of following abbreviation:-
(a) FOB  (b) CIF  (c) FOR  (d) FAS  (e) RLO  (f) CRS
Part- II

Please tick the most appropriate choice:

Q.1. Imports made by Railways attract following taxes/duties:

A) Customs duty  B) Sale Tax
C) Customs duty + Sales tax  D) Excise duty + Customs duty

Q.2. For clearing the Cargo through customs Deptt., importer has to submit a document called:

A) Import Manifest  B) Import Application
C) Bill of Entry  D) Airway Bill

Q.3. Indian agent is paid in Indian rupees, which is worked out based on the exchange rate:

A) Bank's selling Rate- Bill  B) Bank's selling Rate- TT
C) Bank's Buying Rate- Bill  D) Bank's Buying Rate- TT

Q.4. For importing an item, Zonal Railway/Production Unit obtains the foreign exchange from:

A) Open Market  B) Railway Board
C) Reserve Bank of India  D) Ministry of Finance

Q.5. In confirmed and irrevocable letter of credit, there is definite undertaking by:

A) Issuing bank only  B) Confirming bank only
C) Confirming bank as well as issuing bank  D) Issuing Bank, advising bank and confirming bank

Q.6. In FOB contract, the seller bears all the charges until the cargo:

A) Is delivered to the agent of shipping company
B) Passes over the railing of ship
C) Is loaded and stacked on the vessel
D) Is delivered at the port of shipment

Q.7. Marine Insurance contract entered into by the Railway Board covers the inland transportation to the final destination. The normal duration of insurance cover for sea cargo is:

A) 150 days          B) 120 days
C) 90 days from the date of landing at port landing     D) 60 days

Q.8. As per current EXIM policy, Railways can Import freely any item:

A) Except restricted items     B) Provided it is actual user of that item
C) Not appearing in the negative list of import  D) Except prohibited items

Q.9. Open cover for insurance is decided by the Rly Board for all shipments due to following benefits:

A) Materials can be kept in open spaces
B) Materials are covered during shipment by a protective layer on the ship.
C) It is arranged in advance and there is no risk of shipment being uninsured
D) Amount of premium is very small

Q.10. Exam policy is declared as a five years package. This is essentially so because:

A) Custom duty would continuously be reduced by the Govt. of India during this period.
B) No amendments in the negative list items or OGL items will be made during this period.
C) Duly focuses towards general guidelines for an export import house for proper planning for a sustained business.
D) Generally PM’s office tenure in Govt. of India is for 5 years.

Q.11. Correct expansion for B/L is

(a) Bill of landing     (b) Bill of lading
(c) Bill of leading    (d) Bill of loading
Part- III

1. The value of Stores Purchases on Indian Railways in the year 2010-11 were of the order of
   A. Rs. 1,000 Crores   B. Rs. 2,500 Crores
   C. Rs. 16,000 Crores  D. Rs. 29,000 Crores

2. Function of an item remaining constant, if the cost decreases, its value will-
   A. increase   B. decrease
   C. remains constant  D. may increase or decrease

3. In order to avoid any contingency, stock at re-order level has to be-
   A. More than lead time requirement.   B. Less than lead time requirement.
   C. Equal to lead time requirement.   D. Does not have any relation

4. Stores Directorate in Railway Board is under-
   A. Member ( Mech )   B. Member ( Elect )
   C. Member ( Staff )  D. Financial Commissioner

5. Economic order quantity (EOQ) is determined by optimizing between-
   A. Demand and Supply   B. Ordering cost and Carrying cost
   C. Budgets and Service level  D. User and Accounts department

6. Forecasting accuracy increases if the planning period is-
   A. Shorter   B. Longer
   C. Zero   D. Infinity

7. Ambiguity in Description and specification of material will have the following effect on Lead Time-
   A. It will decrease   B. It will increase
8. For the stores declared surplus by a depot, any returned stores are-
   A. not to be accepted.
   B. to be sent to any other depot where they are required.
   C. are to be accepted but credit is given only for scrap value.
   D. a high level committee is to be set up for taking a decision.

9. In Indian Railways open tender is adopted when purchase value is more than Rs.
   A. 2 lakhs      B. 4 lakhs
   C. 5 lakhs      D. 10 lakhs

10. Indian Railway stores code is in how many Volumes?
    A. 2      B. 3
    C. 4      D. 5

11. The pre-check of the purchase order by accounts department is necessary if the value is More than
    A. Rs. 20,000/-      B. Rs. 50,000/-
    C. Rs. 4,00,000/-    D. Rs. 100,000/-

12. Special limited tender is one where
    A. Number of firms is just one
    B. Purchase value is high but Limited tender is issued
    C. Purchase must be restricted from few firms
    D. Tender is issued by Registered post

13. Which one of the following system of codification is followed by Indian Railway for codification of store items?
A. Fully significant coding system
B. Semi significant coding system
C. Non significant coding system
D. Color codification coding system

14. In Indian Railways the case is to be dealt by tender committee, when it is a case of
A. Open tender
B. Limited tender
C. Bulletin tender
D. High value tender above 10 lakhs

15. When the firms are selected and tender enquiry is sent to them, it is a case of
A. Open tender
B. Limited tender
C. Bulletin tender
D. Global tender

16. In Indian Railways the case is to be dealt by tender committee when the purchase value is more than Rs.
A. 3 lakhs
B. 2 lakhs
C. 5 lakhs
D. 10 lakhs

17. In Indian Railways 'A' category items represent what percentage of total consumption value?
   a) 50%
   b) 90%
   c) 65%
   d) 70%

18. PL No. of an item is 11360010. This item may be an item of
   A) Stationery
   B) Steam Locomotive
   C) Electrical item
   D) Diesel Locomotive

19. EOQ is the Quantity at which –
   A) Inventory carrying cost is maximum
   B) Warehousing cost is minimum
   C) Inventory carrying cost + ordering cost is maximum
D) Inventory carrying cost + ordering cost is minimum

20. In a Rate Contract –

A) Quantity is not specified  B) Delivery period is not specified
C) Rough estimate of quantity is given  D) Quantity to be supplied is fixed

21. Check digit in a PL No. for an item appearing at SL.No. 181 in sub group 02 in Main Group 00 will be –

A) 8  B) 5  C) 3  D) 7

22. System of Recoupment to be followed for recouping Emergency stores is –

A) Maxima- Minima  B) Periodic review
C) Base stock  D) Combination of (A) & (B)

23. Tenders are to be invited for purchasing 12000 nos. of Chokes approx. rate of which is Rs. 90/- each. In this case we will normally invite -

A) Open tender  B) Limited tender
C) Single tender  D) Bulletin tender

24. In a PL No. the subgroup to which the item belongs to is represented by –

A) First two digits  B) 3rd and 4th digits
C) 5th and 6th digits  D) 2nd and 3rd digits

25. Total number of stores depots on Indian Railway are approximately-

A) 120  B) 20  C) 230  D) 320

26. At the time of review, it is revealed that an item is not issued to any user for past 26 months but the item is likely be issued in next 22 months. This item will be classified as –

A) Dead Surplus  C) Custody stores
B) Moveable surplus  D) Imprest stores
27. In ABC analysis of items, "A" category items represent

A) Low consumption value items   B) Important items
C) High Annual consumption value items   D) High rate items

28. Buffer stock limit depends on –

A) ABC classification of the item   B) VED classification of the item
C) Combination of (A) & (B)   D) Stock & Non-stock classification of the items

29. Buffer stock is provided –

A) To meet unforeseen requirement   B) To supply items to other users
C) To make good shortfall due to theft, deterioration   D) To have items out of stock

30. Stock of an item with a Section Engineer on 01-06-2012 is 500 nos. Sanctioned imprest of this item is 1500 nos. Quantity of the item to be recouped by him will be equal to-

A) 500 nos.   B) 1500 nos
C) 1000 nos   D) 2000 nos

31. In a VED analysis "V" stands for –

A) Vague items   B) Very costly items
C) Vital item   D) Variety of items

32. Indication of value in the demand is necessary-

A) For posting in liability register / fund register
B) For knowing the appropriate approving authority
C) For the payment to the supplier
D) Combination of (A) & (B)

33. Item not required for the purpose for which it was originally purchased is known as –

A) Inactive item   B) Scrap item
C) Over stock item  D) Emergent stock item

34. For an item having annual consumption equal to 600 nos. maxima and minima are respectively equal to 12 and 8 months consumption. Physical stock of this item on different dates was as under:

1.1.12 ----- 500 ;  1.2.12 ---- 450 ;  1.3.12 -----400 ;  1.4.12 ---- 300 ;

This item should have been recouped on

A) 1.1.12   B) 1.2.12    C) 1.3.12   D) 1.4.12

35 An item having regular turnover caused by constant demand will be known as –

A) Ordinary Stock Item    B) Emergency stock item
C) Regular item     D) Non- stock item

36. Inactive items are those stock items, stock of which

A) is unserviceable
B) more than 3 months old
C) has not been issued to any user for past 12 months
D) is more than the requirement of next 24 months

37. Principal Head of Stores Department on a Zonal Railway is –

A) Chief Materials manager   B) Chief Controller of Stores
C) Controller of Stores       D) Chief Controller of Stores and Purchases

38. Representatives of the tenderers are allowed to be present at the time of opening of

A) Single tender     C) Open tender only
B) Bulletin          D) Open or special limited tender

39. Processing of a tender case after the opening of tenders depends on –

A) Estimated value of purchase   B) Value of the case as per highest offer
C) Value of the case as per lowest offer  
D) None of the above

40. An offer received from the firm to whom no inquiry was sent is known as –
A) Single offer  
B) Unsolicited offer  
C) Delayed offer  
D) Unapproved offer

41. Only one offer received in respect to Limited/ Open tender is known as –
A) Single tender  
B) Single offer  
C) PAC offer  
D) Late offer

42. Proprietary Article certificate is to be issued for the item required to be purchased from -
A) Single firm only  
B) Approved firms only  
C) RDSO approved firms only  
D) None of the above

43. Items not required by the user can be returned on
A) Advice note for returned stores  
B) Minus issue note  
C) Requisition  
D) Indent

44. Purchase finalized on the criteria of “Early delivery” is known as -
A) Special purchase  
B) Time Preference purchase  
C) Delayed purchase  
D) PAC purchase

45. It is proposed to purchase an item of a specific brand only. For this-
A) Specification should be prepared in such a way that only product of that make meets the specification  
B) A PAC should be submitted along with the requisition  
C) A Sample should be submitted along with the requisition  
D) Requisition should be signed by an SAG Officer
46. Weekly Stores Bulletin is a type of

A) Limited tender  C) Open tender
B) Special Limited Tender  D) None of above

47. On a railway, the items have been classified as A, B, C and V, E, D. While designing stock level limits for various items, we will provide to keep minimum safety stocks for –

A) A-V Items  C) C-V Items
B) A-D Items  D) C-D Items.

48. Materials not required are returned to the nominated stores depot as per stores code para number

(a) S - 1539  (b) DS-8  (c) NS-11  (d) SS-11

49. Survey committee is appointed by the General Manager as a standing committee consisting of

(a) Stores officer, Account officer, Electrical officer
(b) Stores officer, Account officer, Mechanical officer
(c) Stores officer, Account officer, S&T officer
(d) None of the above

50. Disposal of scrap may be done by

(a) Auction  (b) Sale by tender
(c) Sale to other Govt. department and undertakings  (d) All above.

51. Custody stores are the stores –

(a) Which are kept under the custody of indentor
(b) These are charged off stores but kept under the custody of stores depot awaiting future use.

(c) Custody stores are non stock items which are surplus with the user

(d) Custody stores are imprest stock items

52. Standardisation helps in

(a) Easy maintenance of equipment by suitable replacement

(b) It is easy for the supplier to manufacture the item with suitable technology

(c) Scale of economy can be achieved

(d) All of them as above

53. PL No. of an item is 98-05-0400. This item may be an item of

(a) Uniforms  (b) Stationery  (c) Steam Locomotive  (d) Scrap

**Indicate true or false-**

1. In FAS contract, the export clearance of the goods is done by the seller.

2. In FOB contract, the obligation of the seller is fulfilled when the goods passes ships Rail.

3. CIF term is reserved for sea and inland waterways.

4. Loco wheels are imported items for Indian Railways.

5. In import shipments, the insurance of the Materials is arranged by Life Insurance of India.

6. Procurement includes purchasing but purchasing is not simple buying.

7. Negotiations is not a must in purchasing.

8. More is the inventory, more is the inventory carrying cost.

9. Less is the inventory, less is purchasing cost.

10. 100 % service level for all the items requires blockage of enormous capital.
11. Railways use significant method of coding for material description.

12. Stock items can be planned well in advance.

13. Non stock items cannot be planned.

14. Some non stock items can be planned.

15. Planning is possible only for M&P items.

16. For recoupment of emergency items Maxima / Minima method is adopted.

17. At EOQ point total cost of material is maximum.

18. Buffer stocks are provided to cater for fluctuations in lead-time but not fluctuations in consumption pattern.

19. In case of a rate contract rate is fixed but quantity is only approximate without specific commitment.

20. In running contract quantity is fixed but rate is not fixed.

21. Railways' bulk requirements of POL items, steel and coaching paints are processed by DGS&D.

**Fill in the blanks –**

1. For indenting and issue of imprest items, form ---- is mentioned in the stores code.

2. Form --- of stores code is the form of combined requisition and issue note.

3. Form S1302 of stores code describes ---- .

4. Consignee code is in ---- digits including check digit.

5. ----- digit is used to check the correctness of PL No.

6. Unit code is in --- digits.

7. Lead time is the time from --- to ----- .

8. Form ---- is prescribed to be used for returned stores.

9. Turning and boring in the workshops is an example of ---
10. Public auction is the most popular method of disposal of scrap because ------------------------- 
-------------------------------------------------------------------------------------------------.

11. Difference between inactive stores and surplus stores is ------------------------------- 
-------------------------------------------------------------------------------------------------.

12. ----- % and ---- % of total cumulative annual usage value of stock items goes for ----- 
- and ---- category of items.

13. While studying ABC and VED category of items, tight and critical scrutiny of 
demands is required while calculating requirements of ------ and --- category of items.

14. In case of imports contracts agency commission to Indian agent is paid in Indian 
rupees based on -------- rate.

15. INCO terms stand for ------------------------------- .
MEDICAL
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Medical Reimbursement Rules

- In case of referral from Rly. Hospital to Non Rly. Hospital by Rly. Medical Officer – Full reimbursement.
- In emergent circumstances, without referral GM/AGM can sanction reimbursement of medical expenses, as per following limit –
  a) For treatment taken in private hospital – up to Rs. 5,00,000/-, including pacemaker.
  b) For treatment taken in recognized/trust hospital – up to Rs. 5,00,000/-, including pacemaker.
  c) For treatment taken in Govt. hospital – Full reimbursement, including pacemaker.

DRMs are delegated powers to sanction the claim up to Rs.25,000/- per case & with ceiling limit of Rs. 2,00,000/- per year only, with concurrence of associate finance for reimbursement of medical expenses in case of treatment taken in emergency at Govt. or recognized hospital. Emergency has to be later confirmed by authorized railway medical officer, post-facto.

- The reimbursement powers shall be exercised by GM/AGM personally duly scrutinized by CMD and concurred in by FA&CAO, while in case of Production units, the case may be scrutinized by CMS and later by concerned Zonal Railway CMD if case is referred to Railway Board.

- Reimbursement claim above these limits have to be referred to Railway Board.

- The claim has to be preferred within 6 months from the date of completion of treatment.

- The Rly emp. Should prefer his claim in the prescribed form along with necessary documents like essentiality certificate of the Rly. Med. Officer, counter signed bills etc.

- Reimbursement in case of special investigations like lab tests, USG, endoscopy etc. done even in private hospital but on referral.
  a) claims up to Rs. 5000/- for each test w.e.f. 30.4.07 can be sanctioned by MD/CMS/MS.
  b) claims above Rs, 5000/-& up to Rs.10,000/- to be sanctioned by CMD in consultation with FA&CAO.

For CT Scan/MRI done at Govt./Recognized/Pvt. hosp. – MD/CMS/MS empowered to reimburse up to Rs.10,000/- in consultation with two senior doctors(Physician & Surgeon).

- For IOL surgery done in Govt. hospital,
(when facility not available in Rly. Hospital) - Full reimbursement,

- **For IOL surgery** done in non-railway/ non-recognized hospital (when facility not available in Rly. Hosp.) - Actual cost or Rs.12,000/- whichever is less, will be reimbursed. Stringent scrutiny to be made by Ophthalmologist and only complicated high risk cases to be referred to non railway hospitals with adequate justification in each case.

- Amendment to para 666 (i) – Reimbursement of cost of VVI Pace Maker.

  If a beneficiary on production of valid documents and on the recommendations of Authorized Medical Officers (AMOs) in case the implementation has been done at Govt./Private hospital, in emergent circumstances the reimbursement is up to Rs. 60,000/-.

Sanction of Advance Payments up to the reimbursement part of anticipated cost of treatment up to Rs. 5,00,000/- (including pacemaker cost of Rs. 60,000/- per case) whichever is less by GM is case of referred to Govt. Hospital and in case of referred to Recognized hospital with recommendation from CMD and concurrence by FA&CAO. In certain cases, power may be re-delegated to DRM of Division and associate finance.

  Powers of GM are enhanced to release advance payment upto Rs. 4 lakhs per case directly to Pvt. non-recognized hospitals provided the patients has been referred on recommendation of Medical Board. AGM can exercise power upto Rs. 2 lakhs in each case.

  **Hearing aids** - Amendment to Para 667-Powers delegated to CMDs for sanctioning the cost raised from Rs.5,500/- to Rs.20,000/-. Cost exceeding Rs.20,000/- to be referred to Railway Board by CMDs duly concurred by FA&CAO.
Medical Examination

Scope

Medical Examination of candidates for appointment to the gazetted railway service
Medical Examination of candidates for appointment to Non-Gazetted Railway services
Medical Examination of serving Non-Gazetted Employee.

Physically handicapped: - Blind, The deaf, The orthopedically handicapped
Periodical Re-Examination of serving employees (PME)
Re-Examination before promotion to higher medical category.
Re-Examination on revision of Medical Classification.

Medical Examination of employee on promotion to higher classes
Medical Examination of railway employee on promotion from Non Gazetted to gazetted posts
Medical Examination of Ex-Service men who has been re-appointed in Railways
Medical Examination of members of Railway Claims Tribunals.
Special Medical Examination

Objectives

To secure continuous effective service and without interfering with his duties
To prevent early pension of payment in case of premature death

No person will be deemed qualified for admission to public service who shall not qualify the government, or the appointing authority, as the case may be, that he has no disease, constitutional affliction, bodily infirmity unfitting him or likely to unfit him for that service

Gazetted Railway Services
Technical Services:-
  1) Railway Engineering Services (Civil), Electrical, Signal and Mechanical)
  2) Indian Railway Traffic Services.
  3) Special Class Railway Apprentices
  4) Posts in Marine Establishments
  5) Indian Railway Medical Services
Gazetted Railway Services
Non Technical:-
1) Indian Railway Accounts Service
2) Indian Railway Stores Service
3) Railway Protection Force
4) Railway Board Secretariat Services - Class I and Class II
5) Chemists and Metallurgists
6) Indian Railway Personnel Services & all other Class I & Class II Services on Railways which are not connected with the train working or use of trolleys.

Physical Examination

Height:
Chest :
Free from congenital deformities, infectious, contagious and chronic diseases.
Males: 152cms
Females: 150cms
Males: 79 cms-84 cms
Females: 74-79

Visual Standards
Non Gazetted Railway Employee
Authorized Medical Examiner:- D.M.O., and above
Physical Examination:- Should be physically fit. Free from congenital deformities, chronic diseases, contagious and infectious diseases.

Classification on the basis of Visual Standards for Non-Gazetted:

Classification Group A (Vision tests required in the interest of public safety)

- A-1: Footplate staff Rail Car Drivers.
- A-2: Other running staff, Points man, Cabin man, Station Maters & Other Staff in operative control of Signals.
- A-3: Loco, Signal and Transportation Inspectors, Staff authorized to work trolleys, Yard Supervisory staff, Road Motor Drivers and Gate Keepers.

Classification Group B: (Vision tests required in the interest of the employee himself or his fellow workers or both.)

- B-1: Such Station and yard non supervisory staff, Permanent Way Masteries, Gang Mates, Key men, Railway protection staff.
- B-2: Steam crane drivers, mechanics, Electrical power house staff etc.

Classification Group C: (Vision tests required in the interest of administration only)
C-1: Ministerial Staff, School Teachers, and other staff.
C-2: Safaiwalas, Peons, Malis, Watchmen etc,

Visual Standards

ME - Candidates
Before training, if there is training before appointment.
Before appointment, if there is no training

PME (Periodical Medical Examination)

- A1, A2, A3—Every four years till 45 yrs. and then every two years till 55 yrs. and there after annually till retirement.
- B1 & B2—On attaining the age of 45 yrs. and there after every 5 yrs.
- RPF—Every three years until retirement SI, ASI: At 45 yrs. and there after every 5 yrs.
- C1 & C2: No PME

Special Medical Examination

- After a long absence, and produces a PMC for more than 90 days.
- After an accident the running staff is subjected to special PME.
- If the employee’s behavior is consistently odd, then again special PME can be requested for.

The requisition for special PME should be given by not less than Class II officer.

CONCLUSIONS

- MEDICAL EXAMINATION ensures selection of physically fit personnel, who do not become a liability to the government.
- PERIODICAL MEDICAL EXAMINATION ensures continuous physical fitness of serving employees.
**********

Medical Boards

Comprises of 03 (Three) Medical Officers. Senior most person among the three will be chairman and one of the members should be Physician and another Surgeon. Also an Ophthalmologist and Lady Medical Officer can be part of board as optional.

Classification of Medical Board:

Obligatory:-

A) Gazetted Railway Employees

i) At the time of appointment
ii) For invalidation from service on account of ill-health
iii) For commutation of pension, if the application of employee for commutation of pension does not reach Head Qtr. Office within one year of retirement.

B) Non-Gazetted Employees:

i) For invalidation from service on account of ill-health.
ii) For commutation of pension

Optional:-

- Prior to issue of certificate of alleged fraud or malingering or clinical difficulty
- Prior to issue of certificate of injury under WCA
- Prior to issue of certificate of Unfitness or AEMG
- Where CMD desires a Board is desirable for special reasons.

Note:-

Inclusion of Ophthalmologist is not necessary in the case of second medical board, when a candidate is declared unfit for reasons other than visual defects.
DECATEGORISATION (AEMG)

When an employee is considered Medically unfit for the original job (even after light job for six months) but fit for the other job than suitable permanent alternative employment in the same category or a lower category is given

A certificate to this effect in the prescribed format to be issued.

Decategorisation (AEMG) can be on the basis of:

- Visual Acuity Defect
- Physical Disability or certain disease conditions

GENERAL GUIDELINES

- Decategorisation (AEMG) is done normally after a period of six months.
- Recommendation for light duty for a period of three months followed by another period of three months. These are given not below the rank of DMO or above.
- The employee has to report sick to his Authorized Medical Officer

ON VISUAL GROUND

- If employee in aye one category operated for cataract.
- Visual acuity not reaching upto prescribed STD.
- No Relaxation upto 6 years of service in a1 & A2
- Defective color vision
- Decategorised driver having vision of A2 will be allowed to work as shunter.

- Should be given after expiry of the period of six months.
- Recommendation should be general and not specific.
- Should be examined by the Medical Officer not below JAG.
- CMS/MS Incharge is the Accepting Authority.
- RPF staff – Approval of CMD required
- Specialist opinion in case of decategorisation after six months of light duty in case of epilepsy.
**********

Medical Certification
(An abstract from medical manual)

A. For Non Gazetted Employees

- Authorized Medical Officer - medical officer within whose jurisdiction the employee is head quartered or specially nominated.
- Competent Railway Doctor – empowered to issue sick, fit, duty & change of air certificate.

1. Different Certificates Issued By Railway Doctor

1. Sick Certificate: - issued to employee when reporting sick.
2. CSC / Interim Certificate- issued when sick period is extended
3. Fit Certificate- when employee becomes fit to resume
4. Transfer Cert. For transfer to HQ of the employee
5. Certification for recommendation for change of air –when change of air becomes must for fast recovery
7. Invalidation Certificate—unfit for railway service
8. IOD- Certificate – injured on duty

- Attendance during sickness- as per instructions of railway doctor.
- Three days certificate from RMP (Private)- do not require Duty Certificate from railway doctors.

Discharge from sick list

- when absent & not attending railway hospital (under sick list)
- In cases of AEMG
- In cases of death
- In cases of medical invalidation

2. Authority to issue different certificates; for particular period

1. Sick & Fit Certificate

   - ADMO - Up to Four months
   - DMO/ Sr. DMO - Up to Nine months
   - MS/CMS, I/c of Hosp/Div. - Up to Eighteen months
   - CMD - More than 18 months

2. Certificate for recommendation for change of air or recuperation.

   - ADMO - Nil, may recommend to DMO/MS
   - DMO/Sr.DMO - Up to two months
• CMS - Up to Nine months
• CMD - More than nine months

3. Invalidation Certificate
• Medical board is essential
• Recommendation to CMD for acceptance

B. For Gazetted Employees

1. Authorized Med. Officer - CMS I/c at Div. HQ, ADMO/DMO/Sr. DMO/MS I/c at places other than Div. HQ (M.O. in charge of the unit).
2. Sick/CSC/Fit Cert. in triplicate, countersigned by I/c.
3. No provision of Private Medical certification.
4. Intimation to concerned DRM/ HOD / Branch Officer.
5. Intimation /report to CMD (if more than 10 days).
6. Invalidation Certificate - by medical board after acceptance of CMD.
7. Grant of leave on basis of medical cert. by competent authority.

C. Rules for Certification in favour of RPF Staff

• Sick memo from controlling officer (RPF).
• No sick certificate without sick memo.
• Declaration in triplicate as per proforma.
• In the OPD sick certificate up to 7 days.
• If more than 7 days, detailed report to MS/CMS with copy to RPF officer.
• In case of indoor treatment, sick certificate up to 14 days at a time after discharge.
• One medical officer nominated for RPF sickness cases.
• In emergency, first treat the staff, take declaration & then ask for sick memo.
• In case of RPF staff on leave / away from HQ sick memo from I/C RPF post/ SM who will intimate the concerned RPF officer.
• Same rule for transfer certificate
• Intimation to RPF officer by sending one copy of declaration taken in triplicate.

Declaration by RPF Staff
I am not feeling well. I may please be issued a medical certificate w.e.f. ----. I shall bring/l have brought sick memo from my officer/supervisor i.e. ----
I declare that -
1. I am/am not under order of transfer, temp/emergency duty or under D&A action.
2. I am on sanctioned leave w.e.f ---- to ----.
3. I was not on sick list/ declared fit by any Rly. /Pvt. Doctor prior to this date.
Or
I was on sick list with ---- & have been given fit /transfer certificate on ----.

Signature
**Medical Treatment & Attendance Rules**  
*An abstract from medical manual*

- Railway Beneficiaries – Employees with family members & dependant relatives (as defined in the pass rules).
- Retired Employees (Registered under RELHS).
- Officers and Staff of CRS-Free
- Audit staff – Free if opted for Railway facility
- Railway employees on Deputation to RITES, IRCON etc. payment on the basis of per capita expenditure.
- Railway employees on deputation with Trade Unions – Free
- Trade Union officials who are ex Railway employee and at All India / Zonal Level – Free up to retirement age.
- Employees of Quasi Railway Organizations. e.g. Co-operative society, Railway. Institute, Officer’s Club
- Free OPD treatment to self and family
- Indoor treatment free to self but on payment for family.
- GRP Personnel- Med. Facilities if agreement of State Govt. with Railway
- Private servants – Free OPD treatment for grievously while carrying passenger’s luggage routine illness, 40% charges for indoor treatment.
- Railway Contractors& their labour- No free treatment.
- Licensed Porters – Free OPD treatment to self & family, free indoor treatment to self if injured.
- Outsiders – No free treatment except family planning operation and immunization.
  Consultation charges Rs.40/- valid for 15days and separate charges for investigations, indoor treatment, Surgery etc.
- Railway passengers falling ill on train – Consultation fee Rs.20/- & separate charges for medicines supplied.
- Freedom Fighters Travelling on a valid 1st class pass – Free Railway Medical Facilities.
- Passenger amenities committee- free med. Facilities to its members.
- Medical attendance at residence – Free for Railway employees, visit fee for family members.
- Special provision for female & Child beneficiaries – They may directly obtain treatment from private hospital where no railway / govt. hospital & get reimbursement.
- Widow mother in law of the widow on her compassionate ground appointment *(if income of widow mother-in-law within prescribed limit).*
• Medical treatment of Railway Passengers involved in accidents/untoward incidents-sending them to nearby Govt/Railway/private Hospital( If others are not available)- Emergency and Essential treatment only

• Trespassers-Providing emergency medical treatment and also sending to nearby Govt. hospital. This aid does not bestow any right to the injured person to claim compensation cover under section 147 and 156 of IRA 1989.

• Minister of Rlys, MOSR, Dy. Minister Rlys, considered under RELHS-97 after they demit office.

NOTE:

Benefits under the RELHS –97 Scheme –

They are eligible for-

a) Ambulance services
b) Medical passes
c) Home visits
d) Medical attendance for first two pregnancies of married daughters at concessional rates.
e) Treatment of private servants as applicable to serving railway employees.

Special identification cards are issued duly affixing photographs of married daughters with clear instructions on the card.

******
OPERATING
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AN INTRODUCTION TO RAIL TRANSPORT

Transport is an important infrastructure in maintaining and developing any economic activity. Rail transport occupies a very important place in surface transport, particularly in a country like India, which is not endowed with much of waterways and has a very large size. Rail transport assumes a greater importance in our country, particularly in view of limited resources of natural oil and abundant availability of coal, an energy source easily usable for rail transport, whether directly or indirectly, through electric energy indigenous or imported. Railways have a positive edge over road, being many times more energy efficient than the latter. Comparative position of energy efficiency on different modes of transportation is as under:

Freight BTU/Tonne km
* Electric traction 62.7
* Diesel traction 77.5
* Diesel truck 1587.3
* Barge 328.0
* Pipeline 281.7
(Source: NITIE study for NTPC & Annual Statistical statement of IR year 11-12)

Notwithstanding disadvantages like being track bound, highly capacity intensive, Railways have played a very important role in the economic development of the country. Though road transport has progressed much faster during the post-independence era, Indian Railways still continue to play a major role in the transport effort required by the nation. Indian Railways carry about 40% of the total passenger kilometers and 60% of the total net tonne kilometers of traffic that is offered to any mechanized mode of transport in the country. Given below is the growth profile of passenger and freight traffic on Indian Railways.

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* Also includes Sleeper Class
## BULK COMMODITIES

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<th>Tonnes Loaded (in millions)</th>
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<td>Commodities other than above</td>
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AT DIVISIONAL LEVEL

- DRM
- Sr.DOM

- DOM Chg.
- AOM (Chg.)

- DOM (M)
- AOM (M)

- DOM (G)
- AOM (G)

- SM (Gaz.)

- Area Manager
Functions of Operating Department

Railway operation encompasses all the activities connected with the running of a railway. However, Operating department in particular has its role in producing a service called Transportation. In this activity, Operating department harnesses the efforts of all the departments of the Railways and optimizes usage of operational assets viz. track, signals fixed installations and rolling stock. Broadly, the functions can be categorized as under:

Planning of Transport Service: This involves both long term as well as short term planning. A lot of spadework has to be done to run trains on day-to-day basis. Passenger trains are planned to be run and detailed timetable issued once every year. Arrangements of rolling stock and locomotives are made to meet the expected demand. Similarly, facilities of wagons have to be made available for the goods traffic. Demands for the wagons for different commodities vary during different seasons of the year. Railways have to plan to meet these fluctuations in demand. Planning would involve not only the individual trains but a lot of other activities necessitating creation of capacity to form and start trains at originating stations, run through a section and receive at the destination station. Though organization of the Railways gets involved in this planning process, the basic framework is provided by the Operation department to which the plans of other departments responsible for provision and maintenance of operational assets, fit in.

Running of trains and continuous watch: Running of trains would involve ordering of trains, booking of crew, watching that the conditions are safe for it to run and arranging various requirements on the run. Efficiency of operation of trains depends on the quality of planning whether short term or long term. Transportation staff, both at originating and terminating as well as roadside stations, are busy round the clock to ensure timely and safe running of trains. Passenger trains run on a predetermined schedule, fluctuations in the traffic do not generally influence their running. On the other hand, except for a few scheduled goods trains, goods trains run as and when there is adequate load. A goods train generally leaves when there are a definite number of wagons to be cleared for a particular destination/yard in the same fashion as a village tonga leaves for the town when it is full. Exceptions in both cases exist, though rare.

Safety: Safety is the prime attribute of any transport system. No user would like to use a transport system, which does not provide a reasonable amount of safety to the limb, life and property of the user. Safety is, therefore, an integral part of operations and it is the responsibility of Operating department as well to ensure that trains are operated in a safe manner. This requires rigid observance of rules and procedures of safe train operation.

Economy and efficiency: While maintenance departments are responsible for making the assets available to the Operating department in proper fettle, it is the responsibility of the latter to make most optimum utilization thereof. Operating department is, therefore, responsible for the productivity of the system. This is measured in terms of operating indices like tonne kilometers and passenger kilometers.
Classification of Traffic

Railway traffic by the very nature is divisible into two categories (i) coaching, and (ii) goods. Coaching traffic includes a passenger, parcel and luggage. Passengers and their luggage are moved by the passenger trains. In the railway parlance, all mail, express and passenger (stopping) trains are included in this category. Parcel traffic is either moved in special parcel trains or in the space available in luggage vans of trains carrying passengers. Occasionally, additional parcel vans are also attached to passenger trains.

Freight traffic is cleared by goods trains and the rates at which this traffic is booked are different than meant for parcel traffic. When adequate coaching vehicles (parcel vans) etc., are not available, even parcel traffic is cleared in goods vehicles but they are moved by passenger trains or parcel trains.

Unit of traffic:

While unit of booking traffic is a passenger or a consignment whatever its size or weight may be, from the operating point of view, a unit of movement is a train. Passenger trains operate on a fixed schedule to a fixed composition (number and type of coaches), which are suitably advertised to the users. Nature, time and volume of the service is decided on the basis of passenger traffic that would normally be expected. The day-to-day demand gets regulated to some extent by the availability of supply of the service. It is only on the long-term basis that demand influences supply.

Freight traffic is booked at goods sheds and goods terminals. The unit in case of freight traffic is a consignment. This may vary from a few kilograms to a few thousand tonnes. From this point of view, traffic is divided into two categories as under:

(1) Wagon Loads:- In this category fall consignments which are booked and loaded utilizing the capacity of wagon in full. Weight would vary according to the volume of the commodity. Earlier this type of traffic was the main traffic of Indian Railways. Wagons are booked from one goods shed or a siding to the other. These are collected by shunting trains into the feeding yards from where these are grouped into trains. Wagons move to the destination switching from one train to the other at different points. Since, however, a wagon is not a unit of movement on the Railways, it takes quite a bit of effort on the part of Railways in collecting individual wagons from road side station, forming them into trains at marshalling yards and again distributing at the destination stations. So this type of traffic is slowly easing out of the Railways.
(2) **Train Loads:-** Railway is eminently suited to this type of traffic. This is suitable for bulk users which have a train load of traffic to be carried to one point. Bulk of the traffic that Indian Railways are carrying today is trainload traffic. Not only major factories and mines offer such traffic, even agricultural and horticultural produce moves in train loads. Since there are large number of commodities which are required to be moved on Indian Railways, they require different types of wagons too.
Types of Trains

Trains can also be divided into two broad based categories:
(1) Trains carrying passengers; and
(2) Trains carrying goods and animals.

Mail and Express trains are those passenger trains, which run between two important stations separated by a long distance. These trains do not stop at all the stations enroute, but only at a few stations where stoppages are warranted by sufficient volume of traffic and operational requirements. In this category also fall super fast trains, which have extended long runs and operate on long distance routes connecting different corners of the country. Passenger trains, except with a few exceptions, stop at all stations. Parcels are cleared by all trains carrying passengers.

Goods trains
Following are the types of goods trains, which normally run on Indian Railways:
(1) Through trains - These are the trains, which run from one yard to the other. They start from the originating yard with full load and neither attach or detach wagons enroute. Bulk of the movement on IR is of this type.
(2) Shunting trains - These trains originate from a yard with wagons meant for the roadside station and also pick up wagons awaiting clearance in the direction of movement of these trains at roadside station. If these trains clear wagons carrying small consignment, they are called "Small Quick Transit" (SQT) trains. Their number is dwindling very fast.
(3) Mixed trains - There are certain trains, though their number is very small, which clear goods traffic and have some passenger coaches attached to them. These are called "Mixed Trains".

Passenger Train Operation

Movement of human beings is an important economic and social need. Large majority of rail users judge the efficiency of railway system on the basis of an occasional journey performed by them. Passenger train operation, therefore, assumes a very great importance in the system of things for the railways.

Passenger trains are arranged to be run by the railways on a regular basis. Their schedules are revised periodically to suit seasonal requirements. These schedules are advertised to the public and are well known to the staff. Utilization of staff and infrastructure is also so planned that the entire operation becomes a routine and goes in a clock like motion. Accordingly, passenger operation is relatively simple, straightforward and does not require very great effort on day-to-day basis.
Efforts have been made that schedules of work laid down for smooth passenger train operations are meticulously observed and watched like a hawk by the Operating officers as any dislocation in these schedules can lead to innumerable problems. Any dislocation in passenger train operation which requires a lot of effort on the part of operating officer not only on the long term basis but also on day to day basis. The punctual running of passenger trains, therefore, assumes importance not only from the point of view of the image of the Railways, but also because loss of punctuality leads to delays, dislocations in goods traffic and deterioration in the efficiency in the indices of both passenger and freight transportation.

Indian Railways serve the country as the main mechanized mode of transport for the inland traffic. Long distance trains criss-cross the length and breadth of the country, bringing people from different parts together. Though in the past, when road transport had not been developed, Railways provided the only mechanized mode of transport in the country, whether short distance or long distance, with the development and advances in the motor transport and establishment of elaborate road network, bulk of the short distance traffic has moved to the road. Railways are also encouraging transfer of this traffic to road as road transport is more suitable mode for this type of traffic. Railways are mainly concentrating on long distance, inter-regional traffic and urban transport in the major metropolitan cities. Only that part of non-suburban traffic can be served by railways better that forms high-density corridors and it is too large for the road transport to cater to. These corridors are between major industrial and commercial centers like Kanpur, Delhi, Ahmedabad-Vadodara-Bombay-Pune. Railway is also suitable for certain extensions of suburban traffic converging into large cities which act as magnets for employment and trading activities, and attract large number of passengers on regular basis.

**Time Tables**

Time table is a schedule in a table form, showing details of arrivals and departures at every station of all trains carrying passengers. These timetables are issued by every zonal railway every year, effective generally from 1st July. On Indian Railways there is another time table, "Trains at a Glance", which is issued by the Railway Board and carries stoppages of important trains at important stations only all over the Indian Railways, as against the Zonal Time Table which indicates stoppages of all scheduled trains at every station on the railways. The objectives of passenger time table are as under:

1. Information for intending passengers regarding schedules of arrivals and departures; through sectional and suburban trains; connections at various stations; and the amenities and facilities available to the passengers at stations;
2. A guide to the railway staff in arranging trains, crossings, precedences, receipt and despatch at terminals, and provision of motive power, crew, maintenance and other facilities;
3. A guide to postal services for transmission of mail;
(4) A data base for calculating the requirements of rolling stock; locomotives and running staff;

(5) To satisfy statutory requirements. Section 65 of the Indian Railway Act lays down that railways must exhibit time tables for the guidance of the public.

The origin of Railway time table is very interesting. Railways in Great Britain, where the railways started first, were hesitant to issue time tables and advertised fixed schedules of trains they were running. With the teething problems galore, they were not sure whether they would be able to live up the commitments after they tell the public fixed schedules of their trains. At that time, one Mr. Bradshaw used to sell maps. In order to increase his sales of maps, he also started publishing schedules of the trains, which could take people to the places of which he used to sell maps. Railway companies consented to his publishing the time tables as it did not involve any commitment on their part. Soon, however, they realized the usefulness of advertisements of the fixed timings as their clientele went up and the companies started issuing the time tables themselves. With the passage of time, teething problems were also taken care of. Today, there is statutory obligation in some of the countries, for the Railway companies to publish their schedules. Indian Railways are required to do so under Section 49 of Indian Railways Act, 1989.

**Types of Time Tables**

Time Tables can be divided into two categories:

(1) **For passengers**

Zonal Time Table and Guide - This time table is published annually by each of the zonal railways. In addition to the train timings, there is additional information, which is useful for the passengers. This mainly relates to rules regarding reservation, refunds, cancellations of confirmed booking, fare tables and other facilities, which Railway administrations provide for the convenience of passengers. Copies of these time tables are available for sale at the booking offices and book stalls.

(a) **Trains at a Glance** - This is an abstract form of time table for all Indian Railways. Important trains are shown with time of arrivals and departures at important stations right from the originating station to the terminating station in one table only. Users have, therefore, not to refer to a number of tables to find out the schedule of a particular train. Main points of information for passengers are also given.

(b) **Military Time Table** - This time table is not made available for general public. Defense are one of very big users of rail infrastructure and a number of special trains for Defense are run by Railways. In order that these trains can be run at short notice, we have detailed timings of such trains worked out, which are also revised along with revision in the public time tables from time to time. These timings are kept secret.

(2) **For Railway staff**

(a) **Staff copy of public time table** - Train timings portion of zonal time table, without the additional pages for guidance of passengers and advertisements, is bound and copies given to staff dealing with passengers for their guidance.

(b) **Working Time Table** - Large amount of information is required to be
conveyed to the railway staff connected with running of trains and maintenance of the infrastructure on the railways. They must not only know the timings of the trains but also a lot of information about the track, signals and other facilities and this information is conveyed to the staff through the working time tables. These time tables are printed division wise, and it is desirable for all railway officers to familiarize themselves with these time tables.

(c) Graphic Time Tables - These time tables are in the graph form and are prepared for the guidance of the Control staff. These time tables are prepared section wise, indicating over a graph not only Mail, Express and Passenger trains, but also Goods trains that can be run during 24 hours. These are also called 'Master Charts'. These are generally displayed in front of the Section Controllers in their cabins, so that they can constantly relate actual running of trains to the fixed schedules laid down in the time tables.

Factors influencing framing of time tables
As seen earlier, time tables are for the benefit of users as well as railways. Factors that influence framing of a time table can also be broadly classified into two categories:

(1) Users Requirement.
Departure and arrivals - Train journeys in India are generally long and take a lot of time. It is convenient to the passengers to leave originating station in the evening and arrive at the destination in the morning so that they are able to perform the journey without wasting any working time during the day. No wonder, most of the trains from the major cities leave in the evening and arrive in the morning. Passengers performing journeys to and from important stations enroute also like the trains to arrive at convenient timings and not in the middle of the night. All this is always not possible to accommodate, but efforts are made by Railways to adjust timings in such a manner that this requirement of passengers is kept in mind. With the increase in the number of trains, staggering of departures and arrivals become unavoidable, otherwise a lot of additional capacity would be required at the terminals and sections to deal with large number of trains in the evenings and mornings. This would also lead to idling of assets for bulk of the time as no trains would be scheduled to leave or arrive around mid day or mid night. Trains should touch important cities and junctions at convenient time.

(a) Connections at junctions - Railway trains run between selected pair of stations. Large number of passengers travel to stations, which are not served, by direct trains. They have, therefore, to change trains at junction stations. It is, therefore, the requirement of the passengers that the connecting trains should leave the connecting junction station as soon after the arrival of the first train as possible, so that they are not required to waste a lot of time waiting for the next train. It is also necessary that such connections are not so very tight that the passengers miss the previous train. Railways have, therefore, to
design their time tables in such a manner that passengers are reasonably assured to connection within about an hour or two of the arrival of the previous train. At certain junctions, staff are authorized to detain connecting trains up to a limit if an earlier train is running late.

(b) **Halts for meals, etc.** - Since railway passengers have to travel long distances and all trains are not equipped with catering facilities, halts at meal timings are provided at stations having facilities for meals, refreshments. These halts are long enough to buy their requirements from the platform.

(c) **Overall speed** - Whatever the requirement of passenger’s enroute, every long distance passenger desires to complete his journey as early as possible. There is, therefore, need to provide fast, long distance trains to cut down journey time of bulk of the passengers. Railways have, therefore, introduced a large number of super fast trains during the last decade or so.

(d) **Range of travel distance** - From the view point of travel distance, railway passengers can be classified into three categories:

i) **Short distance** - This category of passengers travel between major industrial commercial centres or capital/district cities and town or villages around such major cities. This group of passengers generally lives in surrounding town and villages and commute to the city centre/industrial centres for employment regularly. The travel distance is generally up to about 80 kilometres. In very rare cases, people travel on regular basis for more than 80 kilometres also. These passengers like to reach the cities in the morning hours to be able to attend offices/factories and want to go back as early as possible after the office is closed so as to arrive at their residence in the evening. These passengers generally travel in groups as they belong to the same place and travel together regularly. Their livelihood is dependent on punctual running of trains. They are very vociferous and do not tolerate changes which do not suit them. At locations where industries work in shifts, there is traffic around such locations both ways. It is, therefore, essential for the Railways to provide stoppages for passenger trains for the category of passengers at convenient timings. At a few places, even long distance trains are provided halts to enable these passengers to reach their work centres in time.

ii) **Medium distance** - In this group are included passengers whose range of travel falls between 80 to 300 kilometres. Some of these passengers travel between two important cities and prefer to have over night trains. Alternatively, they use long distance trains, which are fast, but finding accommodation on such long distance trains may be a bit difficult. A large number of passengers in this group are those who work in major cities and have roots in places where they are not able to go back every day. They stay at the place of their work and visit their native place frequently, say once or twice a month. Another section of this group are those passengers who travel mainly on social or business
occasion from one village/town to another. They require at least one train a day in each direction so that they can travel conveniently.

iii) Long distance - These passengers prefer fast trains with increased level of comfort. They require trains, which do not have many stops enroute and are able to cover the entire journey in as short a time as possible.

(2) Operator's Requirement

This has to be kept in mind that the trains are run for the use of passengers and their basic requirements are supreme. Railways make efforts to ensure that they are able to cater to all reasonable requirements of the users. There are, however, certain departmental requirements, which influence framing of time table. These can broadly be classified into the following categories:

(a) Infra structural requirements - While continuous exercises to augment infra structural facilities available for running of trains continue, these do act as a constraint to introduction of more number of trains as well as timings when trains can be scheduled. Terminal facilities like platforms, stabling lines, examination lines and repair facilities at the passenger terminals influence not only introduction of additional trains, but also timings of the trains. As there is only a certain number of trains which can be attended to during a given time, departures and arrivals of the trains have to be so spaced as to permit handling at the terminals depending upon the layout at the terminals. Simultaneous departure of one train and reception of another train may also not be possible. While framing timetable, therefore, an interval between the two operations would be required. Availability of coaches and locomotives is another factor which influences scheduling of trains. Since these are costly assets, proper use of them has to be maintained. Railway line also has a capacity, which is provided based on certain requirements. This limits the number of trains that can run and the timing at which those trains can be run. It may be convenient for the passengers to travel at a given time but lack of adequate line capacity may force railways to run the trains at time, which may not be suitable to the passengers.

These infra structural constraints can be overcome but this is very costly proposition. Even when adequate funds are available, there is long gestation period between planning and installation of facilities. This problem is particularly acute in developing countries.

(b) Maintenance requirements - The infrastructure required to run the trains also need maintenance periodically. The train services are so time tabled so as to enable the maintenance of rakes and locomotives at terminals as well as at intermediate points. Most of the routine maintenance of coaches and locomotives is attended to at one of the terminals, which is considered as the base and is responsible for proper mechanical condition of the equipment. This is also called 'Primary Maintenance'. Maintenance at the terminal at the other end is called 'Secondary Maintenance'. In addition, routine examination is carried out at important intermediate stations also.

Another requirement of coaches enroute is cleaning, watering and that of locomotives fuelling or loco changing for which time also has to be provided.

In addition to the rolling stock, fixed installations like track, platforms, signals and electrical overhead equipment (OHE) also need repairs. Time tables provide a suitable
block of time during day light hours for this maintenance. Efforts are made to ensure that no passenger train is scheduled during this block of time so that equipment can be maintained in proper fettle.

(c) Operational requirement - In the running of trains, there are a number of operational factors, which have to be provided in the timetable. There are some trains, which run faster than others. Slower trains have, therefore, to be stopped to give precedence to fast trains. In addition, on a single line section, only one train can run at a time in a block section. We generally do not have facilities on such sections where two trains running in the opposite direction to each other can cross without one of them being stopped. Generally less important train is scheduled to stop for crossing of fast train. Similarly, number of platforms at terminals as well as at important junction stations may be limited and a train may be delayed for reception till an earlier train vacates the platform.

There are a number of slip coaches, which are required to be attached or detached at junction stations. Additional halt is required to be provided for performing shunting for this purpose. This also necessarily slows down the trains. Indian Railways have, therefore, taken a conscious decision to reduce the number of slip coaches wherever possible and it is not very inconvenient to passengers to change trains. A large number of slip coaches have already been discontinued and trains accelerated.

(d) Change of locomotives - Locomotives required to be changed either at places where traction changes or at stations where loco shed is located and locomotives are required to go to the shed as per the loco link.

(e) Loading/unloading of parcels/luggage - Stations having lot of luggage of passengers and parcels are also required to be provided additional time to permit loading/unloading.

(f) Staff requirement - There is a limited time up to which railway staff is expected to perform their duties. They have, therefore, to take over and made over their charge at fixed locations. A bit of additional time is provided for the staff to examine the equipment and documents etc., being taken over.

(g) Unforeseen circumstances - There are a number of circumstances like signal failure, alarm chain pulling, occasional failures for which provision has to be kept. If no provision for such eventualities is kept, it is likely that the trains may run late frequently. This is generally up to the maximum of 3% of the total running time and is called ‘traffic recovery time’ and is provided short of big junctions, divisional/zonal interchange points. It may, however, be noted that in actual practice on most of the railways very little traffic recovery time is available.

Important Connotations used in connection with Time Table

1. Maximum Permissible Speed (MPS) - This is the speed which a driver cannot exceed. This is also called technical speed and is dependent upon the technical condition of the track, signalling and rolling stock in use. It is generally different for different sections and trains. Most of the express trains on Indian Railways have MPS of 100 kmph or more. In order to increase this speed limit, signalling and track need to be carried out and Commissioner of Railway Safety has
to satisfy himself before he permits this limit to be enhanced. Our fastest trains so far were Rajdhani Expresses. But with the introduction of Shatabdi Express between NDLS - BPL, the fastest booked speed is now 150 kmph between NDLS - AGC.

2. **Booked Speed** - This is the speed which determines the normal running time of the trains and on the basis of which time table is prepared. This is generally 10% less than the maximum permissible speed.

With effect from 1st December 2006, however, this distinction of speeds has been dispensed with.

3. **Average Running Speed** - This is the average speed of the train on run. For calculating this, total time consumed in halts is deducted from the total time taken by a train between originating and termination stations.

4. **Commercial Speed / Overall Speed** - This is the average time taken by the train per hour from its start to termination. Long distance passengers are concerned with this. They are not interested how fast a train runs between the stations. What they are concerned about is how fast it can reach its destination.

5. **Speed Restriction** - Maximum permissible speed and booked speed relate to the particular section of the railway engine. Actual condition of the track bridges, curves and nature of signalling at certain stations may require the trains to be run at speeds which should be lower than the booked speed of a particular train. For this, special speed restrictions are imposed, which are of two types:
   
   (a) **Permanent Speed Restrictions** - These speed restrictions are the ones which are supposed to be for sufficiently long duration and are mentioned in the Working Time Table. Since copies of the Working Time Table are available with the train crew, no other intimation is required to be given to them on day to day basis. The time which the trains are expected to lose in observing its restrictions is built into the running time and is time tabled accordingly. These restrictions last the currency of a timetable and are reviewed at the time of revision in the timetable.
   
   (b) **Temporary Speed Restrictions** - A number of speed restrictions may have to be imposed for a short duration either on account of defects in track and related equipment or to facilitate repairs to the track and OHE and signalling installations. Requirement of time for such repairs is assessed well in time before a new timetable is introduced and this time is separately provided for in the timetable and is called 'Engineering Allowance' (EA). This time is also provided in the timetable short of junction stations or at the divisional/zonal interchange points. If there are repair works elsewhere on the section, trains would run late and this would be adjusted before the junction interchange points.

**Minimum Running Time**

This is the time, which a train should take between two stations when running at maximum permissible speed. This is calculated taking into consideration the permanent speed restrictions that may be in force from time to time in the concerned sections. This would be different for different trains and the driver is in no case permitted to take less than the minimum running time relevant to his train. Guards of the trains and Section Controller keep a watch on this aspect so that in case of overspeeding by the drivers, they may take steps to check them.

**Normal Running Time**
This time is based on the booked speed of the train and is generally about 10% more than the minimum running time. The driver is expected to run faster to the minimum running time when running late and is expected to make up time. As stated above now this difference in running times has been done away with and trains are expected to adhere to one set of running times only.

**Calculation of Running Time**

Calculation of running time is based on a number of factors, viz.:

(a) Distance between the two stations
(b) Hauling power of the locomotive
(c) Load of the train
(d) Permissible speeds
(e) Permanent speed restrictions
(f) Gradients and curves
(g) Time required for acceleration and deceleration.

This time is calculated with the help of computer by RDSO and is further validated through trials.

**Authorized Detentions**

This is a time for which a train can be detained at a junction station to wait for another train running late in order to facilitate passengers to maintain connections at the junction stations, some trains can be detained for a specific period, after this detention the train can give connection to another nominated train so that undue hardship to the passengers is not caused. These are, however, the outer limits and connecting train cannot be detained, if it is not likely to connect the trains to be connected within the prescribed limit. This is given in the Working Time Table.

**Rake Links**

Every train has certain specific set of coaches in a definite formation, which is called a rake'. This standardization is necessary to ensure the same type and level of accommodation not only for the guidance of passengers but also for the convenience of management. Since run of a train to the destination and back may take much time to permit the service to be run next day, there is a need for more than one rake. A number of rakes are, therefore, linked together in such a way that one rake is available at either end to run the service as per the schedule. There may be certain trains, which are single rake trains, and these trains are so scheduled as to run whenever the rake becomes available at either of the terminals. If it is a short distance train, it may be possible to run the train on daily basis with single rake. However, if it is long distance trains, frequency of the trains will get influenced by the availability of the rakes. If long distance trains are to be run, more frequency than permitted by the single rake, additional rakes have to be introduced into the circuit, which work in links. This is what we call a rake line. A simple example of a rake line is given below:

**Rake Link**:-

<table>
<thead>
<tr>
<th>1st day</th>
<th>16.40</th>
<th>2951 Dn</th>
<th>08.30</th>
<th>2nd day</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd day</td>
<td>08.35</td>
<td>2952 Up</td>
<td>16.30</td>
<td>2nd day</td>
</tr>
</tbody>
</table>
3rd day 16.40 ➔ Repeat as 2951 Dn

Number of Rakes Required - 2
Primary Maintenance at BCT
Secondary maintenance at NDLS
Goods Train Operation

Goods train operations are inherently more complex than passenger operations for a variety of reasons. Freight operations involve supply of empty wagons for loading of traffic, picking up and collection of loaded wagons from goods sheds and sidings, grouping of loads and formation of trains for varying distances in marshalling yards, arrangement of locomotive and crew, and constant monitoring of the movement of trains of loaded wagons as well as empties right up to the destination. The demands of traffic fluctuate from place to place, day to day at the same place and at different seasons of the year, depending on production which itself is subject to fluctuation owing to weather, consumption patterns, market variations, and sources of supply, labour problems and a host of other factors. The Railways deal with a huge variety of articles, raw material, finished products, packed goods, dangerous goods, livestock and over dimensional consignments. Such a large variety requires different types of wagons for transport, demand for which will fluctuate according to varying patterns.

For this reason it is not generally possible to run goods trains to a fixed schedule or time table as is the case with passenger trains. A goods train which is planned, hence does not automatically run to fixed timings but has to be specially 'ordered' or 'arranged'. Difference between passenger and goods trains in this regard is that crew and locomotives for passenger trains become available on the basis of links, those have to be specially ordered by the control office for goods trains. The conditions required for running of goods trains are availability of:

1. Sufficient load in the yard or at goods shed or in siding and feasibility of train formation in time
2. Power
3. Crew & Guard
4. Path

The running of a goods train depends on three organizations:

1. The marshalling yard or siding which forms the train
2. The loco shed which arranges locomotives
3. The control office which arranges and supervises the movement

The Dy. Chief Controller in charge of goods operation is responsible for ordering goods trains in close coordination with the Power Controller, Traction Loco Controller and the Marshalling Yard/sidings etc.

The provision of power and loco crew is the responsibility of the Power Controller from the mechanical/electrical department as the case may be.

Both diesel and electric locomotives do not require frequent maintenance unlike steam locos in use earlier, and can operate over a very large range of territory, it is not economical to allot or base locomotives at individual sheds in each division, as a single centrally located shed can easily meet the maintenance needs of a large territory. In their case, therefore, based on the outward and return runs plus allowance for detentions at yards at each end of the run, the turn round time is
worked out and each division is allotted a number of engine hours, depending on the total number of services to be run. It is the responsibility of the Maintenance department to ensure availability of locomotives up to this level, and of the Operating department to ensure optimum utilization of locomotives so made available.

**Wagon Usage** - The wagon is the main earning asset of the railway; but it fetches earning only when loaded and moving. Therefore, every effort must be made to load as many wagons as possible and to keep the fleet mobile. Therefore, for a given daily level of loading of wagons that Division or Railway is more efficient which is able to manage with a lesser number of wagons plying on the Division or its 'wagon holding' or 'wagon balance', is an important index of the efficiency of operations of a Division or Railway. However, a difficulty will immediately become apparent, viz. that if a Division were to load a large number of wagons for destinations outside its own jurisdiction, very soon it would run out of wagons. Such a difficulty was faced from the very beginning when companies owned their own wagons. In the beginning, individual companies accepted booking of goods only for stations on their own jurisdiction. The customer was required to 'release' the wagon and arrange a fresh booking over the next railway company's jurisdiction. Obviously, this was a very cumbersome and expensive process and soon enough arrangements were evolved between companies to allow through movement or "interchange or wagons". These arrangements were regulated through the Indian Railway Conference Association. To prevent misuse of wagons by destination railways by detaining the wagons on their own systems for their own local loading, they were required to pay:

1. A per day hire charge for the duration that a wagon would remain on their system for transit to destination land back to the owning railway;
2. If the wagon was detained beyond this period, a penalty charge at a sharply increased rate was levied.

Wagons now move freely between different zonal railways in India. But the above system of 'hire charges' is still prevalent between India and Pakistan/Bangladesh to a limited extent.

**Pooled and Non-Pooled Wagons**

As various railway companies had evolved their own wagon designs, a wagon of lone railway system might not be considered safe or up to the standard by another railway company. To get over this difficulty, the IRCA evolved a system of examination of wagons at inter-change points by its own train examination staff, which system came to be known as "neutral train examination". Such wagons as conformed to a standard design and were considered fit to move freely between one railway and another were taken into the common "wagon pool". Special types of wagon meant to carry special cargo on a particular railway or wagons not conforming to the standard design were called "non pooled" and when loaded to an adjacent railway, were required to be returned immediately to the owning railway by the shortest route. Gradually the vast majority of wagons came to be "pooled". There was yet another category of wagons which might be of low capacity or of very old construction and maintenance not up to accepted standard which could only be used for specific internal movement within each railway and were known as "local traffic wagons". Such wagons were not acceptable in interchange.
The exchange of wagons at terminal junctions between one railway and another thus enables free movement of goods through to destination irrespective of the jurisdiction on which the originating and terminating stations might lie. With the nationalization of railways, the coordinating role of the IRCA has gradually been taken over by the Railway Board.

The working of the wagon pool may be compared to a bank advancing capital to a business. Each Railway contributes its own wagons to the pool, which might be considered as equivalent to depositors keeping their money in bank accounts. In turn, each railway is authorized to draw out of the pool up to a certain number of wagons, depending upon its loading targets and the 'turn round time'; somewhat like the limit up to which a bank may allow an advance to a business firm. For this reason, as with the business firm's advance from the bank, the receipt of additional wagons from other railways through interchange, which adds to the wagon balance of the railways, is considered an additional loan from the pool and is accounted as a debit transaction, while the handing over or making over of wagons to another railway, which reduces the wagon balance, is considered as return of loan to the pool and is a credit transaction. Wagon holding beyond the target may be considered as so much not borrowing of wagons from the pool, and the objective must, therefore, be to achieve the targeted loading with as little borrowing as possible.

The Railway Board, by watching the wagon balance and the movement of broad streams of traffic through important interchange points can readily feel the pulse of operation and regulate it as necessary. That is why the fulfillment of interchange quotas between Railways is considered one of the most important operating performance indices. In a similar manner, interchange targets and wagon balance targets are set and monitored for each division.

**Goods Train Speeds**

Just as in the case of passenger operations, punctuality is considered the index of efficiency so in the case of goods operations speed is the index of efficiency, as better speed of goods trains means better utilization of both of locomotives and wagons and also economic utilization of running staff. The essential pre-requisites for better running speed are right time start of goods trains from originating yards/sidings and running the train to path.

**Wagon Turn Round**

The availability of wagons for loading will depend on the speed with which wagons once loaded can be made available again for loading. This is referred to as "wagon turn round", which is one of the common measures of efficient utilization of wagons. Wagon turn round is defined as the "interval in dates between two successive utilizations of a wagon". A simple formula for calculating wagon turn round is as follows:

\[ T = \frac{B}{L+R} \]

Where, \( T \) is wagon turn round
\( B \) is effective daily average wagon balance
L is the daily average number of wagons loaded
R is daily average loaded wagons received
Thus, if a division has an effective holding of 6000 wagons with 400 wagons per day originating loading and 200 loaded wagons received from other divisions, the wagon turn round will be:
\[
\frac{6000}{400+200} = 10 \text{ days}
\]
Therefore, the turn round improves when loading and loaded receipts increase, and deteriorates when loading and loaded receipts come down; as for example, by increased intake and movement of empties, this latter factor is not significantly under the control of a division and, therefore, an increase in empty movement may lead to a deterioration in wagon turn round although the division may be functioning efficiently. Wagon turn round, therefore, is not a very reliable indicator of wagon utilization, but the simplicity of the concept and its calculation make it a convenient, if somewhat incomplete management tool.

More reliable and comprehensive indices of wagon utilization are the following:

1. Wagons per wagon day, which is a mobility index.
2. Tonne kms. per wagon day, which is the index of the work done. This may be expressed either as gross tonne kms (GTKM) per wagon day, a figure that includes both wagon tare weight and pay load, or as net tonne kms (NTKM) per wagon day in which only pay load is counted.
Operating Control Organization & Functions

The purpose of Control
As an organization develops and becomes more complex, the need for coordination between its various units becomes more urgent. The Control organization is one of the principal means by which this essential coordination is obtained in railway operation. Position of the Control officer in the railway organization can be compared with that of the brain in human body. Just like the brain, it guides all operations on the railway.

Organization of a Divisional Operating Control

The Functions of Control
The complete operation, passenger as well as goods on a division or part of a division in every aspect is in the hands of the Control. This involves:
1. the systematic timing, working and loading of all trains both goods and passenger;
2. the correct ordering and use of locomotive so as to reduce to a minimum the productive time of power and personnel, and losses on account of wasted haulage capacity on trains and thus to keep the "turn round" as low as possible;
3. to so distribute coaching and goods stock and direct its loading, despatch, and movement, particularly through intermediate marshalling yards, and to so direct its placement and quick release so as to attain the quickest possible "turn round";
4. To keep in the closest touch with the operation of continuous sections and divisions so as to avoid congestion and lack of fluidity;
5. from experience gained, to suggest improvements and to eliminate conditions that lead to congestion;
6. To settle promptly and wherever possible without recourse to correspondence, questions of irregularities and to educate and assist stations in correct methods;

7. To provide a continuous supervision by a central competent authority over the entire operation including:
   (a) Running of and working of engines both train and shunting;
   (b) Working of all trains generally;
   (c) Distribution and movement of rolling stock;
   (d) Arrangement, imposition and removal of engineering blocks and allied restrictions;
   (e) Duty hours of running staff;
   (f) Operation of terminals and junctions including yard shunting
   (g) Prompt and economical movement of rakes/piecemeal stock.

8. To provide an impulse of human energy and brain power throughout the section and by coordination and direction ensure the free movement of traffic and thereby obtain the maximum output from each unit involved at the minimum cost to the administration.

The function of the Control office may, for the purpose of understanding be conveniently classified under the heading of planning, execution and review, though in practice, of course, all three activities would be going on simultaneously.

**Planning**

1. Forecast of interchange;
2. Forecast of train to be run section wise
3. Forecast of supply of empties for bulk loading transhipment, etc.;
4. Forecast of unloading;
5. Planning for engineering blocks and special moves.

Information required for this purpose:
1. Power availability
2. Availability of loads
3. Disposition of empties and planning for loading
4. Analysis of midnight divisional wagon balance

The plan is made by CTNL daily at 0800 hrs. and reviewed by Sr.DOM and HQ is informed by 1000 hrs. both immediate and antecedent, for taking remedial action to prevent their recurrence.

**Execution**

The day's plan is to be executed by yards, loco sheds, TXR depots, transhipment supervisors, area controls, SMs and must, therefore, be communicated to them as soon as it is finalized.

Instructions are given in the course of the morning conference, modified as necessary after conference with the HQ. The performance is reviewed once at 1600 hrs. and briefly at night.

**Review**

**Objectives:**
1. Analyzing shortfalls of previous day to take remedial measures and pin point weak spots;
2. Provide basic data for planning for current day.
The following are the main features of the previous day’s performance which are reviewed:

* interchange
* Divisional wagon balance
* Train running
* Disposition of empties
* Particulars of stabled loads
* Yard balances
* Unloading on division
* Registrations and loading
* Transhipment performance
* Punctuality
* Power utilization
* Sick line working
* Accidents, unusual occurrences
* Special type stock
* Crane wagons (heavy lift)

H.Q. Role

The operations of the division require close coordination with and assistance from other divisions and railways. While close direct contact is maintained with neighboring divisions, the conference with HQ is the principal means of achieving coordination, particularly with reference to:

1. Level of interchange between divisions and adjoining railways;
2. Loco holdings on different divisions;
3. Pinpointing excessive balances, hold ups, providing assistance to clear extra power, regulation, imposing quotas and restrictions;
4. Advising traffic in sight from other railways/divisions.

While primarily an operating instrument, Control can and should be of immense value to other departments, e.g.

Commercial department - It can be of considerable help in tracing missing consignments and in the connection of unconnected consignments; expediting the quick disposal of wagons detached out of course for such reasons as broken seals, hot axle, etc., in quickening the release of wagons by ensuring adequate labour at goods sheds and transhipment points for prompt release of wagons, and for balancing the supply of tarpaulins (wagon sheets) when loading general goods in open wagons. It can also be used for the census of passenger trains, to ensure a high standard of service to the public.

Engineering department - By regulating and planning the working of ballast trains and Engineering blocks, it can do much to save waste of labour and ballast train time, while by conveying prompt information to the persons concerned regarding patches of track needing immediate attention it can make for safety of working and expedite such action thus minimizing dislocation of traffic. Prompt release and loading of wagons by departmental users is also watched.

Loco department - By effective control over the distribution of fuel to various sheds and by an economic utilization of loco power it can do much.
**C&W department** - Role of C&W department is in maintaining proper health of coaches and wagons. For this purpose, there are sick lines and carriage depots available on the division. Their performance and problems are monitored by the Control office located in the divisional office. C&W controller keeps the Sr. DME informed of any problems arising in the maintenance from time to time so that timely decision can be taken at the appropriate level.

There are detachments of coaches and wagons from running trains at road side stations. C&W controller keeps a watch on them, not only for prompt attendance to them but also for preventing such out of course detachment in future.

Similarly it keeps a watch on the running of ‘close circuit’ rakes and other rakes like ‘Premium Train Examination’ rakes so that their integrity does not get impaired and the kilometer-logging is up-to-date.

**Signal & Telecommunication department** - Failures of signals, block instruments etc., can cause loss of punctuality and efficiency on the railway. Control office watches these developments like a hawk. Though no separate controller for this purpose is posted in Control offices, one of the Signal Inspectors in the divisional office keeps liaison in the Control. Control officers maintain a register where defects of signals reported by drivers are recorded so that prompt action to rectify them can be initiated.

The very function of Control office depends on the functions of telecommunication network on the division. We have telecommunication staff posted in Control offices round the clock, and who are part of the Control organization, for keeping a watch on the functioning.

**Security** - Law and order and indiscriminate use of alarm chain apparatus are watched closely in Control offices. In areas where such problems exist, we have RPF staff also posted in the Control offices to keep liaison with their out posts.

**Stores** - Expeditious movement of railway materials is essential for the efficient functioning of all the departments. At certain control offices, therefore, we have Stores chasers who watch the movement of stores delivery vans, keeping liaison not only with their staff but also the consignee for whom material is carried in these vans.
Marshalling Yards

A marshalling yard is a place where goods trains originate and terminate. Goods wagons, loaded and empty, arriving from different directions are sorted out and classified according to a plan so as to enable fresh trains to be formed with optimum load for the locomotive and running of goods wagons in full loads or large blocks through to destination or to the farthest possible common point. The need for marshalling yards, of course, arises from the fact that on the railways the unit of movement, which is the train, is much larger than the unit of booking which could typically be even a wagon and, therefore, facilities for consolidating the wagons together into train as well as for breaking up trains and sorting out into individual wagons become essential. This situation has, however, undergone a material change now due to more and more running and loading of rake-load traffic. Marshalling yards are an important part of the goods operations scheme and, in fact, the predominant proportion of total wagon time may in some cases be spent not on trains but in marshalling yards. That is why the marshalling yards are even referred to as 'necessary evil' which, if not properly worked can easily become a 'graveyard' for wagons. The yards are normally located at the following types of places:

1. Junction routes
2. Junction of gauges
3. Major ports
4. Major industrial complexes
5. Collieries

Marshalling yards may be hump yards or flat yards. In India on the M.G. only flat yards are permitted, and on the B.G. also by far the most numerous are the flat yards. A hump yard is one wherein an artificial gradient, shaped like a camel's hump, is introduced on the shunting neck so that wagons pushed up to the crest of the hump by a shunting engine can free run down on the other side, and can be sent into separate lines or sorting sidings by operation of the relevant points as the wagons are moving. This enables a hump yard to handle or sort out a vastly increased number of wagons. Thus under Indian conditions, whereas a flat yard with a single shunting neck can handle about 400 to 500 wagons a day, a hump yard can handle more than 1500 to 1600 wagons per day. However, the speed picked up by a wagon while rolling down the hump into the sorting sidings necessitates special arrangements for braking of the wagons to prevent damage because of excessive impact. This is the reason why hump yards were not permitted on the M.G. where the existing wagon design was unable to take heavy impact.

The main functions of the marshalling yards may be summarized as under:

1. To pass through trains after changing engines or crew, TXR examination, detach sick wagons, if any, and adjust the load of the train, if necessary, according to the maximum permissible on the next engine run;

2. To sort out terminating trains and local loads originating in the yards;
3. To form originating through trains for farthest point possible or farthest destination possible in accordance with marshalling orders laid down by the HQ office;

4. To form shunting goods trains for different sections served by the yards, including suburban sections, if any;

5. To hold back trains and wagons till they are able to be got out;

6. To move train engine and shunting engine/pilot between yards and loco sheds;

To place and withdraw wagons from various points in the local area such as goods sheds, sick lines, transhipment shed and departmental sidings, industrial sidings, etc.

A large marshalling yard consists of reception yard, classification yard and despatch yard and also facilities for bypassing through trains. A loco shed, sick line, various sidings, goodshed, transhipment shed and grid yard for formation of shunting trains are also indicated. A yard of this type wherein wagons enter at one end and progress forward in one direction from stage to stage until departure is called a uniflow yard. The layout indicates that trains from both, up and down directions, can be dealt with in this yard. That is why it may be called a 'single yard'. It is also possible to have separate yards for receiving UP trains and DOWN trains as is the case, for example, at Mughalsarai or Baroda.

**Organization and working** - A large yard may handle up to 3000 and more wagons per day. It is, therefore, increasingly becoming the practice to place the bigger yards under the direct supervision of a junior or senior scale officer who is called 'Area Officer'. Although the officer directly controls only the Operating staff, he is also given the responsibility of coordinating the functions of various departments working in the yard - commercial, carriage & wagon, loco, signal and telecommunication, electrical, security and civil engineering - who are all contributing directly or indirectly to the functioning of the yard.

An organization chart of the Operating staff in a large yard is given below:-
**Evaluation**
The principal statistical indices for evaluating marshalling yard operations are of two types viz. volume and efficiency. The reporting period for marshalling yard operational statistics is usually the calendar month.
The volume of work done is assessed from the number of trains received, number of trains despatched, the number of wagons received, the number of wagons despatched and number of wagons dealt with.
The efficiency of operation is known through the average detention to wagons, which figure may be further taken down indicating detention to through wagons, local wagons and empties. Other indices are the number of wagons dealt with per shunting engine hour, the percentage of right time starts, the percentage of mismarshalled loads originating, the cost of damage to wagons, occupation of line in reception and despatch yards, detention to trains at adjoining stations for reception, intensity of utilization of hump and cost per wagon etc.
Line Capacity and Throughput

There is a limit to the number of trains that can be run on a section. The total number of trains that can be run during a period of 24 hours on a section is called 'Line Capacity of the Section'. For a single line section, this is calculated as number of trains that can be run each way during this time period. On double line sections, this capacity is worked out for both directions separately.

There are a number of block sections on a section. Capacity of the block section on which trains take maximum time is reckoned for the purpose of the capacity of the section. This block section is called the 'Critical Block Section'. The number of trains that can run through this Critical Block Section can also run through the entire section.

A train takes some amount of time to run between two block stations. This is called 'Running Time of the Train'. In addition to this time, there is a little more time required for the purpose of closing the section by normalizing the signals and points behind the train, closing the block section by giving 'Train Out of Section' report to the station in the rear, granting/receiving line clear for the subsequent train, setting of route and taking 'off' signals, etc., before the subsequent train can start. With token working this time is taken as 5". This additional time is called 'Block Operation Time'. For calculating line capacity of a section, total time of 24 hours is divided by running time of the slowest train over the Critical Block Section plus Block Operation Time.

The simplest formula for this purpose is Scott's formula, which is as under:

Scott's Formula

\[
C = \frac{1440 \times E \times \frac{1}{2}}{T + t}
\]

Where

- \( C \) = the line capacity
- \( T \) = running time of the slowest train over critical block section
- \( t \) = block operation time
- \( E \) = efficiency factor (80)

Calculation of line capacity on the basis of above formula takes into consideration the slowest train on the section which would generally be a goods train. The very purpose of calculating line capacity is to find out the number of goods trains, as the number of passenger trains is already known. Ex-GIP Railway, therefore, refined this formula further and calculated the available capacity for running of goods trains. In this formula, the total time consumed in running of passenger train is deducted from the total time available and it is calculated how many goods trains can be run in the remaining time.

This formula is as under:

\[
C_g = \frac{1440 - (T_p + t)}{T_g + t} \times K \times \frac{1}{2}
\]

\[ K = 50\% \]
In this formula, efficiency factor (K) is taken as 50% as a number of gaps between passenger trains may not be usable for running of goods trains.

Since provision of line capacity is a very costly proposition, Railway Management has been conducting continuous research in this subject. South Eastern Railway had once employed one American Consultant to suggest more accurate formula for working out line capacity. This formula is known as Steinbeck's Formula, which is as under:

Steinbeck's Formula

\[ C = \frac{1440}{S} \times Y \]

Where
- \( S = Ta + Tb + O + W \)
- \( Ta = \) running time on 'a' side
- \( Tb = \) running time on 'b' side
- \( O = \) Block operating time for two trains
- \( W = \) Waiting time for the next train
- \( Y = \) Efficiency factor (70)

All these formulae are, however, theoretical and do not take into consideration the physical features over the entire section. Indian Railways, therefore, adopt Charting Method which is the most practical way of assessing line capacity. For this purpose, running of trains is plotted on the time distance graph relating to the section for which the capacity is to be calculated. To begin with, time of all 'scheduled trains' are plotted on the graph and in the gaps between different scheduled passenger trains as many goods trains are inserted as are viable thereby giving the maximum line capacity.

To provide for operating irregularities, incidents and delays, 'Time Allowances' gaps between the line occupation times are inserted. The minimum permissible time allowance is known as 'Tolerance'. The greater the tolerance, the easier it becomes to confine the detrimental effect of irregularities to a smaller number of trains. The adoption of smaller tolerance may increase the capacity of the line, but it will also reduce the prospects of adhering to the schedules. Tolerance provided on various railway systems vary from 0-5 minutes to 10-15 minutes, no guidelines exist on Indian Railways for this purpose.

(a) Maximum Line Capacity is the maximum number of trains that can be theoretically run on a section so that it is impossible to introduce even a single extra train.

(b) Practical Line Capacity is the number of trains per day, which is obtained from the above mentioned maximum line capacity after allowing for time required for maintenance of P. Way, time margins for scheduling any other operational necessities etc. Train scheduling is generally based upon this express of line capacity.

(c) Economic Line Capacity is the number of trains, which can be run at the least cost per train. When line capacity is under-utilized, increase in train services at first follows the law of increasing returns due to more intensive utilization of fixed assets. However, as the number of trains on a section grows larger and larger and the section gets saturated, it becomes more and more difficult to increase train services without
adversely affecting the utilization of rolling stock and train crew and maintenance of track.

**Augmenting Line Capacity**

As the traffic increases, we have to run more trains, which necessitates augmenting the line capacity. Since the capacity works are very costly, careful planning is necessary to ensure that capacity is created as required. There should neither be wastage of capacity nor should the traffic be required to suffer for want of adequate capacity. Line capacity proposals are, therefore, preceded by detailed studies of the future traffic requirements and various alternatives are carefully evaluated so that most economical methods for increasing line capacity can be adopted.

Bulk route kilometerage is on single line. The capacity of the single line section is augmented by improvement in both 'T' as well as 't' of the Scott's formula. There can be improvements in 'E' also.

'T' may be reduced by:
- (a) Reducing length of block section by providing additional crossing and passing stations;
- (b) Increasing speeds of trains by improvements in mode of traction, track, and rolling stock and signalling.

'T' may be reduced by:
- (a) Higher standards of interlocking;
- (b) Token less block instruments
- (c) Panel interlocking;
- (d) CTC and automatic signalling etc.

'E' is affected by time tabling, staff efficiency, upkeep of equipment, efficient operation of terminals, adequate number of loop lines, total length of the section, spacing of block posts/stations etc.

The following sequence may be useful for improving efficiency:
- (a) Time tabling - run trains with similar speed characteristics together to reduce 'speed spread', avoid mixed traction, have directional running, tighten inter-sectional running times, punctual running; goods trains - link, crack and unit trains improve sectional trains;
- (b) utilize motive power hauling capacity fully, utilize motive power intensively;
- (c) Simplify rules - certification of complete arrival, reminder caution orders;
- (d) Training of staff
- (e) Incentive to running staff

On double line sections, capacity can be increased by improving signalling, providing intermediate block signalling, automatic signalling etc. When the level of traffic further increases we have to resort to laying of a third line or quadrupling section, as the situation warrants.

**Throughput**

The ultimate objective of increasing the capacity of a section is to carry more traffic and not merely to increase running number of trains. A more reliable index of productivity is, therefore, throughput expressed as gross or net tonne kms per route
km per annum. In certain countries very heavy trains having a tonnage up to 30000 tonnes are run as compared to average train load of most of the trains on Indian Railways of about 3000 tonnes on B.G. We have also made a small beginning in running heavy trains on Gaya-Gaziabad section on Eastern/Northern Railways. These trains are 9200 tonne trains. There is, however, lot of difficulties in running trains having varying speeds and loads on the same section. We have passenger trains running up to a maximum permissible speed of 130 - 140 kmph. On the same section, goods trains run with a maximum speed of about 75 kmph or in some cases upto 100 kmph. A great deal of care has to be taken if heavier trains are run on the same sections where there is heavy passenger traffic. Another difficulty in increasing loads of our goods trains is the screw coupling with which our conventional wagons are fitted. Screw coupling has a maximum draw bar capacity of 18 tonnes thereby giving a maximum possible trailing load up to 2400 tonnes on the level track. This gets further reduced on graded sections. Indian Railways have, therefore, switched over to CBC coupling having a draw bar strength of 80 tonnes which can take a trailing load of 7200 tonnes. Capacity of loop lines is another factor. With our standard loop length of 686 meters, only 70 conventional wagons can be accommodated, giving a total tonnage of 2240 tonnes. BOX trains having 45 BOXs and a total load of 3600 tonnes can be accommodated on a standard loop line. This type of wagons were introduced in 1960s. Then, new type of box wagons called BOXN were introduced. Fifty eight of these wagons can be accommodated in a standard loop line, giving a total tonnage of about 4700 tonnes. More and more of this type of wagons are now in use to clear more and more traffic. System of braking is another factor in increasing the trailing load. On automatic vacuum brake system, which used to be fitted on most of our rolling stock, braking distance for heavier trains was very long. We hence are increasingly using compressed air brake system which is very efficient and all BOXN/BCN wagons are fitted with air brake system. In addition to this, Rajdhani Expresses and most other important trains are also run on air brake system. A new beginning has now been made by IR to increase the throughput of the section by resorting to what is known as increased axle-load. In this, those commodities which are dense, like ores, are permitted to be carried in excess of marked carrying capacities of the wagons, which is for average commodities. Introduction of this measure has paid rich dividends in increasing the throughput on various sections.
INFORMATION AND COMMUNICATION TECHNOLOGY
APPLICATIONS IN TRAIN OPERATIONS

FOIS - FREIGHT OPERATIONS INFORMATION SYSTEM
The Indian Railways carries nearly 1000 million tonnes of freight in a year. This translates to about 5000 freight trains daily. Freight trains bring two thirds of the Indian Railway revenues and are referred to as the bread earners for the Railways. The major commodities carried by Indian Railways are Coal, Iron Ore, Foodgrains, Iron & Steel, Cement, Petroleum products, Fertilizer and Containerized Traffic. There are specialized wagons to handle the transportation needs of the different types of commodities. Unlike passenger carrying trains, freight trains do not run to a fixed schedule and thus making freight operations a highly information intensive activity. Based on this information managers make allocation decisions continually to dynamically optimize utilization of resources like wagons, locomotives, crew and paths on the network. Real time information allows good decision making and thus ensures high levels of mobility within the system.

The Freight Operations Information System (FOIS) was the first project which CRIS embarked upon. In fact the creation of CRIS is a by product of this effort in the mid eighties. FOIS began as an application to track and monitor the movement of wagons, locomotives and unit trains. Now it is a complete management module for freight trains handling the billing and revenue collections as well. It has played a major role in the improved wagon productivity on Indian Railways and the objective is to use the information to further improve productivity, customer service and thus meet the needs of a rapidly growing economy.

FEATURES: Apart from monitoring the movement of freight trains, the system calculates freight and other charges based on complex rules of business and generates the Railway Receipt, the bill payable by the shipper. Today electronic collection of freight has reached an astounding figure of Rs 100 crores (US$ 20 million) per day. The system has the capability of tracking and tracing consignments and publication of information to the end users. To bring in greater transparency, Indian Railways have begun automatic allotment of rakes to customers for select commodities based on priority rules, operational restrictions, and commercial agreements. Services are provided to major customers by integrating FOIS with their legacy systems. It is capable of keeping record of asset ownership and maintenance, which is now being integrated to an SAP based asset maintenance management system. Most importantly, it also generates performance reports for terminals, train movements, asset use, financial statements and their trends over time that have been used for bringing about systemic improvements.

CONTROL OFFICE APPLICATION: Train operations on the Indian Railways are controlled and monitored by the Control Rooms in each of the seventy seven divisional offices. The Control Room is the nerve center of the division. The fluidity of train movements over the jurisdiction of the division is dependent on the efficiency of
the Control Room operations. The Control office, by its very nature never shuts down and works all hours of the day and every day of the week. The Control Office Application has changed the way the trains are monitored as train movements are captured in real time and movement of scheduled and unscheduled trains planned and controlled through the computer aided interface.

The Control Office Application is the latest addition to train operations related IT applications. Along with Freight Operations Information System (FOIS), COA has led to all information on train operations being computer generated. It is this application that feeds the National Train Enquiry System (NTES) that provides passengers up to date information on train running. The objective of the Indian Railways is to further improve the operations by using technological aids that enable quicker data capture and intelligent applications that provide better planning and forecasting tools.

**FEATURES:** The application requires the controllers to enter data related to the train operations as they receive information from the control points or stations. The application charts the running of the train in a section (a portion of the divisional network) and also generates the advance forecast based on various operational parameters. The train is then virtually handed over to the adjacent division as per its physical movement to maintain continuous flow of information.

The key features of the application include the ability of the controller to order trains, view all possible routes, divert or re-route trains, if required. The application has the facility for capturing and viewing details of consist or composition of the train, details of the crew and locomotive. Reporting of unusual events is enabled through the user friendly interface. There is also a chart that shows details of line occupancy, caution orders, and abnormal working. One of the key elements of the application is the ability to forecast or extrapolate the running of trains which allows the controller to plan better. For managerial supervision the charts can be printed apart from the fact that structured MIS reports are also generated.

COA has been designed such as it can be integrated with any other application. The National Train Enquiry System (NTES), the Punctuality Analysis Module (PAM), and Freight Operations Information System are all integrated through an Enterprise Application Integration Software.

**INTEGRATED COACH MANAGEMENT SYSTEM:** Millions of passengers book their journeys everyday with the confidence that when their train rolls up on the appointed day, it would bring a coach which has place for them. To meet this expectation day in day out, Indian Railways need to track over 50 thousand coaches. By efficiently deploying the fleet, railways are able to run more services for the benefit of their passengers, while minimising any chances of disruption and disappointment. IR also must ensure that these assets receive timely servicing and maintenance. Depending upon the need, the system can deliver historical records from past years in printed reports, or up-to-the-minute information on an official's cell phone.

The Integrated Coach Management System does exactly all this and more. There are three modules that give a comprehensive view to the managers and facilitate quick identification of available resources and their allocation as per the requirements.

**FEATURES:** The COIS (Coaching Operations Information System) module of this application provides detailed, real-time information for planning, executing and
monitoring the operations of passenger services. Since the system is aware of the plans, it requires minimal data input. Even this input is easy because the users can literally drag and drop coaches in a virtual representation of their yards. Another module, called the CMM or Coach Maintenance Management module, has been developed to facilitate and record maintenance of coaches and the management of spare parts inventory. It is fully integrated with the operations modules for generating alerts, interchange of information, request for placement of rolling stock for repairs, delivery and acknowledgement of certification of coaches for service, etc.

The Punctuality Analysis & Monitoring (PAM) module of ICMS automatically picks up the delays from the Control Office Application (COA) and produces real-time insight into the state of the operations. The system provides consistent and accurate reports for all level of management, from the operative to the strategic. Since ICMS already has most of the related information, it is the natural place to also monitor and analyse the punctual running of trains.

SOFTWARE AIDED TRAIN SCHEDULING

Many people find it extremely fascinating to pore over the Railway time table, especially while undertaking a train journey. The route that the train traverses through, the stations en route both significant and lesser known ones, the timings and the stoppages - all these are part of the romance of train journeys. The time table is something like the compass was for the early traveller or the star studded night sky for the seafarer.

Creating a time table for trains on a busy network like the Indian Railways is an extremely challenging task. Planners on the Zonal Railways work independently and then collaboratively with other Zonal level planners to design the All India time table. The two main objectives are that it should be convenient to the passenger and feasible to run on the system. Introducing new train services and augmenting older ones is an art and a select group of planners are highly skilled in this task. Indian Railways decided to provide software tools to aid the planning process. The Software Aided Train Scheduling and Network Governance (SATSaNG) project is entrusted with the task of building such a tool. The entire resource allocation process will now be aided by the tool leading to more efficient allocations and robust time tables.

FEATURES: Fixed Infrastructure Resources Module (FIRM)
The Infrastructure Module will have information on the fixed infrastructure and definitions required for assignment of train services. All information on tracks and signaling will be used to determine the appropriate definitions for conflict free assignment of fixed infrastructure resources. The user interface will include a view of the IR network map.

Rolling Assets Module (RoAM)
The rolling assets resources module will handle all the mobile resources, the rakes, the locomotive and the running staff. The rules for utilizing these resources will be handled within this module.

Scheduling Module for Allocation of Resources to Trains (SMART)
The Scheduling Module is at the heart of the Time Tabling software. This is the module where all the assignment of resources will be done. The resources will be
assigned to train services in a manner that there is no conflicting demand on the same resource and the entire allocation is consistent across all the resources.

Publish Report and Exchange Supporting System (PRESS)
The publishing module will contain all the output from the scheduling module and publish it to the other applications like COA, ICMS, PRS, NTES, and CMS. This module will also be used to publish hard copies of the time table in the format specified by the user.

**Capacity Module**
The capacity module will take all passenger train schedules as fixed and can be used to identify potential freight paths. Further this module will have the capability of building in “what if” scenarios.

**Simulation Module and Run Time Estimation Reports (SMaRTER)**
The simulation module will contain three elements; the train performance or run time calculator, the sectional simulation tool and the terminal simulation tool.

**Demand Evaluation Module to Assist in New Design of Services (DEMANDS)**
The Demands Module will contain analysis of the data from the Passenger Reservation System (PRS) and Unreserved Ticketing System (UTS).

**Latest status of these projects: AS ON OCTOBER 2012**

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th>MODULE</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight Operations Information System (FOIS)</td>
<td>FOIS Phase-II (TMS Expansion)</td>
<td>Non-device locations enabled under nodal concept, more than 99.9% RR’s booked through TMS</td>
</tr>
<tr>
<td></td>
<td>IREPG</td>
<td>E-Payment facility extended to a total of 620 customers.</td>
</tr>
<tr>
<td></td>
<td>Automatic identification (RFID)</td>
<td>Detailed estimate for rollout prepared and submitted to NR</td>
</tr>
<tr>
<td></td>
<td>COA</td>
<td>COA application is running in all 77 division/area control officers</td>
</tr>
<tr>
<td></td>
<td>Management System (ICMS) Coach</td>
<td>Lucknow and New Delhi depot users are using the application.</td>
</tr>
<tr>
<td></td>
<td>Maintenance Module (CMM) pilot</td>
<td>Hand holding by CRIS team</td>
</tr>
<tr>
<td></td>
<td>SATSaNg/TTMS</td>
<td>Version 2.0 of SATSaNg application released. Data entry initiated.</td>
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PERSONNEL
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<td>247-249</td>
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Chapter 1 : Organization of Personnel Department

Organization charts of personal department of Indian Railway's at Railway Board, Zonal Level and Divisional Level are given below.

ORGANISATION CHART AT RAILWAY BOARD LEVEL

Member Staff (MS) is the functional member in the Railway Board for the staff matter.
DIRECTORATES UNDER MEMBER STAFF

- Mgt Services
- Establishment
- Pay Commission
- Vigilance
- Rly. Sports Promotion Board
- Secretary Branches
- Health
- Security
- Official Languages
ORGANIZATIONAL CHART AT ZONAL RAILWAYS
Some important different Pay Scale on Indian Railway

**Designation**
- CRB & Members: 80000 fixed
- GM & Addl. Members: 75500-80000
- AGM & PHOD: 67000-79000
- SAG (ED’s in Rly. Bd.): 37400-67000 GP 10000
- SG (Director in Rly. Bd.): 37400-67000 GP 8700
- JA (Joint Director in Rly.Bd.): 15600-39100 GP 7600
- Sr.Sc. (Dy. Director in Rly. Bd.): 15600-39100 GP 6600
- Jr.Sc.: 15600-39100 GP 5400
- Gr.B: 9300-34800 GP 4800

**Designation**
- Chief OS/CWLI/CPI/CIHER: 9300-34800 GP 4600
- OS/WLI/PI/CIHER: 9300-34800 GP 4200
- Sr.Clerk/WI/PI/IHER: 5200-20200 GP 2800
- Jr.Clerk: 5200-20200 GP 1900

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**ORGANISATION CHART AT DIVISION LEVEL**

- Sr. DPO
  - DPO
    - APO I
    - APO II
    - APO III
Functional areas of Personnel Management

I. Organizational planning & development
• Determination of the needs of organization in terms of short, medium and long term objectives.
• Planning, development and designing of an organizational structure through fixing the duties, responsibility and authority of the employees so that goals may be effectively achieved.
• Development of interpersonal relationship through division of positions, jobs, tasks.
• Inspections

II. Staffing and Employment
• Manpower Planning - Creation, abolition, transfer of posts, cadre review, re-designation, merging of posts, assessment of vacancies, requirement, deployment, redeployment.
• Recruitment
• Selection, suitability, trade test
• Placement of an employee
• Induction and orientation - Introducing employee to the org. giving him all possible information about organization’s objectives, philosophy, policies.
• Seniority, transfer, promotion, reversion
• Separation process (retirement, voluntary retirement, removal, dismissal, resignation, medical ground retirement, death etc.)

III. Training and development
• Initial training.
• Refresher training.
• Promotional training.
• Special professional training.

IV. Compensation, wages and salary administration
• Job evaluation
• Payroll-Wage, salary, annual increment, pay fixation, allowances, recovery
• Incentive, including non-monetary like certificate cum trophy awards.
• Motivation

V. Employee services and benefits
• Safety provision in sheds, workshops
• Employee’s counseling
• Medical services
• Staff benefit fund
• Fringe benefits -
  a) Leave, Passes, PTOs
  b) Workers compensation benefit
  c) Pensionary benefit
  d) Bonus, allowances

VI. Employee records
• Service sheet, personal case, leaves account, seniority list, nominations, and performance appraisal reports.

VII. Labour relation / Industrial relation
• HOER
• Grievance handling
• Rules and regulations - DAR, Vigilance
• Rewards
• Dealing with labour commissioner (CIRM)
• Dealing with trade unions as collective bargaining - PNM, joint consultation, PREM
• Court cases

VIII. Employee welfare

Conditions of work environment
• Working condition
• Allotment of railway quarters
• Sanitation and cleanliness
• Drinking water
• Canteen, Creches, Rest rooms

b) Health services
• First aid facility in all offices
• Medical examination of employees
• Periodical medical examination
• Medical facility to employee & his family members
• Recreational and other welfare facilities, clubs, cooperative stores, sports, schools, Balmandir, holiday home, canteens, community hall etc.
• Education, Balmandir
• Factory act, minimum wages act, wages act, workmen compensation act etc.
• Social work - family planning, blood donation

IX. Personnel research and personnel audit
• Utilization of human resource
• Implementation procedures and policies
• Data relating to important aspects to analyze
• Morale and attitude survey
• Change scope of Personnel administration
• Emerging role of personnel management
• Role of the personnel managers of tomorrow
• Modernization of ‘P’ branch PMIS
Chapter – 2

Recruitment

The principal modes and agencies of recruitment on Indian Railways are as under:

1. Union Public Service Commission for Group ‘A’ Services
2. Railway Recruitment Board for Group ‘C’
3. Railway Recruitment Cell for Group ‘D’
4. Screening of Casual Labours & Substitutes
5. Appointment on compassionate grounds
6. Appointment against sports quota
7. Appointment on the grounds of cultural and artistic talents
8. Appointment of physically handicapped persons through RRB & RRC

Recruitment through UPSC for Group ‘A’ Services

There are the following nine organized services (other than RPF) on the Indian Railways:

1. Indian Railway Service of Engineers (IRSE)
2. Indian Railway Service of Mech. Engineers (IRSME)
3. Indian Railway Service of Signal & Telecom. Engineers (IRSSE)
4. Indian Railway Service of Electrical Engineers (IRSEE)
5. Indian Railway Stores Service (IRSS)
6. Indian Railway Traffic Service (IRTS)
7. Indian Railway Accounts Service (IRAS)
8. Indian Railway Personnel Service (IRPS)
9. Indian Railway Medical Service (IRMS)

Direct Recruitment to all the above nine services is made through the UPSC on the basis of Annual Competitive Exams. The recruitment to IRSE, IRSME, IRSEE & IRSS is done through Combined Engineering Services Examination, while that for IRTS, IRPS & IRAS is done through the Civil Services Examination. The recruitment to IRMS is done through the Combined Medical Services Examination.

In accordance with the provisions of the Recruitment Rules, 50% of the vacancies arising in a year are to be filled through the competitive examinations referred to above (except in the case of IRMS where it is 100% by Direct Recruitment) and the balance 50% are filled by promotion from Group ‘B’ to Group ‘A’.

In case of IRSME out of 50% referred to above, half of the Group ‘A’ (JS) vacancies are filled by recruitment through the Combined Engg. Services Exams and the other half through SCRA Exam.
SENIORITY OF MEMBERS OF GROUP ‘A’ SERVICES

The following principle is applied to fix the seniority of Gr. A officer:

A. **Seniority within the same service**
   i. The officers belonging to any examination batch would initially be junior to the officers of the same Service belonging to an earlier examination batch.
   ii. Within the same batch, the inter-se seniority would initially be in order of merit in the batch as existing on completion of the period of probation.

B. **Seniority Between members of any two Gr. A Services:** The inter-se-seniority as between members of any two Gr. A Services would be determined by the Date for Increment in Time-Scale (DITS) except that-
   i. In case any officer joins service earlier than his senior in the same Service in the same batch, he will take a notional DITS, which will be the same as that of his senior.
   ii. In case any officer is superseded on grounds of suitability by any officer of his own Service, he will, for the purpose of composite inter-se-seniority, take a place just below that of his erstwhile junior who has superseded him.
   iii. In case an officers gets a General Manager’s post open to more than one discipline later than an officer of another Service on grounds of suitability he will take his seniority below that officer.

**Definition of DITS** - The Date for Increment in Time Scale would be the same as the Date of Joining Service in case of direct recruits to Gr. A Services and for others it would be the Date for Increment in Time Scale in Gr. A Service as determined, as per rules laid down from time to time.

DETERMINATION OF SENIORITY OF Group ‘A’ PROBATIONER

The inter-se-seniority of Gr. A probationers of a particular examination batch and of a particular service, on their confirmation to Jr.Scale is decided on the basis of marks obtained by them during the probationary training as indicated below:

<table>
<thead>
<tr>
<th>Training in RSC</th>
<th>Training in Professional Institute</th>
<th>Assessment by Dir. / Controlling officers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation</td>
<td>Induction</td>
<td>Posting Exam.</td>
</tr>
<tr>
<td>150</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>70</td>
<td>280</td>
<td>1250</td>
</tr>
</tbody>
</table>

And marks obtained by them in the UPSC examination (or during the apprenticeship training for SCRA). For the purpose of determining seniority probationers merit position is determined on the basis of marks secured out of maximum marks- 3300 (the maximum marks of UPSC competition would be 2050 and for probationary training 1250).

For Engineering Services Examination, marks obtained out of 1200 will be normalized by multiplying the marks by 1.71083 (2050/1200) & in the case of SCRA marks obtained
out of 2400 during the apprenticeship period will be normalized by multiplying by the marks by 0.854 (2050/2400).

Promotion from Group ‘B’ to Group ‘A’
All group ‘A’ appointment in Jr. Scale, whether direct or by promotion are done by Union Public Service Commission.

As referred above, 50% of vacancies as calculated in a recruitment year are filled by promotion from Group ‘B’ to Group ‘A’. Steps involved are as under
(i) Promotion and all DPCs (Departmental Promotion Committee) procedure are handled in Rly. Board’s office in a Branch known as Estt.Gazetted Promotion under Directorate of Management Services.
(ii) As per existing Reservation policy of Govt. of India, SCs & STs (not OBCs) are to be given benefit of reservation from Gr. ‘B’ to ‘A’ (Jr. Scale). Thus communal distribution is worked out. Thereafter zonal distribution of vacancies in each deptt. As per rules lay down by Ministry of Railways.
(iii) As per zone of consideration, CRs for last 5 years of eligible candidature from each zone along with seniority list of Group ‘B’ officers are collected & sent to UPSC to arrange DPC once in a year. Representatives from Rly. Board as per composition of DPC does also participate in selection process.
(iv) UPSC then send select list to Rly. Board & there after with the approval of Railway Minister, Ministry of Railways issues notification for appointment in Group ‘A’ Jr.Scale. Group ‘B’ officers on their promotion to ‘A’ also get weightage of their Group ‘B’ service in seniority to Group ‘A’.

Promotion within Group ‘A’

An officer is promoted in next grade when he fulfils eligibility norms and is adjudged suitable based on service record (5 years/available performance report) by departmental promotion committee. However before officer can be promoted to higher grade, a vacant post should be available in the grade.

i. Promotion to Senior Scale: A junior scale officer is promoted to Senior scale after completion of 4 years of service in junior scale by GM based on bench mark as ‘good’.

ii. Promotion to JAG: A Gr. ‘A’ officer working in senior scale can be promoted to JAG after completion of minimum 8 years of Gr. ‘A’ service. Full board is the DPC for this purpose and prescribed benchmark is ‘good’.

iii. Promotion to Selection Grade: A Gr. ‘A’ officer working in JAG can be promoted to Selection Grade when he has entered 14 years service on the first of the January of the year of the consideration calculated from the year following year of the examination. Full board is the DPC for this purpose and prescribed benchmark is ‘good’.

iv. Promotion to SAG: A Gr. ‘A’ officer working in Selection Grade can be promoted to SAG when he has completed minimum 17 years service in Gr. ‘A’. Full board is the DPC for this purpose and prescribed benchmark is ‘very good’.
Recruitment through Railway Recruitment Board under control of Railway Recruitment Control Board (RRCB)

Early Beginning:

First time in July 1942, as an experimental measure, a Service Commission with a Chairman and two members was established for recruitment of Subordinate Staff on the then North West Railway. The position was reviewed in 1945 and Services Commissions at Bombay, Calcutta, Madras and Lucknow were set up under Railway Board. These Commissions were introduced with two fold functions of recruiting class III staff and also tender advice to General Managers for dealing with appeals from subordinate staff on disciplinary matters.

Later Developments:

In 1948, the Indian Railway Enquiry Committee reviewed working of commissions. While recommend-ing their permanency, suggested that the work related to appeals should be withdrawn so that commission can give undivided attention to recruitments. Chairman Bombay Service Commission was given the supervisory role to Supervise Commissions at Calcutta, Lucknow and Madras. In 1949, due to financial constraints a ban was imposed on recruitments on Indian Railways thus numbers of commissions was reduced to one centrally located at Bombay. In 1953-54 when Economic conditions of Indian Railway improved, four service commission were again set up at Bombay, Madras, Allahabad and Calcutta. In 1956, the Estimates committee generally approved the method of recruitment by the constitution of the Railway Service Commissions. In 1973 to cater the needs of the Northern Eastern Railway and to facilitate recruitment from the under developed areas of that region an additional commission was set up at Muzaffarpur. In the same year a branch office of Calcutta Service Commission was opened at Ranchi. In 1978 one more additional Service Commission was set up at Secunderabad to cater for the needs of newly formed South Central Railway. Recruitment of staff for the needs of NF Railway was still being done through recruitment committee control by NF Railway. Thus in 1978 this job was entrusted to full fledged service commission with Head Quarters at Guwahati. Yet another service commission was opened in 1980 at Bangalore to cater for the needs of candidates from remote backward areas of Karnataka. In 1981 full-fledged service commission was opened at Danapur.

Creation of additional Service commissions

In 1983 to cater for needs of areas which were getting neglected due to locations of the existing commissions, seven more commissions were set up at Ahmedabad, Ajmer, Bhopal, Bhuvneshwar, Chandigarh, Jammu & Srinagar with sitting at Leh and Trivendrum. In 1984 two more service commissions were set up at Malda and
Gorakhpur and a full-fledged commission at Ranchi was set up to cater for exclusive needs of Scheduled tribes of the area

**Re-naming as Railway Recruitment Board:**

In January, 1985 Railway Service Commissions have been renamed as Railway Recruitment Boards (RRBs). At present 20 Railway Recruitment Boards are functioning.

**Railway Recruitment Control Board (RRCB):**
Railway Recruitment Control Board (RRCB) was set up in 1998 in the Ministry of Railways (Railway Board) with the objectives of

- Formulation of policy in regard to recruitment procedures
- To monitor the activities of all Railway Recruitment Boards (RRBs) including expenditure incurred for recruitment
- To evaluate the performance of RRB's and advise them on priorities as required
- To organize a management information system for monitoring work done by RRB's

RRCB comprises of the following:

<table>
<thead>
<tr>
<th>Designation</th>
<th>Post held</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member (Staff ), Railway Board</td>
<td>Chairman</td>
</tr>
<tr>
<td>Additional Member (Staff), Railway Board</td>
<td>Member</td>
</tr>
<tr>
<td>Advisor (Vigilance),Railway Board</td>
<td>Member</td>
</tr>
<tr>
<td>Executive Director Establishment (RRB), Railway Board</td>
<td>Secretary</td>
</tr>
</tbody>
</table>

Executive Director Establishment (RRB), Railway Board is full time Officer.

**RAILWAY RECRUITMENT BOARDS**

**TOTAL NO. OF RRBS-20**
Each RRB generally consists of 1. Chairman
2. Member Secretary
3. Secretary/Assistant Secretary

**Appointments in RRBs:**

Chairman Railway Board appoints an SAG grade Railway Officer as chairman in RRB.

Member Secretary 3 JAG/SG grade Railway officers names are recommended by General Manager of concerned Railway, which belongs to the RRB Geographically. Railway Board selects one out of these officers and posts in RRB.
General Manager of concerned Railway, which belongs to the RRB Geographically, recommends Asst. Secretary One Jr. Scale Railway officers name. Railway Board approves for posting in RRB.

Other Non-Gazzated The willing group ‘C’ and ‘D’ staff of adjoining Railway/Chairman scrutinizes Division/Workshop/Railway Units To post-suitable staff for 5 years tenure. Hence one-fifth NG staff is replaced every year.

Note:- 1) Some time Secretary of Sr. Scale is posted as like Asst. Secretary.
2) The tenure of Chairman is 3 years. For other officers as per norms Fallowed in Railways in other cases.

RRB calls for eligible applicants through "Employment News" (A publication of the Government of India). The employment notification is also published on the Internet web site. The applications are scrutinized for eligibility. The eligible candidates are called for a written examination with call letters being sent a month in advance of the date of the examination. In most of the categories of jobs, there is no interview after the written examination. In some categories, there will be a second stage written examination. In categories related to operational safety, there will be a psychological test. The application-details furnished by successful candidates are verified and they are called for counseling and scrutiny of original documents. A panel of names is then recommended to the concerned railways to the extent of vacancies. The candidates will be required to pass a medical examination before appointment. The results of selection at every stage will be made available on the Notice Board of RRBs in "Results" through the Internet website to the successful candidates through post.

The selection process is based on merit and is subject to the rules and regulations issued by the Ministry of Railways (Railway Board), Government of India which includes reservation of jobs for certain castes/communities such as Scheduled Castes (SC), Scheduled Tribes (ST), Other Backward Communities (OBC), etc. Ex-servicemen are also entitled for reservation as per the rules. The entire computerized recruitment system functions impersonally without fear or favour. There is no scope for corruption, influence or discretion in this process. Candidates indulging in malpractices and unfair means are dealt with strictly.

Railway Recruitment Control Board, New Delhi, lays down the overall policy guidelines for all Railway Recruitment Boards in India.

There is provision for direct recruitment of staff in Group ‘C’ categories through RRB and in Group ‘D’ lowest category through RRC.

No direct recruitment can be done in the intermediate categories unless prior approval from Railway board has been obtained.

In case the quota of SC/ST cannot be fulfilled through RRB and there still exists the deficiency of SC/ST, direct recruitment can be resorted to, with the approval of GM. For this purpose, sufficient reasons have to be recorded before resorting to direct recruitment.
Screening of Casual Labour and Substitutes

This is an adhoc procedure for empanelment of the staff in Class ‘D’ categories by screening the working casual labour and substitutes. Those casual labour/substitutes who have completed 120 days service, whether on projects or elsewhere are eligible for screening through Screening Committee duly constituted and nominated by competent authority.

The Screening Committee consists of 2 officers - one departmental officer and the other a Personnel Officer. One of the two officers should be from the reserved community.

While screening persons, the names of casual labour and substitutes are arranged according to the total length of service put in by them.

Casual labour who have put in four months’ continuous service but who have over 120 days’ service in broken periods may also be screened if in the seniority list of casual labour maintained in the unit their juniors become eligible and come up for screening.

In case sufficient number of reserved community candidates to fulfill the roster points are not available, then according to the extent orders the committee can resort to direct recruitment.

The panel thus formed is approved by the competent authority and is notified after its approval. The panel remains current until it is exhausted.

Appointment on Compassionate Ground

Appointment on compassionate ground can be done both in Class ‘C’ and Class ‘D’ categories in recruitment grades under the powers of CPO and DRMs respectively. Priority for appointments on compassionate ground is as under:

i. Dependents of employees, who die or are permanently crippled in the course of duty;
ii. Dependents of employees, who die in harness as a result of railway accidents when on off duty;
iii. Dependents of the employees who die in service due to natural causes/prolonged illness or are permanently medically incapacitated.
iv. When an employee’s whereabouts are not known for a period of one year.

Compassionate ground cases appointment can be considered in regard to the employees of Gr.A,B,C & D as per genuine ness and merit of case. But appointment is given in recruitment grade in group C & D only.

Relaxation in age can be given freely in upper age and 1 year in lower age with approval of of competent authority.
i. One child/widow may be appointed on compassionate grounds without any ‘means’, irrespective of whether any other son is already earning.

ii. No qualification higher than the minimum prescribed in the general recruitment rules should be adopted to screen out candidate for compassionate grounds.

**Appointment against Sports quota**

Direct appointments can be made against the Sports Quota by each railway during a calendar year in the following manner:

### Annual quota for recruitment of sports person in Gr. C & D

<table>
<thead>
<tr>
<th>Rlys./Pus</th>
<th>Open Advt. Rlys./Pus quota</th>
<th>Talent Rlys./Pus quota</th>
<th>Scouting RSPB’s quota</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gr. C</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. NR / WR</td>
<td>20</td>
<td>14</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td>B. CR/ER/SCR/ SER/SR</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>30</td>
</tr>
<tr>
<td>C. NER/NFR</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>D. ICF / DLW</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>E. CLW/DCW/RCF/ WAP / Metro/CC</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td><strong>Gr. D</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A) Each div/Hq of rly.</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>B) ICF/DLW</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>C) CLW/DCW/RCF/ WAP/Metro/CCC,RDSO</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

The quota cannot be carried forward. The appointment against sports quota has to be made only to candidates who are outstanding players and/or who have taken part in the international or state events.

**Appointments on the grounds of Cultural & Artistic Talents**

General Manager is empowered to give appointments to the extent of 4 persons in a year either in Group ‘C’ or ‘D’ category on account of outstanding performance in cultural and artistic activities. Two appointments can be done for Scouts & Guides.

**Appointment of Physically Handicapped**

Physically handicapped can also be given appointments in Group ‘C’ or Group ‘D’ to the extent of 15% of recruitment in earmarked categories. In their cases also the relaxation of 5 years in age limit is allowed. The 3 % (i.e. 1% in each group blind, deaf & dumb, orthopedics) of the total recruitment made during the year in group ‘C’ and Gr. ‘D’
are recruited from physically handicapped person and appointed according to their handicap ness following the norms issued by Ministry of rehabilitation

**Appointment of Mechanical Apprentices**

Direct recruitment in Group ‘C’ supervisory category is done by recruitment of Mechanical Apprentices. The training of Mech. Apprentices is for a period of 2 ½ years.
Industrial Relations

Permanent Negotiating Machinery

Shri V.V.Giri founded it in the year 1951 when Shri Lal Bahadur Shastri was the Railway Minister.

With a view to maintain contact with organized labour and resolve disputes and differences arising between organized labour and the Administration, a machinery was set up, is called “Permanent Negotiating Machinery”.

The meetings between the organized labour and the Railway Administration are arranged in three tiers, viz.,

(a) Railway level
(b) the Railway Board level, and
(c) the ad hoc Tribunal level.

Under (a) above, the organized labours have access to the District, Divisional, Workshops and Headquarters Officer of a Railway Administration including the General Manager. Thus at Railway level, there are further three levels, i.e. at Headquarters level, (b) Divisional level & (c) Workshop level. The details of different levels are as under:

<table>
<thead>
<tr>
<th>Levels</th>
<th>Chairman</th>
<th>Secretary</th>
<th>Meetings</th>
<th>Details</th>
</tr>
</thead>
</table>
| Hqrs.  | G.M.     | C.P.O.    | Once in three months and often if necessary | 1. Separate meeting with each recognized union  
2. Prior approval of GM is necessary for items to be discussed. GM can discuss any item without notice.  
3. Individual cases not permitted to be discussed  
In the absence of GM, CPO will be Chairman |
| Divl.  | DRM      | Sr. DPO   | Once in two months | 1. Total number of persons for discussion from union side should not exceed 20. Not more than two persons from each branch.  
2. Every branch should not discuss more than 6 subjects  
3. Individual cases will not be |
discussed but DRM can discuss without notice.

**Railway Board level - All** matters which could not be settled at Railway level and (b) concerning pay scales and allowances would be discussed at this level.

Meetings:

1. Separate meetings with AIRF and NFIR and Railway Board and should be once in a quarter.
2. No limit of subjects and number of Union members for discussion. Dy. Director Establishment should decide it.
3. Chairman = Member Staff
4. Secretary = Director (Estt).

Ad hoc Tribunal Level - Matters of important nature on which no agreement is reached are put up to Ad hoc tribunal.

Chairman = Retired Judge of Supreme or High Court. He shall be having his own staff.
Representatives = Equal number of representatives of Labour and the Railway Administration.

An award is given which is not binding on the government. It is open to Government to accept, reject or modify the decision of Tribunal. Matters settled by agreements or decisions accepted by Government will not again be raised within period of two years. In case the Government has rejected or modified the decision of Tribunal, the matter can again be raised only after a year.

**2. Joint Consultative Machinery**

With a view to have harmonious relations between the Government (Employer) and its employees in the matters of common concern and with the object of further increasing the efficiency the Government of India have established a machinery known as Joint Consultative Machinery and Compulsory Arbitration. The CD councils may discuss matters relating to condition of service, welfare of the employees and improvement of efficiency and standard of work. No individual cases can be considered by the Councils and in regard to recruitment, promotion and discipline, the councils are to restrict their deliberations to the matters of general principles only.

Joint Consultative Machinery works in three tiers viz., National Council, Departmental Council and the Regional Council. The details are as under:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>National</th>
<th>Departmental</th>
<th>Regional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman</td>
<td>Cabinet</td>
<td>Member Staff</td>
<td>Head of Region</td>
</tr>
<tr>
<td></td>
<td>Secretary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Members (Staff side)</td>
<td>24</td>
<td>10</td>
<td>Depends on No. of</td>
</tr>
</tbody>
</table>
The Departmental Council is required to meet once in four months to discuss subjects on the agenda, which should be circulated not less than 30 days before the meeting; business not on agenda can also be put up with the permission of Chairman. Any matter disposed of is not to be placed on agenda again during the following 12 months. If there is no agreement between the two, the matter is referred to Board of Arbitration in which the Government appoints three members. The Chairman shall be an independent person. For members three panels are formed and one person is selected from each panel. **Once judgment or award is declared, it is binding on both parties.** Only Parliament can change the decision, otherwise, it cannot be touched and remain in operation for period of three years.

3. A Comparison of the basic features of Permanent Negotiating Machinery and Joint Consultative Machinery (PNM & JCM)

(a) The PNM started functioning on Railway in 1951. Under the JCM, the National Council started working in 1966 and the Departmental Council in 1968.
(b) PNM and JCM function in three tiers and both the Scheme are non statutory in character.
(c) Under the PNM, a wide range of subjects can be discussed but each tier is expected to dispose of matters falling within its purview and those, which are not resolved, are taken over to next tier. Under JCM, subject relating to general conditions to service and work and welfare of employees, may be discussed. Where a matter concerns only one department, it should be discussed and decided at Departmental Council, and where the matter concerns more than one department, it can be discussed only at National Council level.
(d) Under the PNM, matters of importance remaining unsolved during the discussions between the Federations and the Railway Board may be referred to an ad hoc Tribunal to be appointed by Government. Under the JCM, however, matters unsolved at the National Council or the Departmental Council are referred to Compulsory Arbitration from each Council independently when the disagreement relates to matters affecting pay and allowances, weekly hour of work, and leave of a class or grade of employees.
(e) Under the PNM, recommendations of the ad hoc Tribunal are not binding and the Government may accept, reject or modify the recommendations. Decisions of the Tribunal accepted by Government remain in operation for 2 years. Under the JCM scheme, recommendation of the Board of Arbitration are binding on both sides, subject only to the overriding authority of Parliament, and ordinarily remain in operation for a period of three years.
Corporate Enterprise Group (Now called PREM)

In order to have better and systematic participation of labour in Management for improvement in working of Railway system and appropriate changes for improving efficiency and viability, a Corporate Enterprise Group was set up at Central level in Ministry of Railways in the year 1972 specifically to provide for a free flow and exchange of ideas on the running and shaping of the enterprise of Railways. This group consists of Chairman, members and Secretary of Railway Board on one hand and on the other hand three representatives each of the National Federation of Indian Railways and All Indian Railway men’s Federation and one representative of the Officers’ Federation.

It was felt that the labour leadership, with its wide-base of communication at the grass roots would be able to provide access to view points at the working level and enhance contribution to the corporate efforts by reciprocally interpreting down the line, and broader aspect and objectives of the functioning of the organization. This would also tend to dispel any possible atmosphere of secrecy and distrust, which may at present be attributed to the functioning of top management.

The broad objectives of the Corporate Enterprise Group are to—

a) Evaluate the functioning of the Railways and exchange data and ideas on ways and means for improving the efficiency and viability of the enterprise;
b) Apprise the investment programme, particularly in regard to housing and welfare services;
c) Identify areas and devise action-oriented methods for maximizing organizational effectiveness, the use of technology and towards building up the image of the Railways as a service organization.

Staff matters including those, which come within the purview of the Permanent Negotiating Machinery and Joint Consultative Machinery, are not to be discussed by the Corporate Enterprise Group.

Corporate Enterprise Group has been set up on Zonal Railways from 15.7.1977 (Bd’s letter No.E(LL)77WMP/2-1 of 29.6.1977) to achieve the above objectives. At Zonal Railway level “CEG” consist of three representatives of each of the recognized Unions affiliated to AIRF and NFIR and one representative of the Association affiliated to the All India Railway Officers Federation. The official side is consisting of the General Manager and the Heads of Departments of the Railway, and—

(i) Those who are actually working on the Railway should be nominated to the Zonal CEG.
(ii) The Zonal CEG once formed shall function for a period of two years.
(iii) The GM shall be its Chairman and CPO shall be the Secretary
(iv) The Zonal CEG shall meet at least once in every two months.
A quarterly narrative appreciation in regard to the functioning of the scheme shall be sent to Railway Board within 15 days following the quarter to which the report relates.

**Trade Unions Act, 1926 (amended in 1947)**

A trade union is a continuous association of wage earners for the purpose of maintaining and improving the conditions of workers and their lives.

**Beginning of Union in India with brief history** - In the year 1875, Sorabji Shapurji started a labour agitation in Bombay against appalling conditions of workers especially women and children in factories. Between 1882 to 1890, about 25v strikes were recorded in Madras and Bombay alone. In 1890, N.M. Lokhandey had started labour movement in India and formed "Bombay Milhand Association." He had also started English Newspaper known as "Deen Bandhu". In 1891, Factory Act was passed to improve the conditions of workers. From 1904 to 1911, a common society of Railway men of India and Burma was formed.

P.B. Wadia had started labour movement in 1918 in Choolie near Madras. He was working in Buckingam and Karnatic Mills as worker. He was removed from service for his having participating in political affairs. The name of the union was kept "Madras Labour Union". Within the period of one year, the Union had its four branches consisting of 20,000 members.

In 1971, Miss Ansuiya Sarabhai, a social worker had organised workers and strike at Ahmedabad. In 1920, Mahatma Gandhi had founded Spinning and Weavers Association at Ahmedabad Textile Mill. From here the labour took good turn. Mr. Miller had formed ASSOCIATION of Railway worker in Punjab in 1920. Lala Lajpat Rai founded important name “All-India Trade Union Congress” in 1920. In 1922, All India Railway men Federation were founded. In 1926, the Government passed the Trade Union Act and prior to this they unions were not recognized. In 1940, Government instituted an enquiry in regard to India Trade Union Congress in order to know the activities of union. In 1946, Indian National Trade Union Congress was formed.

Factors responsible for the growth of Trade Unions --

a) Economic conditions due to First World War
b) Many soldiers returned home and needed jobs
c) Due to growth of many leaders and Social reformers
d) Due to International Labour office in India
e) Success of Russian Revolution
Unions in India –

1. All India Trade Union Congress (AITUC) (by Communist)
2. Indian National Trade Union Congress (INTUC) (by Congress)
3. Hind Mazdoor Sabha (Socialist)
4. Bharatiya Mazdoor Sangh (Jansangh)
5. United Trade Union Communist (Communist)
6. Central Trade Union
7. All-India Railwaymen's Federation
8. National Federation of Indian Railwaymen and
9. Bharatita Railway Mazdoor Sang

Union on Railways
a) National Railway Mazdoor Union connected items 1 & 7 above.

Functions of the Trade Unions
The functions can be divided in following three categories:

1. **Intra Mural Function:** Within the walls, adequate wages and allowances, better conditions of work, to reduce the hours of work. Adopted methods: Strikes, collective bargaining, negotiations and boycotts.
2. **Extra Mural Function:** Strikes, Demonstrations, helping the workers at the time of distress in strikes and lockouts, Running schools, libraries, canteens, indoor and outdoor games.
3. **Political Activities:** Taking active part in politics. This is not allowed in India.

Advantages of Trade Unions

a. A boon for working class
b. Brings all-round improvements in working conditions
c. Brings industrial peace
d. Safeguards against the possibility of exploitation of the workers

Disadvantages

a. Workers go on strike on flimsy grounds
b. Hostile attitude towards improvement and improved method of production
c. Go slow policy reduces the national income
d. Creates artificial scarcity of labour
Salient feature of the Trade Union Act, 1926

1. This Act was passed in 1926 to be implemented from 1.6.1927
2. Any seven or more persons can form an Association and get registration
3. The registrar can withdraw or cancel the registration of Union
4. Legal protection shall be given to Union office-bearers against criminal proceedings but that must be for union work only
5. The Union may raise separate funds other than subscriptions on purely voluntary basis for promotion of social or political interest
6. Unions are to define their aim and objects for its constitution and maintain and get audit of accounts
7. The Registrar can inspect the accounts and the union's books at any time
8. If a union(s) indulges in
   a. Unfair practices
   b. Go for irregular strike or
   c. Submit false statements, the punishment would be total withdrawal of recognition
9. If employer
   a. Interferes in the working of union
   b. influences for against the union
   c. discriminates with any officer of the union or
   d. refuses to negotiate or deny privileges to union, he is liable to be fined to the extent of Rs.1000/-.
10. Rights and liabilities of trade union and the purpose for which the union fund may be utilized have been defined in the Act.

Privileges/facilities given to Unions by Railways

1. Through Permanent Negotiating Machinery certain staff
2. Through Joint Consultative Machinery, Government as a whole
3. Staff Benefit Fund (membership or representatives)
4. Participation through Labour Advisory Committee
5. Staff Committee (at certain important stations)
6. Issue of card passes to union workers
7. Special casual leave and passes for attending meetings
8. Railway provide land for building or accommodation on rental basis for office and also provide telephones
9. Sanction to hold meeting on Railway ground with prior approval
10. Space for notice at Railway premises
11. Supply of copies of Railway Board's letters
12. Collection of subscriptions of unions on pay day, 20 yards away from the pay counter
13. Union office bearers cannot be transferred unless two months' notice has been given
14. Foreign service contribution towards pension/PF/Gratuity by recognized unions/Federations shall not be realized for:
   a. Two persons in case of each recognized federation
   b. Two persons in case of each recognized unions at zonal level and
   c. One person in each division of Railway for each recognized union

Dealing with unrecognized Unions/Associations

Unrecognized Unions are those, which are though registered under the Indian Trade Unions Act, 1926, but are not recognized by the government.

In dealing with such unrecognized Unions, it is the policy of the Government not to have meetings with them and communications received from them are neither replied nor acknowledged. However, the grievances of staff received from any quarter including from these unions should be dealt with in proper manners at appropriate level.

Matters raised through correspondence by SC/ST Railway Employees' Associations, in regard to reservations, recruitments, promotions and other grievances of SC/ST employees shall be acknowledged and dealt with advising them the benefits granted by the Government.

Recognition of Associations or Unions

Grant and continuance of recognition rests in the discretion of Government, but recognition when granted will not be withdrawn without due cause and without giving opportunity, to the association to show cause against such withdrawal.

Recognition will not ordinarily be granted or continued to any association unless it complies with the following conditions:

i. It must consist of a distinct class of railway servant and must not be formed on the basis of any caste, tribe or religious denomination or of any group within or section of such caste, tribe or religious denomination.
ii. All railway servants of the same class must be eligible for the membership
iii. It must be registered under the Trade Unions Act.
Staff Grievances

Indian Railways being the largest Public and National enterprise are looking after their prime responsibility of welfare of staff with a view to bring improvement in the employees and to protect their legitimate interest and rights by redressing their genuine grievances.

In short, the grievances of railway employees could be either from management policy or from working conditions of the railway employees. Thus, grievances can be attributed to either general or individual nature.

Grievances of general nature which are of common interest of the employees are seniority, promotions, transfers, payment of wages and overtime, housing, medical sanitation, schools, holiday homes, institutes or accommodation. These grievances are discussed with the leaders of the Tirade Unions in the Permanent Negotiating Machinery at the appropriate level and if not settled at the zonal level, these are referred to AIRF/NFIR for settlement. In case there is still disagreements the matters can be referred to Adhoc Tribunal, where an award is given which is not binding on any of the representatives. It is open to Govt to accept or reject or modify the decision of the Tribunal. Unions shall not open matters settled again for the period of two years. Where the Government have rejected or modified the matters can again be raised at the end of the year.

The matters relating to condition of service, welfare of the employees, improvement of efficiency and standard of work are discussed in the meeting of Joint Consultative Machinery and councils shall entertain no individual cases. If there is no agreement between JCM and Railway Administration, the matter is referred to Board of Arbitration and the final outcome is binding on both the parties. Only Parliament can change the decision.

The individual grievances are normally redressed by the Welfare Inspectors or by representation to the concerned official, through proper channel. In the case of dissatisfaction, representation can be made to the highest authority through proper channel. As per procedure in vogue, the representation from staff should be replied within a period of one month’s time.

Labour Inspectors of Central Government have also to visit Workshops, Stations, Yards and other units to get the information in regard to working hours, periodical rest, non-payment of wages and overtime. They submit their inspection notes to the concerned Railway authority for compliance. The railway authorities have to attend the grievances of staff and genuine grievances are redressed under intimation to the Regional Labour Commissioner. Regular meetings are also held between Railway Administration and Labour Enforcement Officer in order to review the grievances reported by LEO and action taken to redress the same.
1. Evolution of Hours of Employment Regulations

The Hours of Employment Regulations includes:

(a) Statutory provisions incorporated in the Chapter XIV of the Indian Railways Act, 1989.
(b) Railway Servants (Hours of Employment) Rules, 1931.
(c) Railway Servants (Hours of Employment) Rules, 1961.
(d) Railway Board's Subsidiary Instructions on the above Rules, and
(e) Instructions issued by the Railway Board consequent on the acceptance of the recommendations of Railway Labour Tribunal, 1969.

The Indian Railways Act of 1989 and the Railway Servants (Hours of Employment) Rules 1961 have the statutory force.

The Hours of Employment Rules apply to all the Railway servants including Casual Labourers and Substitutes except those who are brought under the -

(a) Factories Act,
(b) Indian Mines Act,
(c) Minimum Wages Act and
(d) Indian Shipping Act.

Rules were incorporated in the Indian Railways Act, 1890 by an amendment in the year 1930 to regulate the Hours of Employment and the periodic rest of the Railway workers. This was done to fulfill the obligations undertaken by the Government of India due to the deliberations made in the Washington and Geneva Conventions which were sponsored by the International Labour Organization. In the year 1931, Rules were issued on the Hours of Employment Regulations by the Governor General-in-Council of India based on the Chapter VI-A of the Indian Railway Act 1890 as amended.

The Government of India based on the representations received for the modification of the said rules appointed the Hon'ble Mr. Justice G S Rajdhyaksha, ICS, for adjudication into the matter. The recommendations of the adjudicator were accepted and the Railway Servants (Hours of Employment) Rules, 1961 were issued.

Later, Shri N M Miabhoy, Retired Chief Justice, High Court of Gujarat, was appointed as Chairman of the Railway Labour Tribunal 1969 to adjudicate on certain points referred by the NFIR and his decisions were accepted. Orders were issued by the Railway
Board on the revision of the rules as recommended by the Railway Labour Tribunal 1969 in regard to the hours of work, payment of overtime allowance etc., to take effect from 01/08/1974.

In exercise of the powers conferred in by the Indian Railways Act, the Central Government made the "The Railway Servants (Hours of Employment) Rules".

2. CLASSIFICATION OF STAFF

As per the rules, the Railway servants are classified into 4 groups viz.

1) Continuous
The employment of all Railway servants under the Hours of Employment Regulations shall be deemed to be 'continuous' with the exception of those few whose employment may be classified as 'intensive' or 'essentially intermittent' or who may be excluded by an order of the Competent Authority.

2) Intensive
The employment of a Railway Servant shall be said to be 'intensive' when it has been declared to be so by the Competent Authority on the ground that it is of a strenuous nature involving continuous concentration or hard manual labor with little or no periods of relaxation. Under this, two factors must be present, viz.-

(a) Strenuous nature of work tending to cause mental or physical strains and

(b) Continuous application to such work with little or no periods of relaxation.

(NOTE: The following categories on the basis of the time observation can only be declared as 'intensive'.

i) Section Controllers,

ii) Staff employed on line clear work such as Leverman etc.,

iii) Yard staff such as Yard Foreman, Shunting or Coupling Jamadars or Shunting or Coupling Porters,

iv) Signallers employed on continuous heavy circuits, and

v) Wireless Operators.)

3) Essentially Intermittent
The employment of a Railway servant shall be regarded as 'essentially intermittent' when it has been declared to be so by the Competent Authority on the ground that his daily duty hours include periods of inaction aggregating 6 hours or more (including at least one period of not less than one hour or two periods of not less than half an hour each) during which the railway servant is on duty but is not called upon to display either physical activity or sustained attention.
4) **Excluded**
The employment of a Railway servant is said to be `excluded' if he belongs to any one of the following categories viz.-

i) Railway servants employed in a confidential capacity,

ii) Armed guards or other personnel subject to discipline similar to that of the armed Police Forces,

iii) Staff of Railway schools imparting technical training or academic education,

iv) Such staff as may be specified as Supervisory staff by the Central Government by rules made under Section 71-E,

v) Such categories of staff of the Health and Medical Department as may be specified by the Central Government by rules made under Section 71-E,

vi) Stenographers attached to Officers at the rank of Junior Administrative

The following categories of staff of Health and Medical Department etc. shall be treated as `excluded'.

a) Assistant Surgeons
b) Matrons
c) Sisters-in-charge
d) Midwives who are not posted on regular shift duties in a Railway Hospital
e) Health Educator/District Extension Educator (Male and Female)
f) Family Planning Field Worker (Male and Female)
g) Lady Health Visitor
h) Auxiliary Nurse-cum-Midwives
i) Projectionists
j) Public Health Nurses (Family Planning)

The Government also may by an order in writing specify the Railway servants or the classes of Railway servants to be treated as Supervisory staff on the ground that the Railway servant holds a position of responsibility, is employed on duties mainly of supervisory character and is from the nature of his work and position comparatively to adjust his hours of duty of work during such hours as supervisory.

3. **PRINCIPLES OF AVERAGING**

Principles of averaging are warranted in Railway working in regard to the following groups of employees.

a) Running Staff
b) Operating Staff
c) Shift Workers
d) Those workers whose work is bound up with the work of workers comprised in the above three categories.
The averaging period for `intensive' and `continuous' workers should be fixed as two weeks and for `essentially intermittent' workers one week.

In the case of `C' Class Gateman, Care-takers of Rest Houses and Reservoirs etc. and Saloon Attendants classified as `essentially intermittent', the period of averaging is fixed as two weeks.

The principles of averaging should not be applied to the staff belonging to the following broad groups and they should be considered to be eligible for fixing their hours of employment on daily basis.

   a) Office staff in Headquarters, Divisional and District Offices (excluding stations and sheds) classified as continuos.

   b) Gang staff of Civil Engineering Department.

   c) Works staff of the Civil Engineering Department.

   d) Staff governed by Hours of Employment Regulations attached to Workshops and Production Units, except Clerks whose work is connected with the shift workers.

   e) Staff belonging to the Stores Department except Store Van Clerks.

**Hours of Employment**

The daily and weekly Hours of Employment of continuous and essentially intermittent workers are fixed as 8 hours and 48 hours respectively.

The essentially intermittent workers can be called upon to work for additional hours as follows in addition to the hours fixed as mentioned above.

a) `C' Class Gatemen, Saloon Attendants, Caretakers of Rest Houses and Reservoirs etc. may be required to do duty for additional hours of 4 hours a day and 24 hours a week. Their averaging period will be fixed as two weeks. The total hours for which these staff can be called upon to work may be 144 hours per two weeks on an average.

b) Staff those who are classified as `essentially intermittent' and posted to road-side stations may be called upon to do duty for 4 hours per day and 24 hours per week when they are provided with residential accommodation within 0.5 km. from their place of work, so that they can be called upon to work 72 hours a week on the average. The period of averaging will be one week. Residential accommodation includes Railway Quarters, Private accommodation etc.

c) The rest of `essentially intermittent' workers viz. those staff who are not coming under (a) and (b) above, can be called upon to do duty for an additional number of 2
hours a day and 12 hours a week. Therefore, they can be called upon for duty for 60 hours a week on the averaging. The period of averaging of these staff will be one week.

The weekly hours of employment of 'intensive' workers will be 42 hours on the average per week. The period of averaging of these workers is fixed as two weeks, so that they can be called upon to do duty for 84 hours in a period of two weeks.

In the case of 'excluded' workers, no statutory maximum limit for the hours of employment has been prescribed but this should not absolve the Railway Administration of their responsibility on humanitarian grounds of seeing that unreasonable conditions are not imposed.

4. ROSTERED HOURS OF DUTY

Rostered hours of duty will be the standard duty hours prescribed for each category of workers as detailed above plus the time required for doing preparatory and/or complimentary work in the case of staff who are required to do so plus the additional hours laid down in the case of essentially intermittent workers as detailed above. The rostered hours should not exceed the statutory limits prescribed when preparatory and/or complimentary work is added, as described in the para below.

Preparatory and/or complimentary work

Preparatory and/or complimentary work includes the work of handing over and/or taking over of charge and are necessarily to be carried on outside the standard duty hours on the scales prescribed for each category.

(NOTE: The time required for preparatory and/or complimentary work to be done by various categories of workers will be determined by means of a job analysis.)

The time required for preparatory and/or complimentary work in regard to each classification of workers or worker and if such time requires to be included in rosters, it shall be done on the proposition mentioned herein.

(a) For continuous, intensive and essentially intermittent workers, who are called upon to do preparatory and/or complimentary work for a period of less than 15 minutes per day, such time shall not be considered as period of duty and may not be included in the roster.

(b) Preparatory and/or complimentary work, if it is assessed as between 15 and 45 minutes per day in the case of continuous workers, half-an-hour credit should be given per day or 3 hours per week should be given and the same should be reflected in the roster.
(c) One hour per day or 6 hours per week against preparatory and/or complimentary work should be given to the `continuous' workers if such work is assessed as between 45 minutes and one hour per day.

(d) In the case of `intensive' workers, preparatory and/or complimentary work for a period between 15 minutes and 30 minutes will be considered as duty for 30 minutes. Roster will be prepared; so as to not to exceed the statutory hours prescribed for such workers.

(e) In the case of `essentially intermittent' workers, credit of 30 minutes will be added if such work is assessed between 15 and 30 minutes. However, the maximum additional hours for such type of work will be fixed at 3 hours per week in the case of whose duty hours other than preparatory and/or complimentary work is fixed as 72 hours per week. As regards to the rest of `essentially intermittent' workers, the maximum additional hours for preparatory and/or complimentary work should be fixed as 4-1/2 hours per week.

(f) In regard to the Running Staff, the whole period from `signing on' to `signing off' should be treated as period on duty.

**Waiting for duty**

The time during which an employee is waiting at the place of duty and not resting should be included in the Hours of Employment since the employee is available for such suitable work as the Administration may assign to him.

Administration should give special attention to the improvement of running rooms to see that the facilities afforded to the running staff are such as to enable to get adequate rest. This applies equally to crew vans and rest vans.

It is also desirable that Railway Administration should try and make provision for one room at each fairly large station for the use of staff who may be arriving at that station on relieving or other duty. It should also be available for the use of staff who is off duty at inconvenient hours.

**Reckoning of traveling on duty as duty**

When a worker not provided with the facility of crew rest van travels as spare on duty on any day beyond a radius of 8 kms. from their place of duty all time spent for traveling from the time they commence the journey from the place of duty will be treated as duty. These instructions would apply only to such staff who had prior to 01/08/1974 been getting the benefit of counting periods of spare travel as duty in terms of subsidiary instructions No.8 provided with travel facilities.
The following running staff whenever they have to travel as spares on duty and when not provided with travelling facilities will come under the classification referred in the above para.

1) Driver Grade `A', `B' and `C' Loco Staff
2) Diesel Driver Loco Staff
3) Diesel Assistant Loco Staff
4) Firemen Grade `A', `B' and `C' Loco Staff
5) Guard Grade `A', `B' and `C' Traffic
6) Brakesman Traffic
7) Driver Grade `A', `B' and `C' Traction Running Staff
8) Assistant Driver Traction Running Staff
9) Motorman Traction Running Staff

In other than cases referred in the above paras, when workers travel as passenger on duty beyond a radius of 8 kms. from the place of duty and who are not provided with accommodation in trains, 50% of the period of travel should be credited towards duty hours. Such travel in the case of any individual employee should be limited to 70 hours in a month. In other words, payment of overtime for such travel should be restricted to 35 hours in a month. This limit should not be exceeded under any circumstances. The accommodation, for this purpose, means provision of sleeper/first class accommodation whether reserved or otherwise. When staff travel in train where there are no facilities of reserved accommodation even for fare-paying passengers of when travel is taken on reservation seats, the question of treating travel time does not arise.

Loco running staff who may be deputed to accompany dead engines may be allowed 2/3rd credit for the time spent by them during such journeys and loco running staff accompanying engines on trial measure may be allowed full credit for the entire journey.

In case of running staff travelling spare on double manned trains, full credit should be given to both the sets of crew, so far as the payment of overtime is concerned, if no crew rest van is provided.

5. SPECIAL INSTRUCTIONS FOR REGULATING HOURS OF EMPLOYMENT OF RUNNING STAFF AND OTHER TRAVELLING STAFF.

1. As a general rule, running staff should be classified as `continuous'.
2. The deemed rostered hours of running staff other than those work on fixed roster should be determined as 104 hours in a two-weekly period and the payment of overtime allowance should be regulated accordingly.
2.2 In the case of Special Grade `A' Drivers and `C' Grade Co-Drivers employed on Superfast trains which are having a booked speed of 100 kms. per hour or more, their hours of employment should normally be limited to 90 hours in a two-weekly period and payment of overtime allowance should be regulated as 1-1/2 times of the ordinary rate of pay for the work done over 90 hours upto 108 hours and twice the rate of pay for the work done beyond 108 hours. This will not, however, apply to such trains as are booked on run at a speed of less than 100 kms. per hour though designated as Superfast trains or when such trains are manned by two special `A' Grade Drivers.

3. In the case of Loco and Traffic running staff, duty hours should count from `signing on' to signing off'.

4. Loco running staff should be allowed 45 minutes before departure from the engine shed and 15 minutes after arrival in the engine shed.

4.2 Traffic running staff
(a) For express and passenger Guards: 30 minutes before the departure of a train for taking over and 30 minutes for making over after arrival should be allowed.

(b) For Goods trains and mixed train Guards and for Ballast trains/departmental and Road Van train Guards: 45 minutes for taking over and 30 minutes for making over should be allowed.

(c) For Brakesmen: They may be treated on par with the Traffic Guards in allowing train attendance work.

5. The Hours of Employment of the running staff should be restricted to 10 hours at a stretch from the time signing on to signing off, if not otherwise warranted in exceptional circumstances of unavoidable operations exigencies or accidents, floods, emergencies etc.

5.2 The 10 hour rule as applicable to the running staff should be implemented subject to the following provisions:

i) The undermentioned periods will count for 10 hour rule.

(a) Engine attendance time as prescribed and
(b) Time taken from starting station upto crew-changing station including intermediate detention.

ii) The following periods will not count.
(a) From bahar line to the station at the starting point, pre-departure, detention and travelling pilot and
(b) At the terminal station from the station to the shed where the destination point is other than a station, say, a yard, a convenient point or area would have to be locally demarcated as the destination station for the purpose of 10 hour rule.

iii) the time spent by running staff on non-running duties such as travelling spare on duty or waiting at a station for returning to headquarters etc. will continue to be excluded for the purposes of 10 hour rule.

6. In the case of Loco and Traffic Running Staff, continual night duty should not normally exceed 6 nights at a stretch.

7. The stay of running staff away from headquarters be limited to 3 days which may work to their staying 3 running rooms e.g., one on the, say, up one at the end and one on the way back.

The 72 hours limit should be relaxed to 96 hours wherever the requirement in operation so demanded.

Running staff, as far as possible should be advised of their periodic rest at or before its commencement.

8. The running staff may be given 4 periods of rest of not less than 30 consecutive hours each or five periods of not less than 22 consecutive hours in a month. Periodic rest should be given as far as possible once in every ten days. Periodic rest should be given in headquarters and should always include a full night.

9. i) Rest for running staff should be based on `running duty' which should be reckoned from actual departure of the train from the starting station till the actual arrival of the train at destination.

ii) Loco and Traffic running staff should be given adequate rest after their trips as under (at Headquarters).

a) For running duty less than 8 hours from signing-on to signing off … 12 hours
b) For running duty 8 hours or more .. 16 hours

iii) Rest at outstations when working other than short trips.

a) For running duty of 8 hours or more .. 8 hours
b) For running duty less than 8 hours .. Rest equal to running duty
9.2 At the discretion of the Competent Authority the above scale of rest may be reduced in an emergency or in order to have delay to a train at outstation, but every endeavour shall be made to give the minimum of 6 hours rest to staff who have done 6 hours running in the forward trip.

9.3 When working short trips, the travel between trips shall be treated as `duty' if it is equal to or less than one hour plus time allowed for train or engine attendance before the next trip, the period being increased at the discretion of the Railway Administration when local condition such as distance from running room to the traffic yard etc.

6. BREACH OF REST ALLOWANCE

In cases of booking of Running staff before completion of the prescribed minimum Rest they are entitled for breach of rest allowance. In cases of utilisation in excess of rostered hours incidence of B O R is high thereby involving additional payment on that account. Such of the staff who performs running duties with out proper rest are also prone to ACCIDENTS.

7. PAYMENT OF OVERTIME UNDER HOURS OF EMPLOYMENT REGULATIONS

Overtime is payable to staff for extra hours worked due to exigencies of service under specific authorisation from the Competent Authorities to work beyond the rostered hours of work and or on rest days, as the case may be.

Payment of overtime is regulated as 1-1/2 times of the ordinary rate of pay for overtime work done between the rostered hours and statutory limits prescribed for each category of staff and twice the ordinary rate of pay for overtime work done beyond the statutory limit. The hourly rate of overtime will be worked out on the basis of `Rostered Hours' over the period of averaging.

<table>
<thead>
<tr>
<th>Period of averaging</th>
<th>Hours of duty over which OT is payable 1-1/2 times of ordinary rate of pay</th>
<th>Statutory limits over which twice the ordinary rate of pay is payable</th>
<th>Classification under HER and category of staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 weekly</td>
<td>84 + Prep/Comp. work, if any</td>
<td>90</td>
<td>Intensive</td>
</tr>
<tr>
<td>- do –</td>
<td>96 + - do –</td>
<td>108</td>
<td>Continuous</td>
</tr>
</tbody>
</table>
When staff belonging `averaging group' are absent/avail recorded leave, such as LAP, LHAP or LWP or unrecorded leave like Casual Leave, Special Casual Leave and compensatory holiday, credit should be given under the actual duty hours column in the overtime slip to the extent of the normal rostered hours of the respective days. The statutory maximum limit need not be worked out proportionately to the days of leave, absence and compensatory holidays during the weekly or two weekly periods, as the case may be.

Against the days of Compensatory Rest/Rest, no credit under the actual duty hours column should be given and marked distinctly as CR/Rest, as the case may be. In case work is done forgoing the weekly rest, then the hours worked should be shown filling the actual duty hours column.

The Railway Servants (Discipline & Appeals) Rules, 1968

The Constitutional provisions are as under:-

309. Recruitment and conditions of service of persons serving the Union or a State. - Subject to the provisions of this Constitution, Acts of the appropriate Legislature may regulate the recruitment, and conditions of service of persons appointed, to public services and posts in connection with the affairs of the Union or of any State:

Provided that it shall be competent for the President or such person as he may direct in the case of services and posts in connection with the affairs of the Union, and for the Governor [http://alfa.nic.in/const/r253.htm](http://alfa.nic.in/const/r253.htm) of a State or such person as he may direct in the case of services and posts in connection with the affairs of the State, to make rules regulating the recruitment, and the conditions of service of persons appointed, to such services and posts until provision in that behalf is made by or under an Act of the appropriate Legislature under this article, and any rules so made shall have effect subject to the provisions of any such Act.
310. Tenure of office of persons serving the Union or a State. -

(1) Except as expressly provided by this Constitution, every person who is a member of a defence service or of a civil service of the Union or of an all-India service or holds any post connected with defence or any civil post under the Union holds office during the pleasure of the President, and every person who is a member of a civil service of a State or holds any civil post under a State holds office during the pleasure of the Governor of the State.

(2) Notwithstanding that a person holding a civil post under the Union or a State holds office during the pleasure of the President or, as the case may be, of the Governor of the State, any contract under which a person, not being a member of a defence service or of an all-India service or of a civil service of the Union or a State, is appointed under this Constitution to hold such a post may, if the President or the Governor, as the case may be, deems it necessary in order to secure the services of a person having special qualifications, provide for the payment to him of compensation, if before the expiration of an agreed period that post is abolished or he is, for reasons not connected with any misconduct on his part, required to vacate that post.

311. Dismissal, removal or reduction in rank of persons employed in civil capacities under the Union or a State. -

(1) No person who is a member of a civil service of the Union or an all-India service or a civil service of a State or holds a civil post under the Union or a State shall be dismissed or removed by an authority subordinate to that by which he was appointed.

(2) No such person as aforesaid shall be dismissed or removed or reduced in rank except after an inquiry in which he has been informed of the charges against him and given a reasonable opportunity of being heard in respect of those charges: Provided that where it is proposed after such inquiry, to impose upon him any such penalty, such penalty may be imposed on the basis of the evidence adduced during such inquiry and it shall not be necessary to give such person any opportunity of making representation on the penalty proposed:

Provided further that this clause shall not apply-

(a) Where a person is dismissed or removed or reduced in rank on the ground of conduct which has led to his conviction on a criminal charge; or
(b) Where the authority empowered to dismiss or remove a person or to reduce him in rank is satisfied that for some reason, to be recorded by that authority in writing, it is not reasonably practicable to hold such inquiry; or

(c) Where the President or the Governor, as the case may be, is satisfied that in the interest of the security of the State it is not expedient to hold such inquiry.

(3) If, in respect of any such person as aforesaid, a question arises whether it is reasonably practicable to hold such inquiry as is referred to in clause (2), the decision thereon of the authority empowered to dismiss or remove such person or to reduce him in rank shall be final.

In exercise of the powers conferred by the Proviso to Article 309 of the Constitution, the President of India has framed the Railway Servants (Discipline and Appeal) Rules, 1968.

Authorities: -

1. Appointing authority
   (a) ‘Appointing authority’ in relation to Railway servant means-
      (i) The authority empowered to make appointments to the Service of which the Railway servant is, for the time being, a member or to the grade of the Service in which the Railway servant is for the time being included or

      (ii) The authority empowered to make appointment to the post which the Railway servant, for the time being holds, or

      (iii) The authority which appointed the Railway servant to such Service, grade or post, as the case may be, or

      (iv) Where the Railway servant having been a permanent member of any other Service or having substantively held any other permanent post, has been in continuous employment under the Ministry of Railways, the authority which appointed him to that Service or to any grade in that Service or to that post. Whichever authority is the highest authority.

Disciplinary Authority means

(i) in relation to the imposition of a penalty on a Railway servant, the authority competent, under these rules, to impose on him that penalty;

(ii) In relation to Rule 9 and clauses (a) and (b) of sub-rule (1) of Rule 11 in the case of any gazetted Railway servant, an authority competent to impose any of the penalties specified in Rule 6;

(iii) in relation to Rule 9 in the case of any non-gazetted Railway servant, an authority competent to impose any of the major penalties specified in Rule 6;
(iv) In relation to clauses (a) and (b) of sub-rule (1) of Rule 11, in the case of a non-gazetted Railway servant, an authority competent to impose any of the penalties specified in Rule 6.

**Suspension**

(1) A Railway servant may be placed under suspension-

(a) where a disciplinary proceeding against him is contemplated or is pending; or

(b) where, in the opinion of the authority competent to place a Railway servant under suspension, he has engaged himself in activities prejudicial to the interest of the security of the state, or

(c) where a case against him in respect of any criminal offence, is under investigation, inquiry or trial

(2) A Railway servant shall be deemed to have been placed under suspension by an order of the competent authority-

(a) with effect from the date of his detention, if he is detained in custody whether on a criminal charge or otherwise, for a period exceeding forty-eight hours.

(b) With effect from the date of his conviction, if in the event of a conviction for an offence, he is sentenced to a term of imprisonment exceeding forty-eight hours and is not forthwith dismissed or removed or compulsorily retired consequent to such conviction.

Explanation - The period of forty eight hours referred to in clause (b) of this sub-rule, shall be computed from the commencement of the imprisonment after the conviction and for this purpose, intermittent periods of imprisonment, if any, shall be taken into account.

(3) Where a penalty of dismissal, removal or compulsory retirement from service imposed upon a Railway servant under suspension, is set aside in appeal or on revision under these rules and the case is remitted for further inquiry or action or with any other directions, the order of his suspension shall be deemed to have continued in force on and from the date of the original order of dismissal, removal or compulsory retirement and shall remain in force until further orders.

(4) Where a penalty of dismissal, removal or compulsory retirement from service imposed upon a Railway servant, is set aside or declared or rendered void in consequence of or by a decision of a court of law and the disciplinary authority on consideration of the circumstances of the case, decides to hold a further inquiry against him on the allegations on which the penalty of dismissal, removal or compulsory retirement, was originally imposed, the Railway servant shall be deemed to have been placed under suspension by the competent authority from the date of the original order of dismissal, removal or compulsory retirement and shall continue to remain under suspension until further orders.
Provided that no such further inquiry shall be ordered unless it is intended to meet a situation where the court has passed an order purely on technical grounds without going into the merits of the case.

(5) (a) an order of suspension made or deemed to have been made under this rule, shall continue to remain in force until it is modified or revoked by the authority competent to do so.

(b) Where a Railway servant is suspended or is deemed to have been suspended (whether in connection with any disciplinary proceeding or otherwise) and any other disciplinary proceeding is commenced against him during the continuance of that suspension, the authority competent to place him under suspension may, for reasons to be recorded by him in writing, direct that the Railway servant shall continue to be under suspension until the termination of all or any of such proceedings.

(c) An order of suspension made or deemed to have been made under this rule, may at any time be modified or revoked by the authority which made or is deemed to have made the order or by any authority to which that authority is subordinate.

(6) Notwithstanding anything contained in sub-rule 5, an order of suspension made or deemed to have been made under sub-rule (1) or sub-rule (2) of this rule shall not be valid after a period of ninety days unless it is extended after review in the manner provided in sub-rule (7) of this rule, for a further period before expiry of ninety days.

(7) The review of an order of suspension shall be done by the authority which is competent to modify revoke the suspension, on the recommendation of the review committee constituted for the purpose, and such competent authority shall pass orders either extending or revoking the suspension before expiry of ninety days from the date of order of suspension. Subsequent reviews shall be made before expiry of the extended period of suspension. Extension of suspension shall not be for a period exceeding one hundred and eighty days at a time.

PENALTIES AND DISCIPLINARY AUTHORITIES

Penalties

The following penalties may, for good and sufficient reasons and as hereinafter provided, be imposed on a Railway servant, namely-

Minor Penalties-

i. Censure,
ii. Withholding of his promotion for a specified period;
iii. Recovery from his pay of the whole or part of any pecuniary loss caused by him to the Government or Railway Administration by negligence or breach of orders;
iii.a. Withholding of the Privilege Passes or Privilege Ticket Orders or both;

iii.b. Reduction to a lower stage in the time scale of pay by one stage for a period not exceeding three years, without cumulative effect and not adversely affecting his pension.

iv. Withholding of increments of pay for a specified period with further directions as to whether on the expiry of such period this will or will not have the effect of postponing the future increments of his pay.

Major Penalties-

v. Save as provided for in clause (iii-b) reduction to a lower stage in the time scale of pay for a specified period, with further directions as to whether on the expiry of such period, the reduction will or will not have the effect of postponing the future increments of his pay.

vi. Reduction to a lower time-scale of pay, grade, post, or service, for a period to be specified in the order of penalty, which shall be a bar to the promotion of the Railway servant during such specified period to the time-scale of pay, grade, post or service from which he was reduced, with direction as to whether or not, on promotion on the expiry of the said specified period-

(a) the period of reduction to time-scale of pay, grade, post or service shall operate to Postpone future increments of his pay, and if so, to what extent; and

(b) the Railway servant shall regain his original seniority in the higher time scale of pay, grade, post or service.

vii. Compulsory retirement;

viii. Removal from service which shall not be disqualification for future employment under the Government or Railway Administration;

ix. Dismissal from service, which shall ordinarily be disqualification for future employment under the Government or Railway Administration.

Provided that in cases of persons found guilty of any act or omission which resulted or would have, ordinarily, resulted in collision or Railway trains, one of the penalties specified in clauses (viii) and (ix) shall, ordinarily, be imposed and in cases of passing Railway signals at danger, one of the penalties specified in clauses (v) to (ix) shall, ordinarily be imposed and where such penalty is not imposed, the reasons therefor shall be recorded in writing.

Provided further that in case of persons found guilty of possessing assets disproportionate to known sources of income or found guilty of having accepted or having obtained from any person any gratification, other than legal remuneration, as a motive or reward for doing or forbearing to do any official act, one of the penalties specified in clauses (viii) or (ix) shall ordinarily be imposed and where such penalty is not imposed, the reasons thereof shall be recorded in writing.
Authority to Institute Proceedings-

(1) The President or any other authority empowered by him, by general or special order may-

(a) Institute disciplinary proceedings against any Railway servant;

(b) Direct a disciplinary authority to institute disciplinary proceedings against any Railway servant on whom that disciplinary authority is competent to impose, under these rules any of the penalties specified in Rule 6.

(2) A disciplinary authority competent under these rules to impose any of the penalties specified in clauses (i) to (iv) of Rule 6 may, subject to the provisions of clause (c) of sub rule (1) of Rule 2 institute disciplinary proceedings against any Railway servant for the imposition of any of the penalties specified in clauses (v) to (ix) of Rule 6, notwithstanding that such disciplinary authority is not competent, under these rules, to impose any of the latter penalties.

PROCEDURE FOR IMPOSING PENALTIES.

PROCEDURE FOR IMPOSING MAJOR PENALTIES.

(1) No order imposing any of the penalties specified in clause (v) to (ix) of Rule 6 shall be made except after any inquiry held, as far as may be, in the manner provided in this rule and Rule 10, or in the manner provided by the Public Servants (Inquiries) Act, 1850 (37 of 1850) where such inquiry is held under that Act.

(2) Whenever the disciplinary authority is of the opinion that there are grounds for inquiring into the truth of any imputation of misconduct or misbehaviour against a Railway servant, it may itself inquire into, or appoint under this rule or under the provisions of the Public Servants (Inquiries) Act, 1850, as the case may be, a Board of Inquiry or other authority to inquire into the truth thereof.

(3) Where a Board of Inquiry is appointed under sub-rule (2) it shall consist of not less than two members, each of whom shall be higher in rank than the Railway servant against whom the inquiry is being held and none of whom shall be subordinate to the other member or members as the case may be, of such Board.

(4) Where the Board of Inquiry consists of two or more than two members, the senior member shall be the Presiding Officer.

(5) Every decision of the Board of Inquiry shall be passed by Majority of votes, and where there is an equality of votes on the findings, the finding of each member shall be incorporated in the report prepared under clause (i) of sub-rule (25).
EXPLANATION- Where the disciplinary authority itself holds the inquiry, any reference in sub rule (12) and in sub rules (14) to (25), to the inquiring authority shall be construed as a reference to the disciplinary authority.

1. Where it is proposed to hold an inquiry against a Railway servant under this rule and Rule 10, the disciplinary authority shall draw up or cause to be drawn up: -

(i) the substance of the imputations of misconduct or misbehavior into definite and distinct articles of charge;

(ii) a statement of the imputations of misconduct or misbehaviour in support of each article of charge which shall contain-

(a) a statement of all relevant facts including any admission or confession made by the Railway servant;

(b) a list of documents by which, and a list of witnesses by whom, the articles of charge are proposed to be sustained.

7. The disciplinary authority shall deliver or cause to be delivered to the Railway servant a copy of the articles of charge, the statement of the imputations of misconduct or misbehaviour and a list of documents and witnesses by which each article of charge is proposed to be sustained and shall require the Railway servant to submit a written statement of his defence within ten days of such further time as the disciplinary authority may allow.

Note: - If copies of documents have not been delivered to the Railway servant along with the articles of charge and if he desire to inspect the same for the preparation of his defence, he may do so, within 10 days from the date of receipt of the articles of charge by him and complete inspection within ten days thereafter and shall state whether he desires to be heard in person.

8. The Railway servant may, for the purpose of his defence submit with the written statement of his defence, a list of witnesses to be examined on his behalf.

Note: - If the Railway servant applies in writing for the supply of copies of the statements of witnesses mentioned in the list referred to in sub-rule (6), the disciplinary authority shall furnish him with a copy of each of such statement as early as possible and in any case not later than three days before the commencement of the examination of the witnesses on behalf of the disciplinary authority.

9. (a) (i) On receipt of the written statement of defence, the disciplinary authority shall consider the same and decide whether the inquiry should be proceeded with under this rule.

(ii) Where the disciplinary authority decides to proceed with the inquiry it may itself inquire into such of the articles of charge as are not admitted or appoint under sub-rule (2) a Board of Inquiry or other authority for the purpose.
(iii) Where all the articles of charge have been admitted by the Railway servant in his written statement of defence, the disciplinary authority shall record its findings on each charge, after taking such further evidence as it may think fit and shall act in the manner laid down in Rule 10.

(iv) If the disciplinary authority, after consideration of the written statement of defence, is of the opinion that the imposition of a Major penalty is not necessary it may drop the proceedings already initiated by it for imposition of major penalty, without prejudice to its right to impose any of the minor penalties, not attracting the provisions of sub-rule (2) of Rule 11. Where the disciplinary authority so drops the proceedings but consider it appropriate to impose any of the minor penalties, not attracting the provisions of sub-rule (2) of Rule 11, it may make an order imposing such penalty and it will not be necessary to give the Railway servant any further opportunity of making representation before the penalty is imposed.

b. If no written statement of defence is submitted by the Railway servant, the disciplinary authority may itself inquire into the articles of charge or may, if it considers it necessary to do so, appoint, under sub-rule (2) an inquiring authority for the purpose and also inform the Railway servant of such appointment.

a. Where the disciplinary authority itself inquires into an article of charge or appoints a Board of Inquiry or any other inquiring authority for holding an inquiry into such charge, it may, by an order in writing, appoint a railway or any other Government servant to be known as Presenting Officer to present on its behalf the case in support of the articles of charge.

The disciplinary authority shall, where it is not the inquiring authority, forward to the inquiring authority-

(i) a copy of the articles of charge and the statement of the imputation of misconduct or misbehavior.

(ii) a copy of the written statement of defence, if any, submitted by the Railway servant.

(iii) A copy of the statement of witnesses, if any referred to in sub-rule (6);

(iv) Evidence providing the delivery of the documents referred to in sub-rule (6) to the Railway servant;

(v) A copy of the order appointing the Presenting Officer, if any; and

(vi) A copy of the list of witnesses, if any, furnished by the Railway servant.

The Railway servant shall appear in person before the inquiring authority on such day and at such time within ten working days from the date of receipt by the inquiring
authority of the order appointing him as such, as the inquiring authority may, by a notice in writing, specify in this behalf, or within such further time not exceeding ten days, as the inquiring authority may allow.

The inquiring authority shall, if the Railway servant fails to appear within the specified time, or refuses or omits to plead, require the Presenting Officer if any, to produce the evidence by which he proposes to prove the articles of charge and shall adjourn the case to a later date not exceeding thirty days, after recording an order that the Railway servant may for the purpose of preparing his defence, give a notice within ten days of the order or within such further time not exceeding ten days as the inquiring authority may allow for the discovery or production of any documents which are in possession of Railway Administration but not mentioned in the list referred to in sub-rule (6).

Note: The Railway servant shall indicate the relevance of the documents required by him to be discovered or produced by the Railway Administration.

13.(a) The Railway servant may represent his case with the assistance of any other Railway servant (including a Railway servant on leave preparatory to retirement) working under the same Railway Administration, subject to whose jurisdiction and control he is working. He cannot engage a legal practitioner for the purpose, unless the Presenting Officer appointed by the disciplinary authority is a legal practitioner or the disciplinary authority having regard to the circumstances of the case, so permits. If the Railway servant is employed in the office of the Railway Board, it attached office or subordinate office, he may present his case with the assistance of any other Railway servant (including a Railway servant on leave preparatory to retirement), employed in the office of the Railway Board, attached office or subordinate office, as the case may be, in which he is working.

(b) The Railway servant may also present his case with the assistance of a retired Railway servant, subject to such conditions as may be specified by the President from time-to-time by general or special order in this behalf.

Note: (1) A non-gazetted Railway servant may take the assistance of an official of a Railway Trade Union, recognized by the Railway Administration under which the Railway servant is employed, to present his case before an inquiring authority but shall not engage a legal practitioner for the above purpose except in the circumstances brought out in clause (a) An official of a Railway Trade Union shall not be allowed to appear on behalf of an alleged delinquent railway official in connection with a disciplinary case pending against that official, to present his case favorably before an inquiring authority unless he has worked as such in a recognized Railway Trade Union for a period of at least one year continuously prior to his appearance before an inquiring authority for the above purpose and subject to the condition that he takes no fees.
(2) Nomination of an assisting Railway servant or an official of a recognized Railway Trade Union shall be made within 20 days from the date of the appointment of the inquiring authority and it shall not be accepted if at the time of nomination the assisting Railway servant or the official or a recognized Railway Trade Union has more than three pending disciplinary cases in which he has to assist.

14. After the nomination of the assisting Railway servant or the official of a Railway Trade Union and other necessary steps preliminary to the inquiry are completed, a date ordinarily not exceeding one month from the date of appointment of the inquiring authority shall be fixed for the inquiry and the Railway servant informed accordingly.

15. The inquiring authority shall, on receipt of the notice for discovery or production of documents, forward the same or copies thereof to the authority in whose custody or possession the documents are kept with a requisition for the production of the documents by such date as may be specified in such requisition.

Provided that the inquiring authority may, for reasons to be recorded by it in writing, refuse to requisition such of the documents as are, in its opinion, not relevant to the case.

16. On receipt of the requisition referred to in sub-rule (15), every authority having the custody or possession of the requisitioned documents shall produce the same before the inquiring authority by the specified time.

Provided that if the authority having the custody or possession of requisitioned documents is satisfied for reasons to be recorded by it in writing that the production of all or any such documents would be against the public interest or security of the State, it shall inform the inquiring authority accordingly and the inquiring authority shall, on being so informed, communicate the information to the Railway servant and withdraw the requisition made by it for the production or discovery of such documents.

17. On the date fixed for the inquiry, the oral and documentary evidence by which the articles of charge are proposed to be proved, shall be produced by or on behalf of the disciplinary authority. The witnesses shall be examined by or on behalf of the Presenting Officer, if any, and may be cross examined by or on behalf of the Railway servant. The Presenting officer, if any shall be entitled to re-examine the witnesses on any points on which they have been cross examined, but not on any new matter without the leave of the inquiring authority. The inquiring authority may also put such questions to the witnesses as it thinks fit.

18. If it shall appear necessary before the close of the case on behalf of the disciplinary authority, the inquiring authority may, in its discretion, allow the Presenting Officer, if any, to produce evidence not included in the list given to the Railway servant or may itself call for new evidence or recall and re-examine any witness and in such cases the Railway servant shall be entitled to have, if he demands it, a copy of the list of further evidence proposed to be produced and an adjournment of the inquiry for three clear days before the production of such new evidence exclusive of the day of
adjournment and the day to which the inquiry is adjourned. The inquiring authority shall give the Railway servant an opportunity of inspection such documents before they are taken on the record. The inquiring authority may also allow the Railway servant to produce new evidence if it is of the opinion that the production of such evidence is necessary in the interest of justice.

Note: New evidence shall not be permitted or called for or any witness shall not be recalled to fill up any gap in the evidence. Such evidence may be called for only when there is an inherent lacuna or defect in the evidence, which has been produced originally.

19. When the case for disciplinary authority is closed, the Railway servant shall be required to state his defence or ally, or in writing, as he may prefer. If the defence is made orally it shall be recorded and the Railway servant shall be required to sign the record. In either case a copy of the statement of defence shall be given to the Presenting officer, if any.

20. The evidence on behalf of the Railway servant shall then be produced. The Railway servant may examine himself in his own behalf, if he so prefers. The witnesses produced by the Railway servant shall then be examined by or on behalf of him and shall be cross-examined by or on behalf of the Presenting Officer, if any. The Railway servant shall be entitled to re-examine the witnesses on any point on which they have been cross-examined but not on any new matter, without the leave of the inquiring authority. The inquiring authority may also put such questions to the witnesses as it thinks fit.

21. The inquiring authority may, after the Railway servant closes his case, and shall, if the Railway servant has not examined himself, generally question him on the circumstances appearing against him in the evidence for the purpose of enabling the Railway servant to explain any circumstances appearing in the evidence against him.

22. The inquiring authority may, after the completion of the production of evidence, hear the Presenting Officer, if any, and the Railway servant, or permit them to file written briefs of their respective cases, if they so desire.

23. If the Railway servant, to whom a copy of the articles of charge has been delivered does not submit the written statement of defence on or before the date specified for the purpose or does not appear in person before the inquiring authority may hold the inquiry ex parte.

24. Whenever any inquiring authority, after having heard and recorded the whole or any part of the evidence in an inquiry ceases to exercise jurisdiction therein and is succeeded by another inquiring authority which has, and which exercise, such jurisdiction, the inquiring authority so succeeding may act on the evidence so recorded by its predecessor, or partly recorded by its predecessor, and partly by itself:

Provided that if, the succeeding inquiring authority is of the opinion that further examination of any of the witnesses whose evidence has already been recorded is
necessary in the interest of justice, it may recall, examine, cross-examine any such witnesses as hereinbefore provided.

25(i) after the conclusion of the inquiry, a report shall be prepared and it shall contain-

a. The articles of charge and the statement of imputations of misconduct or misbehavior.

b. The defence of the Railway servant in respect of each article of charge,

c. An assessment of the evidence in respect of each article of charge and

d. The findings on each article of charge and the reasons therefore

Explanation- If in the opinion of the inquiring authority the proceedings of the inquiry establish any article of charge different from the original articles of charge, it may record its findings on such article of charge.

Provided that the findings on such article of charge shall not be recorded unless the Railway servant has either admitted the facts on which such article of charge is based or has had a reasonable opportunity of defending himself against such article of charge.

(ii) The inquiring authority, where it is not itself the disciplinary authority, shall forward to the disciplinary authority the records of inquiry which shall include-

a. The report prepared by it under clause(I)

b. The written statement of defence, if any, submitted by the Railway servant;

c. The oral and documentary evidence produced in the course of the inquiry;

d. Written briefs, if any, filed by the Presenting Officer, if any, or the Railway servant or both during the course of the enquiry; and

e. The orders, if any, made by the disciplinary authority in regard to the inquiry.

Procedure for imposing minor penalties

(1) Subject to the provisions of sub-clause (iv) of clause (a) of sub-clause (9) or Rule 9 and of sub-rule (4) of Rule 10, no order imposing on a Railway Servant any of the penalties specified in clauses (i) to (iv) of Rule 6 shall be made except after –

(a) informing the Railway Servant in writing of the proposal to take action against him and of the imputations of mis-conduct or mis-behaviour on which it is proposed to be taken, and giving him a reasonable opportunity of making such representation as he may wish to make against the proposal;
(b) holding an inquiry in the manner laid down in sub rules (6 to (25) of Rule 9, in every case in which the disciplinary authority is of the opinion that such inquiry is necessary;

(c) taking the representation, if any, submitted by the Railway servant under clause and the record of inquiry, if any, held under clause (b) into consideration;

(d) recording a finding on each imputation of misconduct or misbehaviour and

(e) consulting the Commission where such consultation is necessary.

(2) Notwithstanding anything contained in clause (b) of sub-rule (1), if in a case, it is proposed, after considering the representation, if any, made by the Railway Servant under clause (a) of that sub-rule to withhold increments of pay and such withholding of increments is likely to affect adversely the amount of pension or special contribution to Provident Fund payable to the Railway Servant or to withhold increments of pay for a period exceeding three years or to withhold increments of any with cumulative effect for any period, an inquiry shall be held in the manner laid down in sub-rules (6) to (25) of Rule 9, before making any order imposing on the Railway any such penalty.

(1) Deleted.

(2) The record of proceedings in cases specified in sub-rules (1) and (2) shall include-

(i) a copy of the intimation of the Railway servant of the proposal to take action against him;

(ii) a copy of the statement of imputations of misconduct or misbehaviour delivered top him;

(iii) his representation, if any,

(iv) the evidence produced during the inquiry, if any;

(v) the advice of the Commission, if any,

(vi) the findings on each imputations of misconduct or misbehaviour; and

(vii) the order on the case together with reasons therefore.

**Action on the inquiry report:**

(1) If the disciplinary authority:

(b) After considering the inquiry report, is of the opinion that further examination of any of the witnesses is necessary in the interests of justice, it may recall the said witness

and examine, cross examine and re-examine the witness;

(c) Is not itself the inquiry authority may, for reasons to be recorded by it in writing, remit the case to the inquiring authority for further inquiry and report and the inquiring authority shall thereupon proceed to hold further inquiry according to the provisions of Rule 9, as far as may be.

(2) The disciplinary authority –
(a) Shall forward or cause to be forwarded a copy of the report of the inquiry, if any, held by the disciplinary authority or where the disciplinary authority is not the inquiring authority a copy of the report of the inquiring authority, its findings on further examination of witnesses, if any, held under sub-rule (1)(a) together with its own tentative reasons for disagreement, if any, with findings of the inquiring authority on any article of charge to the Railway servant, who shall be required to submit, if he so desires, his written representation or submission to the disciplinary authority within 15 days, irrespective of whether the report is favorable to the Railway servant;

(b) Shall consider the representation if any, submitted by the railway servant and record its findings before proceeding further in the matter as specified in sub-rule (3), (4) and (5).

(3) Where the disciplinary authority is of the opinion that the penalty warranted is such as is not within its competence, he shall forward the records of the inquiry to the appropriate disciplinary authority who shall act in the manner as provided in these rules.

(4) If the disciplinary authority having regard to its findings on all or any of the articles of charges, is of the opinion that any of the penalties specified in clauses (i) to (iv) of Rule 6 should be imposed on the Railway Servant, it shall, notwithstanding anything contained in rule 11 make an order imposing such penalty:

Provided that in every case where it is necessary to consult the Commission, the record of the inquiry shall be forwarded by the disciplinary authority to the Commission for its advice shall be taken into consideration before making any order imposing any penalty on the Railway Servant.

(5) If the disciplinary authority, having regard to its findings on all or any of the articles of charges and on the basis of the evidences adduced during the inquiry, is of the opinion that any of the penalties specified in clauses (v) to (ix) of Rule 6 should be imposed on the Railway Servant, it shall make an order imposing such penalty and it shall not be necessary to give the railway servant any opportunity of making representation on the penalty proposed to be imposed:

Provided that in every case where it is necessary to consult the Commission, the record of the inquiry shall be forwarded by the disciplinary authority to the Commission for its advice and such advice shall be taken into consideration before making any order imposing any such penalty on the railway servant.

Various forms used under these rules:-
Standard Form No.1
Standard form of order of suspension
Rule 5(1) of the RS (D&A) Rules, 1968

Office__________
Place__________
Dated__________
No.__________

Order

Whereas a disciplinary proceedings against Shri__________, Design.____________, (Name and design of RE) is contemplated/Pending

Now, therefore, the undersigned (the authority competent to place the Railway Servant under suspension in terms of the Schedules II and III appended to RS(D&A)Rules, 1968), in exercise of powers conferred by Rule 4 / proviso to rule No.4 of RS(D&A) Rules 1968. hereby places the said Shri _________, Design________ under suspension with immediate effect/with effect from_26/3/03.

It is further ordered that during the period this order shall remain in force, the said Shri Shri _________, Design________ shall not leave the headquarters without obtaining previous permission of the competent authority.

Signature ____________________
Design.______________________
(Design of the suspending authority)

Copy to:
Shri _________________________
(Name and design of the suspended Railway Servant)

Orders regarding subsistence allowance admissible to him/her during the period of suspension will issue separately.
Standard form No.2
(Standards form for deeming Railway Servants under suspension)
Rule 5(2) of RS (D&A) Rules, 1968.

 Railway

Place__________________
Dated__________________
No.__________________

Order

Whereas a case against Shri______________________________________________
(Name and designation of the Railway Servant)
In respect of a criminal offence is under investigation.

And whereas the said Shri __________________________________________ was
detained in custody on ______________for a period exceeding 48 hours.

Now, therefore the said Shri ______________________________________________
is deemed to have been suspended with effect from the date of detention i.e. the
___________ in terms of Rule No.5(2) of D&A Rules 1968 and shall remain under
suspension under further orders.

Signature ____________________
Design.______________________
(Design of the suspending authority)
Copy to:
Shri_______________________
(Name and design of the suspended
Railway Servant)

Orders regarding subsistence allowance admissible to him/her during the period of
suspension will issue separately.
Standard Form No. 3
(Standard form of certificate to be furnished by suspended official under rule 2043(2) R-II)

I, __________________________ (Name of the Railway Servant) having been placed under suspension by order No. __________________________ dated __________
While holding the post of __________________________ do hereby certify that I have not been employed in any business, profession, or vocation for profit/remuneration/salary.

Signature __________________________
Name of the Railway Servant __________________________
Address __________________________________________

Standard Form No. 4
(Standard form of order for revocation of suspension
(Rule 5(5) © of RS(D&A) Rules 1968

Place __________________
Dated ________________
No. ________________

Order

Whereas the order placing Shri __________________________ (Name and designation of the Railway servant) under suspension was made/was deemed to have been made by __________________________

Now, therefore, the undersigned (the authority which made or is deemed to have made the order of suspension or any other authority to which that authority is subordinate) in exercise of the powers conferred by Clause © of sub-rule (5) of rules 5 of the RS(D&A) Rule, 1968, hereby revokes the said order of suspension with immediate effect / with effect from __________________________

Signature __________________________
Name __________________________
Design of authority making this order ________________
Copy to
Shri __________________________
Name and designation of the suspended Railway Servant) Address __________________________
STANDARD FORM NO. 5
Standard Form of Charge-sheet
(Rule 9 of Railway Servants (Discipline and Appeal) Rules, 1968)

No.

Office of issue ____________
Place of issue ____________
Date of ________________

MEMORANDUM

1. The undersigned proposes to hold an inquiry against Shri ____________ Design. ____________ Under Rule 9 of Railway Servants (Discipline and Appeal) Rules, 1968. The substance of the imputations of misconduct and misbehavior in respect of which the inquiry is proposed to be held is set out in the enclosed statement of articles of charge (Annexure I). A statement of the imputations of misconduct or misbehaviour in support of each article of charge is enclosed (Annexure II). A list of documents by which and a list of witnesses by whom, the articles of charges are proposed to be sustained are also enclosed (Annexure III & IV). Further, copies of documents mentioned in the list of documents, are per Annexure III are enclosed.

2. ________________ is hereby informed and if he so desires, he can inspect and take extracts from the documents mentioned in the enclosed list of documents (Annexure III) at any time during office hours within ten days of receipt of this memorandum. For this purpose he should contact the ________ immediately on receipt of this memorandum.

3. ________________ is further informed that he may, if he so desired, take the assistance of another Railway servant (who satisfies the requirements of Rule 9(13) of the Railway Servants (Discipline and Appeal) Rules, 1968, and Note 1 and/or Note 2 thereunder as the case may be) for inspecting the documents and assisting him in presenting his case before the Inquiring Authority in the event of an oral inquiry being held. For this purpose, he should nominate one or more person/s in order of preference. Before nominating the assisting Railway servant(s) ________________ should obtain an undertaking from the nominee(s) that he(they) is (are) willing to assist him during the disciplinary proceedings. The undertaking should also contain the particulars of other case(s) if any, in which the nominee(s) had already undertaken to assist and the undertaking should be furnished to the undersigned alongwith the nomination.

4. _____________ is hereby directed to submit to the undersigned a written statement of his defence within ten days of receipt of this Memorandum, if he does not require to inspect any documents for the preparation of his defence, and within ten days after completion of inspection of documents if he desires to inspect documents, and also (a) to state whether he wishes to be heard in person; and
(b) to furnish the names and addresses of the witnesses if any; whom he wishes to
call in support of his defence.

5. _______________ is informed that an inquiry will be held only in respect of those
articles of charge as are not admitted. He should, therefore, specifically admit or/deny
each article of charge.

6. _______________ is further informed that if he does not submit his written
statement of defence within the period specified in para 2 or does not appear in person
before the inquiring authority or otherwise fails or refuses to comply with the provisions
of Rule 9 of the Railway Servants (Discipline and Appeal) Rules, 1968, or the orders/
directions issued in pursuance of the said rule, the inquiring authority may hold the
inquiry ex parte.

7. The attention of _______________ is invited to Rule 20 of the Railway service
(Conduct) Rules, 1966 under which no railway servant shall bring or attempt to bring
any political or other influence to bear upon any superior authority to further his interests
in respect of matter pertaining to his service under the Government. If any
representation is received on his behalf from another person in respect of any matter
dealt within these proceedings, it will be presumed that _______________ is
aware of such a representation and that it has been made at his instance and action will
be taken against him for violation of Rule 20 of the Railway Services (Conduct) Rules,
1966.

8. The receipt of this Memorandum may be acknowledged.

Signature:
(NAME AND DESIGNATION OF THE OFFICER ISSUING)
TO
(Name and designation of the employee)
through _______________
STANDARD FORM NO. 6

Standard Form for Refusing Permission to inspect Document
(Rule 9(16) RS (D&A) Rules, 1968)

ORDER

Shri...........................................................................................................
(Name and designation of the Railway servant)

........................................... has requested permission to inspect and take extracts from the
records specified below for the purpose of preparing his defence in the inquiry pending
against him in pursuant to Memorandum No............................... dated
............................. The undersigned has carefully considered the request and has
decided to refuse such permission for the reasons recorded below against each item:

<table>
<thead>
<tr>
<th>Description of records</th>
<th>Reasons for refusing inspection or taking extracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>2</td>
<td></td>
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<td>3</td>
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<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Signature.............................................
Name...............................................  
(Designation of the Inquiry Authority)
STANDARD FORM NO.7
Standard Form of Order Relating to Appointment of Inquiry Officer / Board of Inquiry (Rule 9(2) of RS (D&A) Rules, 1968)

ORDER

Whereas an Inquiry under rule 9 of the Railway Servants (Discipline and Appeal) Rules, 1968 is being held against Shri D J Jha, HC, DRM Office, BRC

(Name and designation of the Railway servant)

AND WHEREAS the undersigned considers that an Inquiry officer should be appointed to inquire into the charge framed against him.

NOW, THEREFORE, the undersigned, in exercise of the powers conferred by sub-rule (2) of the said Rule, hereby appoints,

Name of the Member-    Designation
1………………...………………………………………………
2………………...………………………………………………
3………………...………………………………………………

OR

Shri Man Singh, APO/BRC……………………………………………………………………
(Name and designation of the Inquiry officer)
as Inquiry Officer to Inquire into the charges against the said Shri D J Jha, HC, DRM Office, BRC

Signature……………………
Name ……(C.K.N.Nair)……..
Designation Sr.DPO/BRC……..

Copy to:
1. Shri Man Singh, APO/BRC
(Name and designation of the Inquiry officer)

2. Shri ……………………………………………………………………
(Name and designation of the Inquiry officer)

3. Shri ……………………………………………………………………
(Name and designation of the Inquiry officer)

OR
Shri ………………………………………………………………………..
(Name and designation of the Inquiry officer)

STANDARD FORM NO.8

Form for appointment of Presenting Officer
(Sub rule (9) (iv) (c ) of Rule 9 of RS (D&A) Rules, 1968)

No………………………
Railway…………………
Place of issue ................
Dated.....................

ORDER

Whereas an Inquiry under rule 9 of the Railway Servants (Discipline and Appeal) Rules, 1968 is being held against Shri ……………………………………………
And whereas the undersigned considers it necessary to appoint a person to present the case in support of the charges before the Inquiring Authority.
Now, Therefore, the undersigned in exercise of the powers conferred by sub-rule 9 (iv) (c ) of Rule 9 of the RS (D&A) Rules, 1969 hereby appoints Shri …………………………………………… as Presenting Officer to present the case in support of the charges before the Inquiring Authority.

Shri ……………………………………………….is also authorised to appoint, during his temporary non-availability any other CBI/Railway Official not below his rank for representing the case before the Inquiry Officer on his behalf and on behalf of the disciplinary authority for examination, cross examination as well as the arguments etc.

Signature........................
Name...........................
Dated..........................

Copy forwarded for information to:
1. Shri ………………………………………………………………………..
   (Name and designation of the Inquiry officer)

Signature........................
Name...........................
(Designation)

No...........................
Copy forwarded for information to:
1. Shri ………………………………………………………………………..
   (Name and designation of the Inquiry officer)
ORDER
Name of Railway servants
1. Shri…………………
2. Shri…………………
3. Shri…………………
4. Shri…………………
5. Shri…………………

Whereas the Railway servants specified in the margin are jointly concerned in a disciplinary case.

* Now, therefore, in exercise of the powers conferred by sub-rules (1) and (2) of rule 13 of Railway Servants (Discipline and Appeal) Rules, 1968, the undersigned hereby directs:

% (1) Disciplinary action against all the said Railway servants shall be taken in the common proceedings.

** (2) Shri………………………. (Name and designation of authority) shall function as the Disciplinary Authority for the purpose of the common proceeding and shall be competent to impose the following penalties –

$ (3) that the procedure prescribed in Rule 9 and Rule 10 / Rule 11 shall be followed in the said proceedings.

Copy to:
1. Shri ………………………………………………………………………………………………………
   (Name and designation of the Inquiry officer)
2. Shri ………………………………………………………………………………………………………
   (Name and designation of the Inquiry officer)
3. Shri ………………………………………………………………………………………………………
   (Name and designation of the Inquiry officer)
4. Shri ………………………………………………………………………………………………………
   (Name and designation of the Inquiry officer)
5. Shri ………………………………………………………………………………………………………
   (Name and designation of the Inquiry officer)

* The authority competent to impose the penalty of dismissal from service on all such Railway servants or if they are different, highest of such authorities with the consent of others.
% Score out of the portion not applicable
** See rule 13(2) (i)
@ Here specify the penalties, see Rule 13(2) (ii)
$ See Rule 13(2)(iii)

**************************
STANDARD FORM NO. 11
Standard Form of Memorandum of charge for Imposing Minor Penalties
(Rule 11 of RS(D&A) Rules, 1968)

No……………………….
Railway……………………
Place of issue ……………
Dated……………………..

MEMORANDUM

1. Shri…………………………………………………………………………………
   (Name, designation and office in which working)
   is hereby informed that the undersigned proposes to take action against him under rule
   11 of the Railway Servants (Discipline and Appeal) Rules, 1968. A statement of the
   imputations of misconduct or misbehaviour on which action is proposed to be taken as
   mentioned above, is enclosed.

2. Shri…………………….. is hereby given an opportunity to make such
   representation as he may wish to make against the proposal. The representation, if
   any, should be submitted to the undersigned so as to reach within ten days of receipt of
   this Memorandum.

3. If Shri……………………………………………….. fails to submit his representation within
   the period specified in para 2, it will be presumed that he has no representation to make
   and orders will be liable to be passed against Shri………………………………………………….. ex parte.

4. The receipt of this Memorandum should be acknowledged by
   Shri………………………………………………………….

   Signature…………………..
   Name……………………
   ……………………………
   (Designation of the competent authority)

To
Shri…………………………………………………………………………………
(Name, designation and office of the Railway servant)
RAILWAY SERVICE (CONDUCT) RULES, 1966

1. Short title.
1. These rules may be called the Railway Services (conduct) Rules 1966.
2. They shall come into force at once.

2. Definition. - In these rules, unless the context otherwise requires-

a. 'Government' means, in relation to
   i. gazetted officers holding posts in the Railway Board, the President;
   ii. other gazetted officers, the Railway Board;
   iii. non-gazetted officers, in the Railway Board, the Secretary, Railway Board;
   iv. other non-gazetted officers in offices directly under administrative control of the Railway Board, the Heads of the offices concerned; and
   v. other non-gazetted officers, the General Managers of the Railway Administrations concerned:

Provided that for purposes of purposes of sub-rules (2) and (3) of rule 5, sub-rule (i) of rule 8, sub-rule (i) of rule 10, rule 12, rule 14, sub-rules (1) and (3) of rule 15, sub-rule (3) of rule 16, sub-rule (1) of rule 19 and rule 21, 'Government' means the Railway Board in the case of all non-gazetted Railway servants.

b. "Railway servant" means a railway servant as defined in rule 103(43*) of the Indian Railway Establishment Code.

*Railway Servant means a person who is a member of a service or who holds a post under the administrative control of the Railway Board and includes a post in the Railway Board. Persons lent from a service or post which is not under the administrative control of the Railway Board to a service or post which is under such administrative control do not come within the scope of this definition.

Explanation.- A railway servant whose services are placed at the disposal of a company, corporation, organization or a local authority shall, for the purposes of these rules, be deemed to be a railway servant notwithstanding that his salary is drawn from sources other than the Consolidated Fund of India.

c. "means of family" in relation to a railway servant includes –
i. the wife or husband, as the case may be, of the railway servant, whether residing with the railway servant or not but does not include a wife or husband, as the case
may be, separated from the railway servant by a decree or order of a competent court;

ii. son or daughter or step-son or step-daughter of the railway servant and wholly dependent on him, but does not include a child or a step-child who is no longer in any way dependent on the railway servant or of whose custody the railway servant has been deprived by or under any law;

iii. any other person related whether by blood or marriage to the railway servant or to the railway servant’s wife or husband, and wholly dependent on the railway servant.

Railway Ministry’s decision. -- The son/daughter will come within the purview of this rule only if he or she is dependent upon the Railway servant.

(E(D&A) 77 GS1-13 dt. 14-7-1977.)


1. Every railway servant shall at all times
   i. maintain absolute integrity;
   ii. maintain devotion to duty; and
   iii. do nothing which is unbecoming of a railway servant.

2. Every railway servant holding a supervisory post shall take all possible steps to ensure the integrity and devotion to duty of all railway servants for the time being under his control and authority;

   i. no railway servant shall, in the performance of his official duties, or in the exercise of powers conferred on him, act otherwise than his best judgement except when he is acting under the direction of his official superior;

   ii. the direction of the official superior shall ordinarily be in writing, and where the issue of oral direction becomes unavoidable, the official superior shall confirm it in writing immediately thereafter; and

   iv. a railway servant who has received oral direction from his official superior, shall seek confirmation of the same in writing as early as possible, whereupon it shall be duty of the official superior to confirm the direction in writing.

Explanation I. —A railway servant who habitually fails to perform the task assigned to him within the time set for the purpose and with the quality of performance expected of him shall be deemed to be lacking in devotion to duty within the meaning of clause (ii) of sub-rule (1).

Explanation II. —Nothing in clause (ii) of sub-rule (2) shall be construed as empowering a railway servant to evade his responsibilities by seeking instructions from or approval of, a superior officer or authority when such instructions are not necessary under the scheme of distribution of powers and responsibilities.
Railway Ministry's decision. —In the light of the provisions of Rule 3(2)(ii) it is impressed upon all Railway servants that—

i. Oral instructions should not, as far as possible, be issued by senior officers to their subordinates;

ii. if the oral instructions are issued by any senior officer they should be confirmed by him in writing immediately thereafter;

iii. if a junior officer seeks confirmation to the oral instructions given by the senior, the latter should confirm it in writing, whenever such confirmation is sought;

iv. a junior officer who has received oral orders from his superior officer should seek confirmation in writing as early as practicable;

v. whenever a member of the personal staff of Minister communicates an oral order on behalf of the Minister, it should be confirmed by him in writing immediately thereafter;

vi. If junior officer received oral instructions from the Minister or from his personal staff and the orders are in accordance with the normal rules, regulations or procedures, they should be brought to the notice of the Secretary, or the concerned Members of the Railway Board or the Head of the Department, as the case may be, for information.

vii. if a junior officer received oral instructions from the Minister or from his personal staff and the orders are not in accordance with the norms, rules, regulations or procedures, they should seek further clear orders from the secretary, the concerned Member of the Railway Board or the Head of the Department, as the case may be, about the line of action to be taken, stating clearly that the oral instructions are not in accordance with the rules, regulations, norms, or procedures. (No. E(D&A) 78 GSI-9 dt. 14-12-78).

3 A. Promptness andCourtesy

No Railway servant shall

a. in the performance of his official duties, act a discourteous manner;

b. in his official dealings with the public or otherwise adopt dilatory tactics or willfully cause delays in disposal of the work assigned to him.

[Authority: Railway Board’s letter No. E(D&A)95 GS1-5 dt. 14.9.95 (RBE 101/95)]

3 B. Observance of Government’s policies.

Every railway servant shall, at all times—

i. act in accordance with the Government’s policies regarding age of marriage, preservation of environment, protection of wildlife and cultural heritage;

ii. observe the Government’s policies regarding prevention of crime against women.
3 C. Prohibition of sexual harassment of working women.

1. No Railway servants shall indulge in any act of sexual harassment of any woman at her work place.

2. Every railway servant who is incharge of a work place shall take appropriate steps to prevent sexual harassment to any woman at such work place.

Explanation – For the purpose of this rule, "sexual harassment " includes such unwelcome sexually determined behavior, whether directly or otherwise, as:

   a. Physical contact and advances;
   b. demand or request for sexual favours;
   c. sexually coloured remarks;
   d. showing any pornography; or
   e. any other unwelcome physical, verbal or non-verbal conduct of a sexual nature.

4. Employment of near relatives of railway servants in Company or firm enjoying Government patronage.

1. No railway servant shall use his position or influence directly or indirectly to secure employment for any member of his family in any company or firm;

2. i. No Group A Officer shall, except with the prior sanction of the Government permit his son, daughter or other dependent to accept employment in any company or firm with which he has official dealings or in any other company or firm having official dealings with the Government:

   Provided that where the acceptance of the employment cannot await prior permission of the Government or is otherwise considered urgent, the employment may be accepted provisionally subject to the permission of the Government and the fact of such acceptance shall at once be reported to the Government.

   ii. A railway servant shall, as soon as he becomes aware of the acceptance by a member of his family of an employment in any company or firm, intimate such acceptance to the Government and shall also intimate whether he has or has had any official dealings with that company or firm:
Provided that no such intimation shall be necessary in the case of a Group 'A' Officer if he has already obtained the sanction of, or sent a report to the Government under clause (i).

3. No railway servant shall in the discharge of his official duties deal with any matter or give or sanction any contract to any company or firm or any other person, if any member of his family is employed in that company or firm or under that person or if he or any member of his family is interested in such matter or contract in any other manner and the railway servant shall refer every such matter or contract to his superior officer or authority and the matter or contract shall thereafter be disposed of according to the instructions of such officer or authority.

5. Taking part in politics and elections.
1. No railway servant shall be a member of, or be otherwise associated with, any political party or any organization which takes part in politics nor shall he take part in, subscribe in aid of, or assist in any other manner, any political movement or activity.
2. It shall be the duty of every railway servant to endeavour to prevent any member of his family from taking part in, subscribing in aid of, or assisting in any other manner any movement or activity which is, or tends directly or indirectly to be subversive of the Government as by law established and where a railway servant is unable to prevent a member of his family from taking part in, or subscribing in aid of or assisting in any other manner, any such movement or activity, he shall make a report to that effect to the Government.
3. If any question arises whether a party is a political party or whether any organization takes part in politics or whether any movement or activity falls within the scope of sub-rule (2) the decision of the Government thereon shall be final.
4. No railway servant shall canvass, otherwise interfere with, or use his influence in connection with or take part in, an election to any legislature or local authority. Provided that —
   i. a railway servant qualified to vote at such election may exercise his right to vote, but where he does so, he shall give no indication of the manner in which he proposes to vote or has voted;
   ii. a railway servant shall not be deemed to have contravened the provisions of this sub-rule by reason only that he assists in the conduct of an election in the performance of a duty imposed on him by or under any law for the time being in force.

Explanation. – The display by a railway servant on his person, vehicle or residence of any electoral symbol shall amount to using his influence in connection with an election within the meaning of this sub-rule.
Railway Ministry’s decision.

1. Railway servants wishing to join the Bharat Sevak Samaj should obtain prior permission from the Head of the Department. This permission will not, however, absolve them from the observance, at all times, of the rules and instructions relating to the conduct and behaviour of the Railway servant.

(E (D & A) 64 GS1 dt. 27-5-1964.)

2. The Railway servants should not only be impartial but they should appear to be impartial in relation to the elections. They should not take part in any election campaign nor should they canvass. They should always take scrupulous care not to lend their names, official position of authority to assist one group as against another. Any disregard of these instructions will be considered as serious act of indiscipline. Their attention is drawn to the provisions in section 134–A of the Representation of the People Act, 1951 which reads as under:

"If any person in the service of the Government, acts as an election agent or a polling agent or a counting agent of a candidate at an election he shall be punishable with imprisonment for a term which may extend upto 3 months or with fine or with both."

(E (D & A) 66 GS1-15 dt. 27-12-66)

3. Political neutrality of Railway servants—It is essential that Railway servants should not only maintain political neutrality but should also appear to do so and they should not participate in the activities of, or associate themselves with any organization in respect of which there is the slightest reason to think that the organization has a political aspect or with organizations banned by the Government.

(E (D & A) 69 GS1-25 dt. 31-1-1970). (NS Policy/19 dt. 11-3-1976).

6. Joining of Associations or Unions by Railway Servants. — No railway servants shall join, or continue to be a member of an association or union the objects or activities of which are prejudicial to the interests of the sovereignty and integrity of India or public order or morality.

Note. — It is not permissible for a gazetted railway servant to join any association of non-gazetted railway servant like a Railway Employees Union. When a non-gazetted railway servant who is a member of a Railway Employees’ Union is promoted to gazetted rank, either in an officiating or permanent capacity he shall resign his membership of such Union. If, however, the officer concerned satisfies the General Manager of the railway concerned that by such resignation he will lose financially or otherwise under any
beneficent scheme organized by such Union such as death or accident insurance, he may be permitted to continue as an ordinary member, but not as office bearer or representative, of that Union. The responsibility for satisfying the General Manager in this respect will rest with the officer concerned.

7. Demonstration. - No railway servant shall engage himself or participate in any demonstration which is prejudicial to the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign states, public order, decency or morality, or which involves contempt of court, defamation or incitement to an offence.

Railway Ministry’s decision.

1. Where peaceful and orderly meetings or demonstrations are held during the lunch without obstructing in any manner the free passage to and from the office, there would be no objection to the holding of such meetings or demonstrations nor would the participating staff render themselves liable to disciplinary action thereby. The same position will apply in respect of peaceful and orderly meeting and demonstration during half an hour interval prior to the start of working hours and the half an hour interval succeeding the close of working hours.

2. The position regarding the scope of this Rule is clarified as under:
   i. Demonstration, meetings and processions, which are orderly and peaceful and are held outside office premises and outside working hours, should not be interfered with.
   ii. The wearing of badges while at work should not be interfered with unless the badges have inscriptions or slogans which may offend against the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign states, public order, decency or morality or which may amount to contempt of court, defamation or incitement to an offence. The colour of the badge or arm band should not be considered in any case.
   iii. Demonstration or the raising of slogans or other such disorderly conduct should not be permitted within office premises and disciplinary proceedings should be started against those found indulging in such action within office premises.

(No. E(D&A) 63 GS1-3 dt. 27-4-1964.)

3. It will be in order to take disciplinary action in respect of demonstration anywhere, even far away from office premises and at any time even on a holiday, resorted to by a railway servant, even in the capacity of a Trade Union worker, if that activity could be proved to be one falling within the prohibitive activities listed in this rule.

(No. E(L)66 UT 1-79 dt. 12-1-1966.)

4. Peaceful and orderly meetings and demonstrations held during lunch intervals or during half and hour interval prior to the start of working hour and the half an hour
interval succeeding the close of the working hours, without obstructing in any manner the free passage to and from the office do not infringe the provisions under this rule.

(No. E(L) 77 UT 1-79 dt. 26/28-7-1967.)

5. The principle of 'No work no Pay' should not be circumvented in any way including by grant of leave to a railway servant for the period of absence caused due to participation in a strike.

(No. E(LR) II77 ST 1-126 dt. 15-7-1978.)

6. If an application for casual leave is presented by a railway servant specifically for the purpose of participation in a demonstration, it is open to the competent authority to refuse casual leave for this purpose. If in spite of refusal, and employee absents himself from duty, he can be treated to have been unauthorisedly absent, with all the attendant consequences of unauthorised absence.

(No. E(G) 79 LE 1-10 dt. 19-6-1980.)

8. Connection with press or other media.
1. No Railway servant shall, except with the previous sanction of the Government, own wholly or in part, or conduct or participate in the editing or management of, any newspaper or other periodical publication or electronic media.
2. nothing in sub-rule (1) shall apply in case a Railway servant in the bonafide discharge of his official duties publishes a book or participates in a public media.
3. A Railway Servant publishing a book or participating in a public media shall, at all times, make it clear that the views expressed by him are his own and not that of Government.

[Authority : Railway Board's letter No. E(D&A)95 GS 1-6 dated 14-9-95 (RBE 102/1995)]

9. Criticism of Government. - No railway servant shall, in any radio broadcast, telecast through any electronic media or in any document published in his own name or anonymously, pseudonymously or in the name of any other person or in any communication to press or in any public utterance, make any statement of fact or opinion—
   i. which has the effect of an adverse criticism of any current or recent policy or action of the Central Government or State Government;
   ii. which is capable of embarrassing the relations between the Central Government and the Government of any State; or
   iii. which is capable of embarrassing the relations between the Central Government and the Government of any foreign State:
Provided that nothing in this rule shall apply to any statement made or views expressed by a railway servant in his official capacity or in the due performance of the duties assigned to him.

Railway Ministry’s decision.—Serving Railway employees, if they, in their individual capacity or in their capacity of office bearer of association (including federation/unions of railway employees ) or editor/publishers office bearers of journals issued by such association (including federation/union) pass resolutions making statement and/or expressing opinion on issues which involve violation by the individual employees of this Rule become liable for disciplinary action.

(E (D&A) 68GD1-6 dot. 24-6-1968.

10. Evidence before Committee or any other Authority.
1. Save as provided in sub-rule (3) no railway servant shall, except with the previous sanction of the Government, give evidence in connection with, any enquiry conducted by any person, committee or authority.
2. Where any sanction has been accorded under sub-rule (1), no railway servant shall in the course of giving such evidence criticize the policy or any action of the Central Government or of a State Government.
3. Nothing in this rule shall apply to
   a. evidence given at any enquiry before an authority appointed by the government, Parliament or a State Legislature; or
   b. evidence given in any judicial inquiry; or
   c. evidence given at any departmental inquiry ordered by authorities subordinate to the Government.

11. Unauthorised communication of information. - No railway servant, shall except in accordance with any general or special order of the Government or in the performance in good faith of the duties assigned to him communicate, directly or indirectly, any official document or any part thereof or information to any Government or railway servant or any other person to whom he is not authorised to communicate such documents or information.

Any information given under RTI is not a violation of this Rule.

Explanation. - Quotation by a railway servant (in his representations to official superior authorities or from any letter, circular of office memorandum, or from the notes on any file to which he is not authorized to have access or which he is not authorized to keep in his personal custody or for personal purpose) shall amount to unauthorized communication of information within the meaning of this rule.

12. Subscription. - No railway servant, shall, except with the previous sanction of the Government or of the competent authority, ask for or accept contributions to or
otherwise associate himself with the raising, of, any funds or other collections in cash or in kind in pursuance of any object whatsoever.

**Railway Ministry’s decision.**

1. The association of Railway servants with the selling of tickets for charity show or for any purpose whatsoever attract the provisions of this rule and prior permission of the Government would be necessary for this purpose. Sale of Tickets by Railway employees to the members of the general public is likely to invite public criticism and should not be permitted.

*(E(D&A) 68 GS 1-7 dt. 19/22-8-1968.)*

2. The powers under this Rule may be exercised by the General Managers in respect of all staff working under them for collection of subscription for celebrating religious festivals only. Permission should be given on the specific conditions that only voluntary subscription are collected and no pressure of any kind is brought on them on the collection of these funds.

*(E(D&A) 68 GS1-7 dt. 30-1-1969.)*

13. **Gifts.**

Save as provided in these Rules, no Railway servant shall accept, or permit any member of his family or (any other person acting on his behalf) to accept, any gift. Explanation. —The expression "gift" shall include free transport, boarding, lodging or other service or any other pecuniary advantage provided by any person other than a near relative or personal friend having no official dealings with the Govt. servant.

**Note.**

- A casual measure, lift or other social hospitality shall not be deemed to be a gift.
- A Railway servant shall avoid accepting lavish hospitality or frequent hospitality from any individual, industrial or commercial firms, organizations, etc. having official dealings with him.
- On occasions such as weddings, anniversaries, funerals or religious functions, when the making of gift is in conformity with the prevailing religious and social practice, a Railway Servant may accept gifts from his near relatives or from his personal friends having no official dealings with him, but shall make a report to the Government, if the value of such gift exceeds –
  
  i. rupees seven thousand in the case of a Railway servant holding any Group 'A' post;  
  
  ii. rupees four thousand in the case of a Railway servant holding any Group 'B' post;  
  
  iii. rupees two thousand in the case of a Railway servant holding any Group 'C' post;  
  
  and  
  
  iv. rupees one thousand in the case of a Railway servant holding any Group 'D' post.

In any other case, a Railway servant shall not accept any gift without the sanction of the Government if the value exceeds

rupees one thousand five hundred in the case of Railway servants holding any Group 'A' or Group 'B' post; and

Rupees One Thousand in the case of Railway Servants holding any Group 'C' or Group 'D' post.

Notwithstanding anything contained in sub-rules (2) and (3), a Railway Servant, being a member of the Indian delegation or otherwise, may receive and retain gifts from foreign dignitaries if the market value of gifts received on one occasion does not exceed rupees one thousand. In all other cases, the acceptance and retention of such gifts shall be regulated by the instructions issued by the Government in this regard from time to time.

A Railway Servant shall not accept any gifts from any foreign firm which is either contracting with the Government of India or is one with which the Railway servant had, has or is likely to have official dealings. Acceptance of gifts by a Railway servant from any other firm shall be subject to the provisions of sub-rule (3).


Railway Ministry’s decision. – 1 The acceptance of tips is misconduct and may be treated as a good and sufficient reason for taking disciplinary action.

(E (D&A)61 GSI-15 dt. 19-9-61.)

Railway Ministry’s decision. —2 Gifts received or given by a railway servant in the form of cash attract the provisions of the Rule even though it is a transaction between father and son.

(E (D&A) 64 GS1-5 dt. 25-2-65.)

Railway Ministry’s decision. —3 Receipt of presents by Railway servants at the time of their marriage in form of cash, ornaments, cloths or other articles, otherwise than as consideration for marriage, from relative and personal friends and others will be regulated by the above Rule. Purchase of items of movable property for giving presents at the time of marriage or on other occasions will be regulated by Rule 18 (3), like any other transaction of movable property.

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Railway Ministry’s decision. – 4 Making or acceptance of gifts amongst "Near Relatives" which include father, mother, son, daughter etc. requires the approval of the competent authority in terms of sub rule (5) above.

Railway Ministry’s decision – 5 The following are the instructions in regard to receipt, retention and disposal of gifts of high valuation received by Railway servants from foreign dignitaries and foreign firms.

0. The presents of symbolic nature like a ceremonial sword, ceremonial robe etc. may be retained by the recipient.
1. The gifts of the value not exceeding Rs. 1000 may also be retained.
2. Railway servant shall report the receipt of gifts, the value of which exceeds Rs. 1000 to the department indicating the value. The Department will refer the matter to Toshakhana for valuation of the gifts. If it is found that the value is Rs. 1000 or less the gift will be returned to the recipient. If however, the value exceeds Rs. 1000 it will be retained by in Toshakhana and the recipient will, have the option to purchase it from Toshakhana by paying the difference between the value as estimated and Rs. 1000.
3. Acceptance of gifts from foreign firms with whom the Railway servant has had or has or is likely to have official dealing either, directly or indirectly by virtue of his official position as well as acceptance of gifts from firms which are contracting firms with the government are prohibited.

13-A. Dowry.-

No Railway servant shall

i. give or take or abet the giving or taking of dowry; or
ii. demand directly or indirectly, from the parents or guardian of a bride or bridegroom, as the case may be, any dowry.

Explanations: For the purpose of this rule 'dowry' has the same meaning as in the Dowry Prohibition Act, 1961.

In this Act, "dowry" means any property or valuable security given or agreed to be given either directly or indirectly—

a. by one party to a marriage to the other party to marriage; or
b. by the parents of either party to a marriage or by any other person, to either party to the marriage or to any other person;

at or before or after the marriage as consideration for the marriage of the said parties, but does not include dower or mahr in the case of persons to whom the Muslim Personal Law (Shariat) applies.

Explanation I. ---For the removal of doubts, it is hereby declared that any presents made at the time of a marriage to either party to the marriage in the form of cash, ornaments, clothes or other articles shall not be deemed to be dowry within the meaning of this section, unless they are made as consideration for the marriage of the said parties.

Explanation II. ---The expression "Valuable security" has the same meaning as in Section 30 of the Indian Penal Code.

14. Public demonstrations in honour of Railway servants. - No railway servant shall except with the previous sanction of the Government receive any complimentary or valedictory address or accept any testimonial or attend any meetings of entertainment held in this honour, or in the honour of any other Government servant:

Provided that nothing in this rule shall apply to

i. a farewell entertainment of a substantially private and informal character held in honour of a railway servant or any other Government servant on the occasion of his retirement or transfer or any person who has recently quit the service of any Government; or

ii. the acceptance of simple and inexpensive entertainments arranged by public bodies or institutions.

Note. - Exercise of pressure or influence of any sort on any railway servant to induce him to subscribe towards any farewell entertainment even if it is of a substantially private or informal character and the collection of subscriptions from Group 'C' and Group 'D' employees under any circumstances for the entertainment of any railway or other Government servant not belonging to Group 'C' and Group 'D' is forbidden.

Railway Ministry’s decision. - 1. Officers in Group ‘A’ service upto the J.A. Grade should furnish promptly particulars of all invitations received by them from foreign missions in India and accept them only after obtaining the necessary clearance from the Railway Board. Officers in Group 'B' service and below are debarred from accepting such invitations except in very rare cases. All officers, so permitted, should submit a list of any important and interesting talks or other discussions held with the representative of the foreign mission on matters of interest to the Railway Board.

(E (D&A) 57 GSI-3 dt. 8-1-57.)
Railway Ministry’s decision. - 2. Railway servants should refrain from associating themselves with functions inappropriate and inconsistent with the rule of detached impartiality such as to declare buildings etc. open or to lay the foundation stones of new buildings or to allow roads, bridges, parks or public institutions such as hospitals, schools or colleges to be named after them. When occasions which have a cultural and sociological significance arise, especially in remote areas, prior permission of their superior officer should be obtained.

(E (D&A) 60 GSI-8 dt. 27-3-61.)

Railway Ministry’s decision. - 3. While no subscription should be collected from class III and class IV staff when any entertainment is held in honour of a Class II or Class I Officer it is not the intention of the rule that when an entertainment is held in honour of Class III/Class IV staff, a class I or class II Officer should not attend the function as a guest by invitation or on a contributory basis.

(E (D&A) 60 GSI-6 dt. 4.11.1967)

15. Private trade or Employment.

1. Subject to the provisions of sub-rule (2) no Railway Servant shall, except with the previous sanction of the Government

   a. engage directly or indirectly in any trade or business, or
   b. negotiate for, or undertake, any other employment, or
   c. hold an elective office, or canvass for a candidate or candidates for an elective office, in any body, whether incorporated or not, or
   d. canvass in support of any business of insurance agency, commission agency, etc. owned or managed by any member of his family or
   e. take part except in the discharge of his official duties, in the registration, promotion or management of any bank or other company registered or required to be registered, under the Companies Act, 1956 (1 of 1956) or any other law for the time being in force, or of any co-operative society for commercial purpose.
   f. participate in or associate himself in any manner in the making of —
      i. a sponsored media (radio or television) programme; or
      ii. a media programme commissioned by Government media but produced by a private agency; or
      iii. a privately produced media programme including video magazine;

Provided that no previous permission shall be necessary in case where the Railway Servant participates in a programme produced or commissioned by Government media in his official capacity."
2. **A railway servant may, without the previous sanction of the Government**

   a. undertake honorary work of a social or charitable nature, or
   
   b. undertake occasional work of a literary, artistic or scientific character, or
   
   c. participate in sports activities as an amateur, or
   
   d. take part in the registration, promotion or management (not involving the holding of an elective office) of a literary, scientific or charitable society or of a club or similar organization the aims or objects of which relate to promotion of sports, cultural or recreational activities, registered under the Societies Registration Act, 1860 (21 of 1860), or any other law for the time being in force, or,
   
   e. take part in the registration, promotion or management (not involving the holding of an elective office) of a co-operative society substantially for the benefit of railway servants, registered under the Co-operative Societies Act, 1912 (2 of 1912) or any other law for the time being in force.

**Provided that:**

i. he shall discontinue taking part in such activities, if so directed by the Government; and

ii. in a case falling under clause (d) or clause (e) of this sub-rule, his official duties shall not suffer thereby and he shall, within a period on one month of his taking part in such activity, report to the Government giving details of the nature of his participation.

3. Every railway servant shall report to the Government if any member of his family is engaged in a trade or business or owns or manages an insurance agency or commission agency.

4. Unless otherwise provided by general or special orders of the Government, no Railway servant may accept any fee for any work done by him for any private or public body or any private person without the sanction of the prescribed authority.

Explanation. –The term 'fee' used here shall have the meaning assigned to it in Rule 103(18) - R.I.

Railway Ministry’s decision 1. - It is not permissible for a Railway servant to take an Insurance Agency in his own name and canvass for the same.

(E (D&A) 58 GSI-40 dt. 7-3-58.)

Railway Ministry’s decision 2. – Railway servants should not ordinarily be allowed to accept part time employment whether under Government or elsewhere; even though such employment is after office hours.
Railway’s Ministry’s decision 3 - Railway servants, holding recognized qualification for any system of medicine may be granted permission by the Heads of Departments to undertake medical practice during spare time, on a purely charitable basis without detriment to his official duties. This will not apply to those who possess the qualification and are employed as physicians, surgeons etc., on the Railways.

(E (D&A) 64 GSI-5 dt. 30-5-64 and 10-11-65.)

Railway’s Ministry’s decision 4. - No railway servant should negotiate for commercial employment during service without obtaining the prior permission of the Head of the Department and such permission should not be given unless there are any special reasons for doing so.

(E(G) 66 EM 1-2 dt. 26-3-66.)


15-A. Sub-letting and vacation of Government accommodation.

1. Save as otherwise provided in any other law for the time being in force, no Railway servant shall sub-let, lease or otherwise allow occupation by any other person of Government accommodation which has been allotted to him.
2. A Railway servant shall, after the cancellation of his allotment of Government accommodation vacate the same within the time-limit prescribed by the allotting authority."


16. Investment, lending and borrowing.

1. No Railway servant shall speculate in any stock, share or other investment:

Provided that nothing in this sub-rule shall apply to occasional investments made through stock brokers or other persons duly authorised and licensed or who have obtained a certificate of registration under the relevant law.

Explanation — Frequent purchase or sale or both, of shares, securities or other investments shall be deemed to be speculation within the meaning of this sub-rule.
2. No Railway servant shall make, or permit any member of his family or any person acting on his behalf to make, any investment, which is likely to embarrass or influence him in the discharge of his official duties. For this purpose, any purchase of shares out of the quotas reserved for Directors of Companies or their friends and associates shall be deemed to be an investment which is likely to embarrass the Railway servant."


3. If any question arises whether any transaction is of the nature referred to in sub-rule (1) or sub-rule (2), the decision of the government thereon shall be final.

4.
   i. No railway servant shall, save in the ordinary course of business with a bank or a public limited company either himself or through any member of his family or any other person acting on his behalf
      a. Lend or borrow or deposit money, as a principal or an agent, to or from or with, any person or firm or private limited company with whom he is likely to have official dealings or otherwise place himself under pecuniary obligation to such person or firm or private limited company; or
      b. lend money to any person at interest or in a manner whereby return in money or in kind is charged or paid.

Provided that a railway servant may give to, or accept from, a relative or a personal friend, a purely temporary loan of a small amount free of interest, or operate a credit account with a bonafide tradesman or make an advance or pay to his private employee.

Provided further that nothing in this sub-rule shall apply in respect of any transaction entered into by a railway servant with the previous sanction of the Government.

ii. When a railway servant is appointed or transferred to a post of such nature as would involve him in the breach of any of the provisions of sub-rule (2) or sub-rule (4), he shall forthwith report the circumstances to the competent authority and shall thereafter act in accordance with such order as may be made by such authority.

Railway Ministry’s decision. —Loan taken from LIC by the Railway servant against their Insurance policies will be covered by the exception provided in the above rule and permission of the Government will not be necessary.

(E (D&A) 68 GSI/21 dt. 21-11-1968.)

17. Insolvency and Habitual indebtedness.

1. A railway servant shall so manage his private affairs as to avoid habitual indebtedness or insolvency. A railway servant against whom any legal proceeding is instituted for the recovery of any debt due from him or for adjudging him as an insolvent shall forthwith report the full facts of the legal proceeding to the Government.
Note. The burden of proving that the insolvency or indebtedness was the result of circumstances which, with the exercise of ordinary diligence, the railway servant could not have foreseen, or over which he had no control and had not proceeded from extravagant or dissipated habits, shall be upon the railway servant.

The following procedure shall be followed in the case of non-gazetted railway servants:

i. The report required under sub-rule (1) above shall be submitted by the railway servant to his immediate superior who should forward it through the normal channel to the authority competent to remove or dismiss the employee from service. Except where such authority requires guidance or clarification from a higher authority, it shall consider and pass appropriate orders thereon. A railway servant desiring to seek the benefit of the Insolvency Act shall apply to the Head of his Department, or to such authority as the government may specify in this behalf, for permission to file a Schedule in a Court of Law. Same time, he shall explain in such form as the Government may prescribe in this behalf all the circumstances which led to his financial embarrassment. The said authority will then consider his case in the light of those circumstances.

If the railway servant can prove that the indebtedness was the result of circumstances, which, with the exercise of ordinary diligence, he could not have foreseen or over which he had no control, and did not proceed from extravagant or dissipated habits and if as the result of investigation, the said authority considers that sufficient justification exists for the retention of the employee in service, he may permit him to have recourse to the court. Otherwise he should take steps either to dismiss or remove the employee from service as the circumstances of the case may warrant. If a railway servant asks for permission to seek the benefit of the Insolvency Act for a second time such permission may not be granted by an authority lower than the General Manager or Head of Office who, if he decides to retain the employee in service, shall report the circumstances to the Railway Board for information. As the Railway Co-operative Credit is often the creditor in such a case and other railway servants are sureties for the debtor, the said authority will, in deciding whether or not the debtor should be retained in railway service, consider the effect of this dismissal or removal on the railway and on his fellow employees.

ii. A railway servant who seeks the assistance of the Insolvency Court without the previous permission of the competent authority shall render himself liable to removal from service.

iii. A railway servant who is arrested for debt is liable for dismissal.

iv. Steps will be taken from time to time by the head of an office to ascertain from pay sheets, etc. whether any railway servant under him are in habitual state of indebtedness. If a moiety of the pay of a railway servant is being frequently attached for debit has been continuously so attached for a period exceeding two years or is attached for a sum which under ordinary circumstances he could not repay within two years, such railway servant shall be considered liable for dismissal.
v. Every case falling under (iii) or (iv) shall be considered in the light of the instructions contained in clause (i) above before it is finally decided whether or not the railway servant concerned should be dismissed or removed but in exceptional circumstances such railway servant should not be retained in service.

2. A railway servant shall also report to the Government or to such authorities as may be specified in this behalf the facts when a portion of his salary is constantly being attached, has been continuously attached for a period exceeding two years or is attached for a sum which, in ordinary circumstances, cannot be paid within a period of two years.

3. When a moiety of a railway servant’s salary is attached, the report by his superior officer to the Government competent authority should show what is the proportion of the debts to the salary; how far they detract from the debtor’s efficiency as a railway servant; whether the debtor’s position is irretrievable; and whether in the circumstances of the case, it is desirable to retain him in the post occupied by him when the matter was brought to notice; or in any post under the Government.

18. Movable, immovable and valuable Property.

1. 

i. Every railway servant shall on his first appointment to the railway service submit a return of his assets and liabilities, in such form as may be prescribed by the Government, giving full particulars regarding—

a. the immovable property inherited by him, owned or acquired by him or held by him on lease or mortgage, either in his own name or in the name of any member of his family or in the name of any person;

b. the shares, debentures and cash including bank deposits inherited by him or similarly owned, acquired, or held by him;

c. other movable property inherited by him or similarly owned, acquired or held by him;

d. debts and other liabilities incurred by him directly or indirectly.

Note.1 - Sub-rule (1) shall not ordinarily apply to Group 'D' railway servants, but the Government may, in appropriate cases, direct that it shall apply to any of such railway servants or any class of such railway servants.

Note. 2 - In every return, the values of items of movable property worth less than Rs. 10,000 may be added and shown as a lump sum. The values of articles of daily use such as clothing, utensils, crockery, books and the like, need not be included in such return.

Note. 3
i. Where railway servant already belonging to a service or holding a Post is appointed to any other Government or Railway service or post, he shall not be required to submit a fresh return under this clause.

ii. Every railway servant belonging to any service or holding any post included in Group A or Group B shall submit an annual return in such form as may be prescribed by the Government in this regard giving full particulars regarding the immovable property the inherited by him or owned or acquired by him on held by him on lease or mortgage either in his own name or in the name of any member of his family or in the name of any other person.

No railway servant shall, except with the previous knowledge of the Government acquire or dispose of any immovable property by lease, mortgage, purchase, sale, gift or otherwise either in his own name or in the name of any member of his family:

Provided that the previous sanction of the Government shall be obtained by the Railway servant if any such transaction is with a person having official dealings with him.

Where a railway servant enters into a transaction in respect of movable property either in his own name or in the name of a member of his family, he shall, within one month from the date of such transaction, report the same to the Government, if the value of such property exceeds two months Basic Pay

Provided that the previous sanction of the Government shall be obtained by the Railway servant if any such transaction is with a person having official dealings with him.

Note.1 - Purchase of items of movable property for giving presents at the of marriage will be regulated by rule 18(3) above like any other transactions in movable property

(Railway Board’s letter No. E(D&A) 65 GSI-12 dated 23-4-1966.)

Note 2. - The powers of the Government so far as sub-rule(3) is concerned, may be exercised by—

. General Manager and the Chairman, Railway Rates Tribunal, in respect of both gazetted and non-gazetted officers under their respective administrative control; and

i. Senior Deputy General Managers on Zonal Railways in respect of gazetted officers below the Senior Administrative Grade and non-gazetted officers subject to the condition that the powers hereby delegated are not further delegated by them to lower authorities so far as cases of gazetted officers are concerned.

The Government or any authority empowered by it in this behalf may, at any time by general or special order, require a railway servant to furnish, within a period specified in the order, a full and complete statement of such movable or immovable property held or acquired by him or on his behalf or by any member of his family as may be specified in the order. Such statement shall, if so required by the Government or by the authority so empowered, include the details of the means by which, or the source from which, such property was acquired.
The Government may exempt any category of railway servants belonging to Group ‘C’ or Group ‘D’ from any of the provisions of this rule except sub-rule(4). No such exemption shall, however, be made without the concurrence of the Railway Board, who will consult the Ministry of Home Affairs (Now Cabinet Secretariat, Department of personnel).

Explanation I. —For the purpose of this rule, the expression ‘movable property includes—

. jewellery, insurance policies the annual premium of which exceeds Rs. 10,000 or one-sixth of the total annual emoluments received from Government, whichever is less’ shares, securities and debentures;
  a. All loans, whether secured or not, advanced or taken by the Government servant.
  b. motor cars, motor cycles, horses, or any other means of conveyance; and
  c. refrigerators, radios, radiograms and television sets.

Explanation II. —For the purpose of this rule, “lease” means, except where it is obtained from, or granted to, a person having official dealing with the railway servant, a case of immovable property from year to year or for any term exceeding one year or reserving a yearly rent.

Railway Ministry’s decision 1.—It is undesirable for Railway servants to bid at auctions arranged by their own department or under orders of which the auction is conducted and if he does so it would be regarded as indulging in conduct unbecoming of a railway servant under the rules.

(E (D&A) 58 GS-1-6 dt. 15-3-58 & 27-6-66.)

Railway Ministry’s decision 2. —The intention of proviso to sub-rule (2) & (3) regarding bonafide deal is to assure that—

i. the transaction proposed to be entered into is for bonafide purposes;

ii. the acquisition/sale of property in question is at fair prevailing market prices and does not involve any element or profiteering or speculation;

iii. there is no reasonable ground to hold that the transaction in question is the result of the exercise of any undue official influence by the officer e.g. in return of any official favours conferred or likely to be conferred upon the prospective seller/buyer of the property; and

iv. there is nothing otherwise objectionable in return to the proposed transaction.

(E (D&A) 60 GS-1-5 dt. 7-6-60.)

Railway Ministry’s decision 3. —The term "Regular and reputed dealer" means a person or firm who deals in a particular item and keeps regular accounts of lists, its transaction
and who has regular business premises. A co-operative housing society registered under the Co-operative Society’s Act, 1912 or any corresponding law in force also falls under this definition.

(E (D&A) 60 GS-1-5 dt. 30-1-61.)

Railway Ministry’s decision 4. -- Whenever a Railway servant wishes to build a house, the following procedure should be followed:

a. Before starting construction of the house, he should report or seek permission as the case may be and after completion of the house, he should report to the prescribed authority.

b. The details in proforma prescribed should be furnished wherever it is possible to do so. Wherever it is not possible to furnish the details about purchase of movable property acquired for the construction of the house, the Railway servant concerned should mention the covered area on which the building is proposed to be erected and the estimated cost of the building.

c. In case where the expenditure to be incurred on repairs or minor construction work in respect of any immovable property belonging to a Railway servant, is estimated to exceed Rs. 1000/- sanction of the prescribed authority is required.

Railway Ministry’s decision 5. ---The factum of giving or receiving money between father and son can be termed as a transaction of movable property within the meaning of Rule18(3).

(E (D&A) 64 GS-1-6 dt.25-2-65.)

Railway Ministry’s decision 6. ---In exercise of the powers conferred by rule 24 read with Rule 2(a) (ii) of these rules, the Railway Board hereby directs as follows:

i. Powers exercised by the Railway Board under rule 18(2) of the above rules shall be also exercisable by the General Managers, all Indian Railways, Production Units and the Director General, RDSO in respect of Gazetted officers under their respective administrative control subject to the condition that all cases of such sanction accorded by them shall be reported to the Railway Board, and

ii. Powers exercisable by the Railway Board under rule 18(3) of these rules shall be also exercisable by Director General RDSO in respect of gazetted officers under his administrative control.

(E (D&A) 69 GS-1-11 dt. 14-8-69.)

Railway Ministry’s decision 7. - Railway servants should not buy or sell property to or from a firm with whom he has official dealings. In exceptional cases, however, permission may be granted only after careful enquiry into the officer’s dealing with the
firm and after it is satisfactorily established that he was not conferred and is not likely to confer any official favour upon the party concerned.

(E (D&A) 69 GS-1-3 dt. 9-5-75.)

Railway Ministry’s decision 8. - While no permission of the Government is necessary for taking Life insurance Policy or making fixed deposits in Banks under sub-rule (3) above, permission is required to be obtained to join a Chit Fund.

(E (D&A) 69 GS-1-36 dt. 13-12-76.)

Railway Ministry’s decision 9. - The provision of Delhi Rent Control Act and similar other provisions in other States, wherever applicable, should be observed by Railway servants while taking rent advance for property held them.

(E (D&A) 69 GS-1-2 dt. 30-4-76.)

Railway Ministry’s decision 10. - It is clarified that transactions entered into by the spouse or any other member of family of a railway servant out of his or her own funds (including stridhan, gifts, inheritance etc.) as distinct from the funds of the railway servant himself in his or her own name and in his or her own right, would not attract the provision of sub-rule (2) and (3) of Rule 18.

18-A. Restrictions in relation to acquisition and disposal of immovable property outside India and transaction with foreigners, etc. - Notwithstanding anything contained in sub-rule (2) of rule 18. No railway servant shall except with the previous sanction of the Government –

a. Acquire, by purchase, mortgage, lease, gift or otherwise, either in his own name or in the name of any member of his family, any immovable property situated outside India.

b. dispose of, by sale, mortgage, gift or otherwise, or grant any lease in respect of any immovable property situated outside India which was acquired or is held by him either in his own name or in the name of any member of his family;

c. enter into any transaction with any foreigner, foreign Government, foreign organization or concern—

i. for the acquisition, by purchase, mortgage, lease, gift or otherwise, either in his own name or in the name of any member of his family, or any immovable property.

ii. for the disposal of, by sale, mortgage, gift or otherwise, or the grant of any lease in respect of, any immovable property which was acquired or is held by him either in his own name or in the name of any member of his family.

1. No railway servant shall, except with the previous sanction of the Government, have recourse to any Court or to the Press for the vindication of any official act which has been subject matter of adverse criticism or an attack of a defamatory character.

Provided that if no such sanction is received by the railway servant within a period of three months from the date of receipt of his request by the Government, he shall be free to assume that the permission as sought for has been granted to him.

2. Nothing in this rule shall be deemed to prohibit a railway servant from vindicating his private character and or any act done by him in his private capacity and where any action for vindicating his private character or any act done by him in his private capacity is taken, the railway servant shall submit a report to the Government regarding such action.

Railway Ministry’s decision 1.—Railway servants seeking redress of their grievances arising out of their employment of conditions of service should in their own interest and also consistently with official propriety and discipline first exhaust the normal official channels of redress before they take the issue to a court of law. Any attempt by Railway servants to seek redress from the court of law or such matters (even in cases where such a remedy is legally admissible) without first exhausting the normal official channels of redress can only be regarded as contrary to official propriety and subversive of good discipline and may well justify the initiation of disciplinary action against them.

(E (D&A) 62 RG6-21 dt.5-2-64 & E (D&A) 69 RG 6-37 dt. 14-2-67.)

20. Canvassing of Non-official or other Influence. - No railway servant shall bring or attempt to bring any political or other influence to bear upon any superior authority to further his interests in respect of matters pertaining to his service under the Government.

Railway Ministry’s decision.—Railway servants are advised to strictly refrain from bringing pressure from the M.Ps and other influential outsiders to secure benefits out of turn or regarding any matter arising out of their service. If such occasions arise, the name of the officer or the member of the staff concerned will be brought to the notice of the Head of the Department for such disciplinary action as may be considered necessary.

(E (D&A) 70 RG6-9 dt. 7-7-71.)


1. No railway servant shall enter into, or contract, a marriage with a person having spouse living: and,

2. No railway servant, having a spouse living shall enter into, or contract, a marriage with any person.
3. A railway servant who has married or married a person other than of Indian Nationality shall forthwith intimate the fact to the Government

Provided that the Government may permit a railway servant to enter into, or contract, any such marriage as is referred to in clause (1) or clause (2), if it is satisfied that

a. such marriage is permissible under the personal law applicable to such railway servant and other party to the marriage; and
b. there are other grounds for so doing.

22. Consumption of intoxicating Drinks and Drugs.

1. A railway servant shall
   a. strictly abide by the law relating to intoxicating drinks or drugs during the course of his duties and shall also take due care that the performance of his duties at any time is not affected in any way by the influence of such drink or drug,
   b. refrain from consuming any intoxicated drink or drug in a public place;

2. A railway servant shall not
   a. appear in a public place in a state of intoxication;
   b. use any intoxicating drink or drug to excess;
   c. if he belongs to the category of running staff (both local and traffic) or is connected directly with train passing, have taken or used any intoxicating drinks or drugs within eight hours of the commencement of duty or take such drinks or drugs during the course of duty.

Explanation. —For the purpose of this rule, "Public place" means any place or premises (including conveyance) to which the public have, or are permitted to have, access whether on payment or otherwise.

22-A Prohibition regarding employment of Children below 14 years of age. - No Railway servant shall employ to work any child below the age of 14 years.


23. Interpretation. - The power of interpreting these rules is reserved to the President.

24. Delegation of Powers. - The Government may, by general or special order, direct that any power exercisable by it under these rules shall, subject to such conditions, if any, as may be specified in the order, be exercisable also by such officer or authority as may be specified in the order.

25. Repeal and Savings. - The Railway Services (Conduct) Rules, 1966, contained in Appendix VI of the Indian Railways Establishment Code, Volume I, shall cease to be in force except as respects things done or omitted to be done.
26. Obligation to abide by all administrative Instructions. —Notwithstanding anything contained in these rules, a railway servant shall be governed by all the administrative instruction that may be issued from time to time in regard to the conduct of railway servants.
LEAVE RULES

DIFFERENT KINDS OF LEAVE RULES

(1) Company Leave Rules:
These rules apply to the staff which was taken over from the East Indian Railway Company and Great Indian Peninsula Railway Company and did not elect to come under New Leave Rules. These rules are almost obsolete, since all the employees who were governed by these rules must have retired by now.

(2) Fundamental Leave Rules:
These rules apply to the staff appointed in State Railways up to 31.08.28. These rules have also become obsolete.

(3) New Leave Rules or State Railway Leave Rules, 1930:
These rules apply to staff who are not governed under Fundamental Leave Rules and are appointed up to 31.01.49 but have not elected to come under C.P.C. Leave Rules.

(4) C.P.C. Leave Rules or Liberalized Leave Rules, 1949:
The rules apply to the staff who are appointed on or after 1.2.49 and also the existing staff as on 31.01.49 who opted to come under these rules.

C.P.C. LEAVE RULES

C.P.C. Leave Rules which are also called Liberalized Leave Rules came into effect from 1st February, 1949. These rules replaced the New Leave Rules and every existing employee was given the option of electing these rules in order to bring about maximum uniformity amongst the Railwaymen insofar as leave is concerned. A majority of the Railwaymen opted in favour of these rules and the staff appointed after the introduction of these rules automatically came under them. These rules are called Liberalized Rules as they are surely an improvement over the New Leave Rules which have been superseded. At present the C.P.C. Leave Rules are most popular amongst the Railwaymen. Under these rules, any kind of leave i.e. L.A.P., L.H.A.P., etc. may be granted in combination with or in continuation of any other kind of leave.

Following are the different kinds of leave, an employee is entitled to get under C.P.C. Leave Rules.
LEAVE ON AVERAGE PAY

(1)

Crediting of Leaves:
The L.A.P. account of all the Railway servants, should be credited with 30 days. This should be done in two installments, 15 days on the first of January and 15 days on the 1st of July every year. With effect from 01.01.77, 15 days L.A.P. should be credited to the account of Railway servants at the commencement of each calendar half year. The credit of 15 days Leave, thus afforded will be reduced by 1/10th of the period of extraordinary leave availed during the previous half year, subject to a maximum of 15 days. (R.B. No. E(P&A)1-76/CPC/LE-3 of 11.03.77) (N.R., S.N. 6734). One tenth of the period of dies –non, if any, in the previous half year will also be deducted (R.B. No, E(P&A) I-79/CPC/LE-1 of 05.05.79)(N.R., S.N. 7287).

Leave at the credit of the employee at the close of the previous half year shall be carried forward to the next half year subject to the leave so carried forward plus the credit for that half year not exceeding the maximum limit of 300 days.

Leave credited in the leave account of an employee on 1st January /1st July can be sanctioned retrospectively e.g. an employee on L.W.P. from 27.12.68 to 10.01.69 (having no L.A.P. or H.A.P. at his credit) can get his L.W.P. from 01.01.69 to 10.01.69 converted L.A.P. as soon as the advance credit of L.A.P. is afforded to him (N.R., S.N. 4727).

During the half yearly period in which an employee is appointed, credit of L.A.P. @ 2 ½ days per month of service is given and for this purpose half a month or more will be taken as one month.

During the period of 01.01.66 to 31.10.73 credit of L.A.P. in the leave account of a temporary staff before completion of one year service would be made on half yearly basis once on 1st January and again on 1st July at the rate of 1 ¼ days for each completed month of service was likely to render in the calendar half year.

(2)

Credit of Leave to Retiring Employees:
During the calendar half year in which a staff is due to retire or goes on L.P.R. or resigns from service or is removed or dismissed from service or dies, recalculation will be made for crediting leave for that half year. This will be at the rate of 2 ½ days per month and
for this, half month or more will be taken as a month. (R. B. No. E (S) 62-CTC/LE/9 of 13.12.65) & (E (S) 66 CTC/LE/1 of 19.66 & 28.9.66 & R. B. No. PC-III-878/LE-I of 13.05.74 and 15.05.74.

(3) **Staff in Railway Schools**:

*Staff serving in Railway Schools are entitled to 10 days L.A.P. in a year in which they avail the full vacation. When, however, they do not avail the vacation in any year, they will be entitled to L.A.P. for that year as other Railway staff.*

If such staffs are prevented from availing full vacation, they will be entitled to L.A.P. in such proportion of the period of 30 days as the number of days of vacation not taken bears to the full vacation.

(4) **Accumulation of Leave**:

Maximum leave that can be accumulated at any time is 300 days.

(5) **Maximum Leave granted at One time**:

Maximum leave that can be granted at one time is 120 days, but in case the leave is to be spent out of India, except Myanmar, Sri Lanka, Nepal and Pakistan, then it can be upto the extent of 180 days.

An employee, officiating in a higher post can only be granted leave on full average pay at a stretch for 60 days at one time excepting Class IV staff. If leave is granted beyond this period it will be based on substantive pay.

(6) **Half day’s leave**:

The workshop staff may be allowed to take leave for half a day with pay or without pay. For this purpose leave for half a day means authorised absence from duty for over half an hour. The concession of such leave is however, restricted to six such occasions in a year. (R.B. No. E(L) 61 WSI 5 of 06.11.61). The facility of short leave may also be granted to clerical and supervisory staff of Workshops, where it was available prior to its withdrawal in 1966 (R.B. No. E(G)72 LE I-6 of 30.11.73) (N.R., S.N. 6061).

Leave in terms of half day may also be given to artisans and Class IV (Group “D”) staff employed in Electrical Power Shops and other workshops located within or outside Mechanical Workshops and to artisans and other Class-IV (Group-“D”) staff of Stores Depots located within mechanical workshops who work in split shifts and are not entitled to casual leave. Such categories of staff employed in Stores Depots located outside the workshops will not be granted leave in terms of half-a-day but if they were enjoying this facility in the past and are not entitled to casual leave, the facility may not be withdrawn. (R. B. No. E(L)65 WSI-6 of 30.03.66.)
Delegation of powers for Sanctioning Leave:
The G.M. may delegate the power of sanctioning casual and earned leave upto 15 days to Class III and Class IV (Group “C” & “D”) staff to Senior Supervisory staff in the grade of RS. 5000-8000 (R.S.) and above, such as Permanent Way Inspectors, I.O.Ws, Traffic Inspectors, Signal Inspectors, Loco Foremen and Station Masters of important stations. (R.B. No. E (G)63 LE 2/22 of 22.09.64) & (E(G)76 LE/2/40 of 04.11.78) (N.R., S.N. 7168).

Leave on Medical Certificate:
A gazetted Railway servant can also be granted leave on medical certificate for period exceeding 2 months on the basis of a certificate from an Authorised Medical Attendant as in the case of non-gazetted Railway servants. The production of medical certificate can be dispensed with by the competent authority in case of an application for leave from a Gazetted Officer also for period not exceeding 3 days at a time. (R.B. No. E (P&A) 1-76/CPC/LE/3 of 11.03.77) (N.R., S.N. 6734).

Carry Forward:
Temporary Railway servants who have not completed 3 years of service and who resign from such service for taking up appointment in a post in another Central Government department/office and the application had been duly forwarded by the Railway Administration concerned, are also eligible for the benefit of carry forward, of leave on confirmation in the new post. (R. B. No. E(NG)II-76/AP/12 of 04.03.77) (N.R., S.N. 5732).

Maximum Leave:
No Railway servant shall be granted leave of any kind for a continuous period exceeding five years unless otherwise determined by the President in view of exceptional circumstances. (R.B. No. F/E/III/75 SFN/1 of 16.06.76) (N.R., 6560)

Prefixing/Suffixing of Holidays to Leave:
Prefixing and suffixing of holidays to leave, other than on medical certificate shall be allowed automatically except in cases where due to administrative reasons such prefixing and suffixing of holidays in specifically withheld. (R.B. No. E (P&A)1-76/CPC/LE-3 of 11.03.77) (N.R. S.N. No. 6734)

Leave cannot be claimed as a matter of right
Leave cannot be claimed by a Railway servant as matter of right. The competent authority has the discretion to refuse or revoke the leave of any description. The discretion, is however, to be exercised judiciously and must not be used as, in effect, to abridge the employees leave entitlement. The sanctioning authority has no discretion to alter the nature of leave due applied for.
Overstaying-Unauthorized absence:
It will be illegal to remove a temporary Railway servant from service on ground of “deemed resignation” for reasons of unauthorized absence. Temporary Railway servants should also be afforded an opportunity to show cause under Discipline and Appeal Rules, before they are removed from service for unauthorized absence.

Accordingly, Note (2) under Rule 732 of Railway Establishment Code Vol. I has been modified. (R.B. No. E(P&A) I-84/CPC/LE-3 of 23.03.85) (N.R., S.N. 8701).

Maximum of 10 days encashment of LAP while in service for maximum of 6 occasion every alternate year

LEAVE ON HALF AVERAGE PAY

(1) Leave admissible:
The rate at which leave at half average pay can be earned is 20 days for each completed year of service. This applies to all the staff irrespective of class.

(2) Accumulation:
Leave on half average pay can be accumulated up to any extent.

(3) Maximum Leave to be granted:
Maximum leave on half-average pay that can be granted at one time is 24 months.

(4) Leave Salary:
During leave on half average pay, the salary payable will be half of the substantive pay. But when leave is commuted then it will be on full substantive pay.

(5) Crediting of Leave:
The Railway Board has decided that the Railway employees may be allowed the benefit of advance credit of leave on his average pay by crediting to their leave account on 1st January and 1st July each year. (R.B. No. E(P&A)I-85/JCM/NC-3 of 30-9-86 (N. R. , S. N. 7964)

COMMUTED LEAVE

Leave on half-average pay can be converted into half the period of such leave on average pay on medical grounds. The leave so converted is called “Committed Leave.” The employee can ask for commutation of his leave on half average pay even if he has got leave on average pay at his credit in his leave account. (739R). The commutation of half pay leave
should be allowed where leave is required for an approved course of study, and upto a maximum of 180 days of half pay leave during entire service should be allowed to be commuted where such leave is utilized for an approved course of study.

On the expire of commuted leave, if the employee wants to retire voluntarily, the commuted leave shall once again be reconverted into half pay leave and excess amount drawn by the employee as leave salary shall be recovered. If, however, the retirement is thrust upon him by the reasons of ill health, incapacitating him for further service, no refund should be taken. (R. B. No. E(S)1-60 C.P.C./LE/3 of 20.09.60)

When commuted leave is granted, twice the amount of such leave shall be ebited against the half pay leave due.

**Committed Leave for approved Course of Study:**
L.H.A.P. upto a maximum of 180 days shall be allowed to be committed during entire service where such leave is utilized for an approved course of study i.e. a course which is certified to be in the public interest by the leave sanctioning authority. This provision is effective from 01.11.73 and is applicable to all Railway servants. (R.B. No. PC-III/73/LE/1 of 13.05.74 and 15.01.75)(N.R. S.N. 6035).

Any kind of leave i.e. LAP, Committed Leave, L.H.A.P. etc. under C.P.C. Leave Rules may be granted in combination with or in continuity of any kind of leave. (R.B. No. E(S)62 CPC/LE/8 dtd. 28.01.63)

**LEAVE NOT DUE**

Except in case of leave preparatory to retirement, a permanent Railway employee may be granted “Leave not due” on half average pay for a period not exceeding 360 days in all, out of which not more than 90 days at a time and 180 days in all, otherwise than on medical grounds. This leave is granted in advance of its being earned and is debited against the leave on half average pay to be earned on resumption of duty.

Such leave is granted only in exceptional circumstances where there are reasonable prospects of the employee returning to duty and earning the leave (740-R). “Leave not due” cannot be granted retrospectively when the employee has resumed duty. If any employee who has been granted “Leave not due” intends to retire voluntarily either during such leave or on its expiry, the “Leave not due” granted to him shall be cancelled and his retirement shall take effect from the date of commencement of such leave. If he retires voluntarily he will be called upon to refund the leave salary already drawn. But if the retirement is on account of ill health, no refund will be insisted upon (R.B. No. E(S)1-61/CPC/LE/II of 14.08.62) If the
employee is retired compulsorily, the leave salary in respect of “Leave not due” will not be recovered . (R. B. No. E9S 67 CPC/LE/1 of 14.10.76) (N.R. S.N. 6653).

Even if the employee retires voluntarily or resigns of his own volition on other than medical grounds after returning to duty, he has to refund the leave salary drawn to the extent it has not been subsequently wiped off (R.B. No. E. (S) 65 CPC/LE/5 of 24.09.65). No recovery of amount of leave salary of should be made if the retirement of the Railway servant who has joined duty after availing himself of “Leave not due” is by reasons of ill health, incapacitating the Railway servant for further service or in the event of his death. (R.B. No. E(S) 67/CPC/LE/1 of 23.11.72) (N.R. S.N. 5791).

No recovery of leave salary shall be made if the employee has not subsequently earned half pay leave due to compulsory retirement on disciplinary grounds or due to premature retirement CRB No. E (S) 67(CPC/LE/1 of 4.9.81 (N.R. S. N. 7829).

**Temporary Railway Servants**

Leave not due may be granted to temporary Railway servants also, who are suffering from T.B. , Leprosy, Cancer or Mental illness, for a period not exceeding 360 days during the entire service subject to fulfillment of the following conditions:

(a) That the Railway servant has put in at least one year’s service.

(b) That the post from which the Railway servant proceeds on leave is likely to last till his return to duty.

(c) That request for grant of leave is supported by a medical certificate

(d) That the competent authority is satisfied that there is a reasonable prospect of the Railway servant returning to duty on its expiry and earning an equal amount of half average pay leave there after and:

(e) That “leave not due” shall be limited to the half average pay leave, he is likely to earn thereafter and shall be debited against such half average pay leave (R.B.No. E(D&A)1-76/CPC/LE/3 of 11.03.77(N.R. S.N. 6734).

On the representation of A.I.R.F., the Railway Board has decided that while it is not possible to relax the aforesaid conditions, yet individual cases of hardship may be considered on merit and deserving cases referred to the Board for orders. (R.B. No. E(P&A) I-78/FE-2/5 of 6.7.81) (N.R., S.N. 7891)

**Note** : In case where “leave not due” cannot be granted, the grant of extraordinary leave will be irregular unless this is specifically applied for by the employee in writing. There is no objection to conversion of a leave as “leave not due” with retrospective effect if the authority so desires only in such cases where extraordinary leave or leave of any other kind was granted initially and not in respect of periods of unauthorized absence
EXTRAORDINARY LEAVE

(a) As is apparent from the name itself, extraordinary leave is granted to an employee when no other kind of leave i.e. L.A.P. or L.H.A.P. is due to him. It may be granted to an employee who specifically applies for this leave although some other leave is admissible to him;

(b) No leave salary is admissible to the employee during such leave and this leave is not debited to the leave account.

(c) This leave can be granted in continuation of other leave except casual leave;

(d) Period of absence without leave can also be commuted to extra-ordinary leave.

(e) Maximum period of extra ordinary leave that can be granted at a time is 5 years inclusive of other leave, if any;

(f) Temporary employee may be granted extraordinary leave for a period not exceeding 3 months at a time without a medical certificate and upto 6 months with medical certificate of common ailments;

(g) In case a temporary employee is suffering from T.B. or Leprosy, 18 months’ extraordinary leave inclusive of any leave on average pay, if due, can be granted to him.

Note: The extraordinary leave can be granted to temporary employees only if they have put in a minimum of one year’s continuous service.

It has been clarified by the Railway Board that two spells of extraordinary leave if intervened by any other kind of leave are to be treated as one continuous spell of extraordinary leave for the purpose of Rule 732-R-I read with rule 742-R-I (R.B. No. E(S) 67 CPC/LE-1 of 5.10.74) (N.R. S.N. 6216)

(h) The competent authority has discretion to allow extraordinary leave, to count for pension.

(i) if it is taken on grounds other than medical certificate

(ii) if it is taken due to inability of the pension concerned to join or rejoin duty to civil commotion or a natural calamity provided that he has no other type of leave to his credit, and

(iii) if it is taken for prosecuting higher scientific and technical studies.

(i) In the matter of increment also, according to Rule 2022 (B) RII, extraordinary leave taken on account of illness covered by a medical certificate counts for increment. Further in accordance with item 8 in Appendix XXXII-R-II, powers have been delegated to competent authorities to make substantive appointment to the post which the Railway
servant holds, to allow at their discretion the counting of extraordinary leave in case where extraordinary leave is taken for cause beyond the Railway servant’s control (R.B. No. F(E)II 71 PN/1/28 of 7.3.72) (N.R. S.N. 5605)

“Dies-non” The dies-non” period is taken as non-existing in the Railway servants career. Such period is neither counted as service nor it is constituted as break in service. When a period is treated as “dies-non” it gives the concerned Railway servant continuity of service prior to and after the break for all purposes and period of break is not counted for any purpose.

Special Disability Leave:
(a) The leave is granted to a Railway employee whether temporary or permanent, who is disabled by injury inflicted either intentionally by someone or caused during the course of performance of his official duties.
(b) This leave is admissible only when the injury manifests itself within three months of the due of occurrence.
(c) The period of leave that can be granted shall be such as is certified by the Authorised Medical Officer subject to a maximum of 24 months in respect of one disability.
(d) Disability leave can be combined with any other kind of leave.
(e) The leave salary admissible during such leave will be average pay for the first four months and half-average pay for the remaining period.
(f) If the employee is governed by the Workmen’s Compensation Act, then the amount of leave salary that is paid to him will be deducted from the amount of compensation payable under Workmen’s Compensation Act.
(g) Special disability leave (accidental) may be granted to a Railway servant who is disabled by injury accidentally caused or by illness incurred in the performance of any duty which has the effect of increasing his liability of illness. The period of absence from duty may be covered in part by leave under this rule or in part by the other leave, provided the leave on average pay will be less than the amount of L.A.P. as mentioned above.

The General Manager may grant this leave to both gazetted and non-gazetted staff, subject to report at the end of each year to the Board in respect of Special Disability/Accident. (R. B. No. F(X) 11-62-PW/4/3 of 9.3.64)

STUDY LEAVE

(a) It is granted to a Railway employee for the purpose of:
(i) Higher studies or undergoing training in professional and technical subjects, having direct and close connection with the sphere of his
duties;
(ii) A study capable of widening one’s mind in manner likely to improve his abilities as Railway servant;
(iii) Studies connected with the frame work or background of public administration;
(iv) A course of training or study tour, certified to be advantageous to Government from the point of view of public interest and related to the duties of Railway servant;
(v) Railway employees on the staff side of National Council under the J.C.M. Scheme, may be granted study leave by Railway Board, on the usual terms and conditions, if they secure admission for Management Training Courses in recognized institution in foreign countries. (R. B. No. F(E)70 LE 9/3 of 18.11.70) (N.R., S. N. 5155).

(b) Study leave is not granted for academic or literary pursuits.

(c) Study leave should be liberally granted particular to scientific, technical and administrative staff.

(d) If such leave is for study outside India, the permission of Finance Ministry, Government of India should be obtained and release of necessary foreign exchange asked for.

(e) This leave can be granted for a maximum period of 24 months in the entire service of Railwayman and upto 12 months at any one time.

(f) During this leave availed outside India, the employee shall get salary at half average pay and study allowance at the current prescribed rates per day. 
For courses of study in India, the leave salary payable during study leave shall be equal to the pay (without allowance) that the employee draws while on duty immediately before proceeding on such leave. No study allowance shall be paid during the period. The amount, if any, received by a Railway servant during the period of study leave as scholarship or stipend or remuneration in respect of any part time employment which used to be adjusted against study allowance under the existing rules shall hereafter be adjusted against the said leave salary subject to the condition that the leave salary shall not be reduced to an amount less than payable as leave salary during half pay leave (R. B. No. PCIII/73/LF/1 of 15.1.75) (N.R., S.N. 6035 A).

(g) On return from the study leave, the employee has no option to resign or retire for three years. For this purpose he will have to execute a bond before proceeding on leave. If the employee resigns within this period, otherwise than on medical ground, he will be required to refund
(i) the actual amount of leave salary, study allowance, cost of fees, travelling and other expenses, if any, incurred by the Railway and

(ii) the actual amount, if any, of the cost incurred by the other agencies e.g. foreign Government, foundations, trust etc. in connection with the course of study together with interest thereon at Government rates for the time being in force Government loan from the date of demand before his resignation is accepted or permission to retire is granted. (R.B. No. F(E)III/83/LE-1/9 of 16.10.85)(N.R. S.N. 8871)

(h) Instances have come to the notice of the Railway Board where officers at the very beginning of their career on the Railways have gone abroad on study leave for 3 to 5 years and on return, had to be considered for rapid promotion from Junior Scale to Senior Scale and JA Grade without their having sufficient working experience on the Railways. In order to avoid such situations and to ensure that young officers gain sufficient working experience at the start of their career, the Board has decided that study leave abroad should not be granted to junior and senior scale Group “A” officers (including IRMS). Accordingly, no cases of study leave abroad pertaining to such officers should be recommended to Board for sanction. (R. B. No. F (E) III/92/LE-1/5 dated 25.6.92( N. R., S.N. 10651).

(i) It has been decided by the Government to increase the limit of Study Leave combined with other kinds of leave with leave salary excluding Extraordinary Leave from 28 months to 36 months to Railway employees undergoing course of study leading to the award of Ph.D. degree, provided the study as well as the University/Institution are approved by the controlling authority and subject to fulfillment of various conditions regarding grant of Study Leave. (R.B. No. F(E)III/89/LE-1/5 dated 20.11.90). This provision is also applicable to Doctors pursuing P. G. Course in the field of medicine w.e.f. the academic year of 1993 (R.B. No. F(E)III/95/IE 1/1 dated 6.8.97) (N.R. S.N. 11445).

(j) Study Leave will count as service for promotion but not for earning leave, other than L.H.A.P. under C.P.C. Leave Rules. (R.B. No. F (E)64/LE-9/2 of 4.5.64).

(k) Study Leave to gazetted staff may be granted by the Railway Board. The General Manager may grant such leave to non-gazetted staff provided the course and institution to be attended have been recognized by general or specific orders of the Railway Board (R.B. No/ F(E) 63 LE9(1) of 26.6.63 and F(E)57/SR (1) of 30.12.60).

(l) Study Leave shall not be granted to Railway servants who are on deputation to other departments and vice-versa (R.B. No. F (E) 66 LE 9/1 of 18.7.66) (N.R. S.N 3556).
(m) Study Leave cannot be granted to those with less than 5 years service and to those who are due to retire within 3 years of the return from study leave.

A Medical Officer may be granted study leave for prosecuting a course of post-graduate study in Medical Science in India, if the Head of the Medical Department certifies to the effect that such study shall be valuable in increasing the efficiency of such Medical Officer in the performance of his duties. For post-graduate study in medical science abroad, study leave shall be granted if the Director General of Railway Health Services certifies that such study shall be valuable in increasing the efficiency of such Medical Officer for the purposes of his duty.

The General Managers while considering the proposed for grant of study leave shall satisfy themselves that more than the required number of Specialists are not already available and that the work can be managed without substitute during the absence of the officer who had been granted study leave and that not more than 5 doctors on each of the Central, Eastern, Northern, Southern, South Central, South Eastern and Western Railways and 3 doctors each on North Eastern and North-East-Frontier Railways are granted study leave in a year. The production units may however grant study leave to not more than one medical officer in a year (R.B. No. F(E)III/89/LE-1/5 dt. 19.2.90) (N.R. S.N. 10101).

The Railway Board has decided that Study Leave will be granted only in those cases outside India for super-specialization in subjects or courses leading to Ph. D which are of advantage to the Railways. Such cases can be processed and sanction granted with the personal approval of the General Manager, subject to the following instructions.

(i) Leave abroad should not be granted to Junior Scale/Senior Scale officers including IRMS.
(ii) The subject of study of super-specialization or the course leading to Ph. D should be directly related to the sphere of duty and certified as such by the Head of Department. The Head of Department will also certify that such study will enable the officer to keep abreast with the modern developments and improve his technical standards, which will substantially benefit the Railways.
(iii) The grant of study leave will not involve any grant of study allowance which is in foreign exchange.
(iv) The study leave out of India shall not be granted for prosecution of studies on subject/courses for which adequate facilities exists in India or under any of the schemes administered by the Department of Economic Affairs of Ministry of Finance or by the Ministry of Education (R.B. No. F (E) III/92/LE/5 dated 7.10.1994 (R.B. E. No. 82/94)).
MATERNTITY LEAVE

(a) Maternity Leave may be granted to female Railway employees for a period of 180 days.
(b) This leave can also be granted irrespective of number of surviving children in case of miscarriage or abortion for a period not exceeding 45 days during entire service..
(c) Such leave is not debited to the leave account of the employees.
(d) Leave of any other kind including commuted leave may also be granted in continuation of maternity leave, upto a maximum of one year without production of medical certificate. (R.B. No. F (E) III 76/LE1/1 of 23.1.78 N.R. S.N. 6942) (R.B. No. E (P&A)I/86/ CPC/LE/9 dated 1.2.91 ) (N.R., S.N. 10366).
Further leave in continuation may be granted on producing medical certificate for the illness of female employee or newly born child (R.B. No. F (E) III/76/LE/1/1 of 24.10.78) (N.R. S.N. 7154).
(e) A temporary female employee is also entitled to this privilege.
(f) This leave may be granted for a period of 135 days from the date of its commencement.
(g) Female casual labourers with temporary status are also entitled to all benefits of maternity leave irrespective of length of temporary status service. (R. B. No. E(P&A) I/90/CPC/LE/9 dated 25.6.91)(N.R. S.N. 10476) (R.B. No. E (NG) II/77/CL/1 of 3.4.77 (N.R. S.N. 6770 )
(h) Maternity leave may be granted to ad-hoc female employees on the basis of medical certificate, provided their appointment is likely to continue till the period of leave expires and they are likely to be retained in service there after (R.B. No. E(NG)II/75/SB/7 of 1.1.79 (N.R.S.N. 7243 A).
(i) Maternity leave may not be allowed to women employees having two children.
(j) Maternity leave is admissible even to unmarried female Railway Servants (R.B. No. E (P&A) I-86/CPC/LE-7 of 3.7.86) (N.R. S.N. 9011).
(k) Maternity leave on account of miscarriage-abortion restricted to 45 days can be granted in the entire service career of a female employee. In calculating number of days of maternity leave, such maternity leave availed by a female employee shall not be taken into account (R.B. No. E (P&A)-94/CPC/LE-6 of 12.9.94) (R. B. E. No. 70/94)
Child Care Leave : Maximum of 2 years upto 2 surviving children till
attaining the age of 18 years

Child Care Leave

Consequent upon recommendation of the Fifth State Pay Commission for introduction of ‘Child Care Leave’ in favour of female State Government Employees, the matter has been under consideration of the Government for some time past.

After careful consideration of the matter, the undersigned is directed by the order of the Governor to say that the Female Govt. Employees having minor children may be granted Child Care Leave (CCL) by an authority competent to grant leave, for a maximum period of two years (i.e. 730 days) during their entire service period for taking care of upto two children upto 18 years of their age whether for rearing or to look after any of their needs like examination, sickness etc. subject to the following conditions:

(i) During the period of such leave, the female employees shall be paid leave salary equal to the pay drawn immediately before proceeding on leave.
(ii) It may not be granted in more than 3 (three) spells in a calendar year.
(iii) It may not be granted for less than 15 days in a spell.
(iv) Child Care Leave shall not be debited against the leave account.
(v) It may be combined with leave of the kind due and admissible.
(vi) Child Care Leave should not ordinarily be granted during the probation period except in case of certain extreme situation where the leave sanctioning authority is fully satisfied about

PATERNITY LEAVE

A male Railway servant (including an apprentice) with less than two surviving children may be granted paternity leave for a period of 15 days during the confinement of his wife i.e. with in 180 days from the date of delivery. During the period of such leave, he shall be paid leave salary equal to the pay drawn immediately before proceeding on leave. The paternity leave shall not be debited against the Leave Account and may be combined with any other kind of leave. These orders take effect from 7.10.1997 (R.B. No. E (P&A)/I-97/TPT/LE-6, dated 10.11.1997.).

HOSPITAL LEAVE

(a) Hospital leave is granted to all classes of Railway servants (except gazetted officers) when they are under medical treatment for injuries
sustained on duty. The fact that the injuries were the result of carelessness on the part of the employee is immaterial.

(b) The salary to be paid to the employee while on Hospital leave will be either average pay, or half average pay, as the authority granting leave may consider necessary.

(c) The Railway Board has decided not to grant any general relaxation in the provisions of Hospital leave as incorporated in Rule 554-F-I which restricted grant of Hospital leave on leave salary (i) equal to the leave salary while on Average Pay for the first 120 days of any period of such leave, and (ii) equal to leave salary during half-pay leave for the remaining period of any such leave. The Railway Board has, however, decided that individual cases meriting sanction of Hospital leave beyond a period of 120 days on leave salary equal to leave on average pay may be referred to the Railway Board with the personal recommendations of the General Manager for relaxation of the Rule on case-to-case basis (R.B. No. E(P&A)-I-89/JCM/DC-5 dated 21.8.1991) (R.B.E. No. 148/91

In partial amendment, the Railway Board has decided that the Divisional Railway Managers/Chief Workshop Engineers are Empowered to relax the provisions of Rule 554-R.1. (1985 Edition) in individual cases, meriting sanction of Hospital leave beyond a period of 120 days on leave salary equal to leave on average pay, subject to such cases being reviewed by the Medical Superintendents and concurred in by Senior Divisional Accounts Officer/Associate Accounts Officer. (R.B. No. E (P&A)-I-89/JCM/DC-5 dated 14.1.1993).

It has further been decided that the Heads of Non-divisional units, such as Workshops, Stores, Depots, Zonal Training Centres etc. in the Junior Administrative Grade/Selection Grade are also empowered to sanction Hospital Leave beyond a period of 120 days in relaxation of the provisions of Rule 554. R-1, (1985 Edition) in individual cases meriting sanction of Hospital leave beyond 120 days on leave salary equal to leave on average pay (R. B. No. E (P&A) I-89/JCM/DC-5 dated 22.6.1993 (R.B.E. No. 97/93).

(d) It can be combined with any other leave provided the total leave does not exceed 28 months.

(e) Officiating arrangement can be made during the currency of Hospital leave.

(f) Hospital leave is not admissible to casual labour, but is admissible to an apprentice (R.B. No. E-54-LE 5/1/3 of 19.11.55) as leave and not duty (R.B. No. E(NG)60 P. M./1-31 of 23.5.61)

(g) In case of Railway servant to whom Workmen’s Compensatory Act, 1923 applies, the amount of leave salary payable during Hospital leave shall be reduced by the amount of compensation payable as half monthly payment. When a disablement considered at first as temporary, proves to be permanent and compensation is payable, the leave salary shall be
restored to the full amount admissible under the rule.

(h) Hospital leave is not admissible to an employee from the date he is declared permanently unfit for service.

(i) The authority granting hospital leave may decide to grant half pay leave in the following cases.

(i) When the employee does not co-operate with his medical attendant and his progress has, therefore, been retarded; and

(ii) When there is an element of negligence of disregard of rules on the part of the employee, which has contributed to the accident involving injury or illness of the employees.

(j) A Railway servant whose limb has to be amputated as a result of an injury on duty, the period from the date of healing of the wound to the date of fixing the artificial limb plus journey time till he is fit for duty should be treated as Hospital leave. (R.B. No. F (E) 61-LE-4/1 of 28.10.61) This rule will also apply when such staff has to remain absent from duty for the replacement of artificial limb or for obtaining a spare limb. (R.B. No. 64/H/1/16 of 26/27.10.64)

CASUAL LEAVE

(a) Casual leave is granted for unforeseen casualties or for private and personal work.

(b) It is not considered as absence from duty, as such there is no reduction of privilege while on casual leave.

(c) Total amount of casual leave that can be granted to Railway servants who are eligible to avail themselves of all public holidays and workshop paid holidays, is limited to 8 days in a calendar year. The staff whose nature of duties are such as not to permit them to enjoy holidays are entitled to 10 days casual leave in a year. (R. B. No. E(G) 98 IE, 1.1 PC-V/36 dated 20.2.98)(N.R. S.N. 11466)

(d) Public Holidays including Sundays, closed Saturday and weekly of falling, within a spell of casual leave will not count as casual leave (R.B. No PC-60/LE-7/1 of 23.4.60 and 24.8.60). The total period of absence may exceed the total amount of casual leave admissible (R. B. No. E(G)97LE1-5 of 5.8.67.

(e) Casual leave including compensatory casual leave in lieu of attendance on Sunday cannot be combined with any other kind of earned leave except quarantine leave. (R.B. No. E(G) 59-LE 1-5 of 31.11.59).

(f) Casual leave if not availed during the calendar year will lapse with the close of the year and cannot be carried forward.

(g) Full amount of casual leave can be granted to an employee who joins service in the second half of the year.

(h) The school staff is also entitled to casual leave just as other Railway staff but vacation cannot be affixed or prefixed to such leave (R.B. No. E 55
LE2/74/3 of 27.7.55.

(i) The Workshop staff will also be entitled to 8 days casual leave in a year (R.B. No. E(G) 70LE 1/15 of 2.2.72 (N.R. S.N. 5585).

Certain other categories of staff in Workshops not strictly covered by the term “Workshop Staff and Staff in Printing Presses and Stores Depots” should also be granted 8 days casual leave as well as 15 paid holidays (R.B. No. E(G) 70 LE I-5 of 22.4.72)(N.R. S.N. 5637).

Apprentice Mechanics under training in Railway Workshops and also other Apprentices (who are not governed by the Apprentices Act 1961) attached to the Workshop and Printing Presses, who were getting only 15 paid holidays will, in addition be entitled to the casual leave of 8 days in a calendar year. (R.B. No. E (G) 70 LE 1-5 of 22.6.73)(N.R. S.N. 5932).

(j) On the day when there are two periods of the working in the workshop absence during either of the two periods will be treated as casual leave for half a day and if there is only one period working on that day absence during that period will be treated as casual leave for a day (R.B. No. E (G) 72 LE 2/41 of 10.4.73) (N.R. S.N. 5882).

(k) Half day’s casual leave may also be granted and can be combined with fully day’s casual leave. For grant of half day’s casual leave to office staff, the lunch interval is to be taken as the dividing line.

Since the grant of half day’s casual leave is permissible, the staff should not attend the office late or leave the office earlier without obtaining half day’s leave.

Late arrival in office may, however, be condoned by the officer-in-charge of the section upto the extent of one hour on not more than two occasions in a month, provided he is satisfied that it is due to unavoidable reasons like illness in the family, late running of train/bus etc.

For each late attendance on the 3rd and successive occasions in a month half day’s casual leave should be debited to the casual leave account of the employee. When casual leave is not due to the employee disciplinary action may be taken against him (R.B. No. E (G) 65 LE 2-29 of 6.11.65 and E(G) 66 LE-2-32 of 12.6.67).

(l) If a Railway servant has availed half day’s casual leave in the afternoon and had no casual leave due to be credit to cover his absence on the following days because of his sickness or other compelling circumstances, he may be permitted as an exception to the general rule, to combine that half day’s casual leave with other regular leave granted to cover his absence for the following day. To avoid this, employee should satisfy himself that he would be in a position to attend office on the next working day before he avails half day’s leave (R. B. No. E(G) 65 LE-2-29 of 25.6.66).
If an employee who has no casual leave to his credit, comes late without sufficient justification and the administrative authority concerned, is not prepared to condone the late coming but does not, at the same propose to take disciplinary action, it may inform the employee concerned that he will be treated as on unauthorized absence for the day on which he has come late and leave it to the official himself either to the consequence of unauthorized absence or to apply for earned leave or any other kind of leave due and admissible for the day, as he may choose. In case he applied for earned leave or any other kind of leave admissible for the entire day, the same may be sanctioned by the competent authority. (R.B. No. E (G) 82-LE-1-10 20.9.82) (N.R. S.N. 8176).

It has been further clarified by Railway Board that the above orders are not applicable to Railway employee who are governed by the provisions of Payment of Wages Act and industrial Dispute Act, (R.B. No. E(G) 82-LE-1/10 of 14.3.83 (N.R. S.N. 8276).

(m) The G.M. may delegate powers to Senior Supervisory staff in the grade of RS. 5000-8000(R.S.) and above to sanction casual and earned leave upto 15 days to Class-III and Class-IV (Group “C” and “D” staff working under them. The G.Ms. may also delegate these powers to Supervisors in grades before RS. 5000-8000 (R.S.) also (R.B. No. E(G) 70 LE 2 –5 of 19.3.71) (N.R. S.N. 5340), These instructions will continue on permanent basis (R.B. No. E(G) 76 LE 2-40 of 4.11.78) (N.R. S.N. 7168).

SPECIAL CASUAL LEAVE

(a) The special casual leave can be granted in the following cases:

(i) Employees, who are Boy scouts or Rover Scouts for attending camps or rallies or when engaged on scouting duties. Special casual leave in respect of leader trainer/assistant leader trainers whose services are utilized for imparting training to scouts/guides can be granted leave upto the extent of 45 days in a calendar year.

Special casual leave beyond this limit can be granted with the approved of the Railway Board (R.B. No. E (W) 86/WE6-3 of 4.12.86) (N>R. S.N. 9151-A).

(ii) Employees participating in well-established athletic contest and sports tournaments, mountaineering expeditions may also be treated as sports activity.

(iii) Employees attending courts as jurors or assessors with the permission of executive officer.

(iv) For donation of blood for one day.

(v) For appearing in Hindi Examination conducted by Home Ministry.

(vi) For attending meeting with officers as representatives of
recognized unions.

(vii) For appearing as defence counsels in departmental enquiries.

(viii) Special casual leave is also admissible to the Railway servants who are members, delegates of members, managing committee members and office bearers of the Co-operative Societies when they have to remain absent from their duties to attend the meetings. Members elected and nominated to sub-committees may also be granted special casual leave (R.B. No. E(G) 64 LE1-10 of 17.6.66 and 16.11.70) (S.N. 5199).

(ix) Railway servants participating in various meetings of Kendriya Sachivalaya Hindi Parishad may be granted special casual leave to the extent as mentioned in R.B. Letter No. E (G) 76 LE/24 of 17.12.76 (N.R. S.N. 6696).

(x) For attending coaching camps organized by the Railway Sports Control Board and coaching camps organized by National Sports Federation to which participants are sponsored by Railway Sports Control Board (R.B. No. E (W) 72-Spl-4 of 24.1.81) (N.R. S.N. 5781).

Participation by Railway teams sponsored by Zonal Railways in All India major tournaments may be considered as participation in event of national importance for granting special casual leave (R. B. No. E (W) 72-Spl. 1-4 of 3.7.79(N.R. S. N. 7333)

The Railway employees who are NIS (Patiala) coaches when deputed for coaching from one Railway to another Railway may be treated on duty for a limited period of 15 days at a stretch. The total period for which a Railway employee may be so deputed in one calendar year shall not exceed 30 days. Such deputation of a Railway employee who is NIS (Patiala) coach, from Railway to another Railway shall be authorised only Railway Sports Control Board in Railway Ministry.

Railway sportsmen participating in National Championships may be treated as on duty for the period of participation in the events including the period of journey to and from the place of the events.

Period of absence of the Railway employees who are nominated as coaches or managers or assistant managers of the Indian Railway teams participating in the National Championship in the various sports discipline held from time to time be treated as on duty as follows:

(a) Coaches – 15 days prior to the commencement of the National Championship concerned for imparting training to Railway sportsmen in a coaching camp when organized.

(b) Managers or Asst. Managers- Three days prior to the commencement or during the coaching camp for one of the officials.
Note: In both the cases, prescribed period excludes journey time for outstation coaching camp (R. B. No. E(W) 72ST-4 of 2.8.84 )(N.R. S.N. 8605).

Railway sportsmen participation in training camps for a period not exceeding 30 days prior to the National Championships may also be treated as on duty in addition to the period of participation in the actual events as indicated in the foregoing para (R.B. No. E(W) 72 Spl/1-4 of 24.1.81)(N.R. S.N. 7762 and S.N. 8724).

Participation by Railway teams sponsored by Zonal Railways in All-India major tournaments may also be considered as participation in events of National importance for granting special casual leave.(R. B. No. E (W) 72/Spl/1-4 of 3.7.79 (N. R. S. N. 7333).

The Railway Administration may sanction special casual leave upto 30 days to sportsmen for participation in "ordinary sporting events" and upto 90 days for participation in "events of national and international importance" exclusively. These limits of 30 days /90 days will have to be applied for ordinary /national and international events separately and they should not be clubbed. In other words, it is not the intention to apply an overall limit of 120 days for participation in ordinary events and national and international events.

The existing ceiling limit of 30 days special casual leave for National Tournaments in which the Railwaymen participate as members of State team, shall stand increased to 45 days for the aforesaid purpose only (R. B. No. E (W) 85/SPI-3 of 11.6.85) (N.R. S.N. 8755).

The General Managers have been given full powers to sanction special casual leave for such periods as considered necessary without any upper limit, to Railway employees sponsored by R.S.C.B. for participation in sporting " events of national and international importance " exclusively. (R. B. No. E (W) 81/501/3 of 19.9.81) (N.R. S.N. 7915).

Note:

(1) Special casual leave granted for participation in sporting events/tournaments may be combined with ordinary casual leave or regular leave. (R. B. No. E (W) 60 SPI-26 of 30.1.61)

Special casual leave granted to Boy scouts or Rover scout for attending camps or rallies or when engaged on scouting duties may be permitted to be combined with casual leave or recorded leave when sanctioned on scouting duties. However, when regular leave is granted in combination with special casual leave, casual leave will not be granted in combination. (R. B.No. E (W) 80/6-2 of 5.1.83) (N.R.S.N. 8378).

The Railway employees who are granted special casual leave for scouting
duties and suffer injuries while on such special casual leave for scouting /guiding activities and are hospitalized, the period during the treatment of such injuries should be regularized as special casual leave subject to the overall limit of special casual leave of 30 days in a calendar year. (R. B. No. E (W) 89/SPL-4 OF 12.8.83 (N.R. S.N.8378).

(2) Sundays and holidays falling within a spell of special casual leave granted to Railway servants for participation in sports and hourly permission granted to them for practice session should be excluded from the total number of days of special casual leave admissible to the employees concerned (R. B. No. E (W) 67 SP 1/15 of 5.10.68) (N. R. S.N/ 4482).

(3) When Railway employee are spared for attending to practice session of sports, they may be allowed to remain absent from duty with prior permission. (R. B. No. E(W)67 SP 1/15 of 24.7.69 (N.R. S.N. 4848)

(4) Apprentices undergoing training in the Railway Technical Schedule under Apprentices Act, 1961 should not be granted special casual leave on sports account (R. B. No. E (W) 69 Spl. 7 of 3.9.71) (N. R. S.N. 5435)

(xi) Special casual leave may be granted to staff rot their absence due to Bundh, Curfew, other disturbances, etc. The period of absence spent at outstations by Railway employees who proceeded on duty or on leave and could not return to the headquarters due to dislocation of train services on account of floods, may also be treated as special casual leave.

Special casual leave in cases mentioned above may be granted by the Head of the Department and all such cases should be reported to the Railway Board (R. B. No. E (LR)-II-79 ST-2/2 of 24.8.79) (N. R. S.N. 7392).

These orders do not cover the cases when the Railway employees could not reach their office/duty place because of disorganization of train service caused due to train accidents/floods, as a result of heavy rain etc. Such cases should be referred to the Railway Board before regularizing the absence in such cases as a special Casual Leave. (R, B. No. E(L.R) II 79-ST-2-1 of 1.11.81) (N. R. S. N. 7933).

On reconsideration, the Board have clarified that in such cases also the Railway Administration can grant special casual leave but continue to send a report to them. The competent authority should be satisfied that in all such cases no other mode of transport was available which could have been availed of by the employees to reach their place of duty. In case State Transport or other private transport was available, it would not be justified to grant special casual leave. In such cases, the competent authority should consider each case on merits and decide the same under
and their powers (R. B. No. E (LR) II 81/ST-2-1 of 28.4.82) (N. R. S. N. 8049)

(xii) The period of absence from duty of Railway employees participating in Trekking expedition may also be regulated by the grant of special casual leave not exceeding 30 days in a calendar year provided the expeditions has the approval of Indian Mountaineering Foundation and the period of 30 days special casual leave is not exceeded (R. B. No. E(W)85/Spl-4 of 16.7.85) (N. R. S. N. 8799)

(xiii) Special casual leave not exceeding fourteen working days in admissible to married female Railway servants who undergo tubectomy operation whether puerperal or non-puerperal. 14 days special casual leave is again admissible if a female employee undergoes the operation for the second time in the event of failure of tubectomy (R. B. No. 70/H/FW/29/1 of 23.10.70).

(xiv) One day’s special casual leave is admissible to married female Railway servants who have I. U. C. D. insertion. (R. B. No. 67/H/FP/6/1 of 16.3.67). Special casual leave for one day may be granted for re-insertion of I.U.C.D. also9 (R. B. No. 78/H/FW/9/5 of 11.6.81) (N. R. S.N. 7854).

(xv) Special casual leave not exceeding six working days is admissible to those Railway servants who undergo Vasectomy operation, (R. B. No. 77/H/FW/29/75 of 2.2.780 (N. R. S. N. 6950).

(xvi) Special casual leave upto 7 days to male Railway servant whose wife undergoes a puerperal tubectomy for the first time or second time due to failure of the last operation.

(xvii) Additional special casual leave for treatment of post-vasectomy and post-tubectomy complications like Haematoma and sepsis. In addition to six days and 14 days ordinarily admissible may be granted by Railway Administration on production of a certificate from the concerned hospital authorities/authorised medical attendant where he/she was hospitalized for the post operational complications (R. B. No.77/H/FW/9/5 of 2.2.78) (N. R. S. N. 6950)(R.B. No. 75/H/FP/9/2 of 31-3-76 (N. R. S. N. 6516) and (R. B. No. 71(H) FP/32/2 of 26-8-71) (N. R. S. N. 5422).

Special casual leave in case of post-vasectomy/tubectomy operation complications not requiring hospitalization should be restricted in 7/14 working days respectively as the period of special casual leave in such cases cannot be unlimited (R. B. No. 78/H/(FW) 9/5 of 11-6-81) 9n. R. S. N. 7854).

(xviii) Special casual leave is also admissible to the Government servants (mentioned below) who undergo operation for recanalisation:
(a) who are unmarried, or
(b) who have less than two children, or
(c) who desire for substantial reasons, e.g., a person who has lost all male children or female children after vasectomy/tubectomy operation performed.

In such cases special casual leave upto a period of 21 days or actual period of hospitalization as certified by the authorised medical attendant, whichever is less may be granted. In addition, the minimum journey period actually required and spent for to and from journey performed for undergoing his operation (R, B. No. 78/H/FW/1Pt. 1 of 1-7-78) (N. R. S. N. 7076).

(xix) Female Government employees who undergo salpingectomy operation after medical termination of pregnancy (MTP) may be granted special casual leave not exceeding 14 days.

(xx) Male Government employees whose wives undergo tubectomy and salpingectomy operation after medical termination of pregnancy may be granted special casual leave up to 7 days subject to the production of medical certificate stating that their wives have undergone tubectomy/salpingectomy operation after M.T.P. It shall not be necessary to state in the certificate that the presence of Central Government employee is required to look after the wife under her convalescence

Note:

(1) Special casual leave connected with sterilization and recanalisation under Female Welfare Programme may be suffixed as well as prefixed to regular leave on casual leave, However, special casual leave should not be allowed to be prefixed both to regular leave and casual leave. Special casual leave should either be prefixed to regular or to casual leave but not both. Similarly, special casual leave may be suffixed either to regular leave or to casual leave and not both. The intervening holidays and/or Sundays may be prefixed/suffixed to regular leave, as the case may be (R. B. No. 78/H(FW)9/5 of 11.6.81) (N. R. S. N. 7854).

(2) Daily rated staff (casual labour) on the Railway and Projects who are in employments for at least 3 months continuously and are likely to remain in service for 3 months after the operation are entitled to wages for the periods mentioned in the above rules, if they undergo sterilization on I.U.D. insertion (R. B. No. 66/H/FW/6/74 of 15.3.72).

(3) Special casual leave may also be granted to the eligible canteen employees for promoting small family norms under the above (R. B. No. )

**ABSENCE OF SPORTSMEN TREATED AS DUTY.**

(1) The question of treating the period of participation of Railway Sports persons and officials in Inter Railway Championship organized under the auspices of Railway Sports Control Board has been under consideration
of the Board. After careful deliberation, the Board have decided that participation of specified number of team, including officials, sports persons in various Inter Railway championship in team event or individual events and technical officials be treated as duty.

(2) While the sports persons, who broadly qualify for this facility have been included in the List of Annexure “A”, RSCB will circulate the particulars of such teams/sports persons, technical officials before organization of the various Inter Railway Tournaments).

(3) The following safeguards must be observed with a view to preventing any misuse of this facility and their compliance ensured:

(i) Only actual participation days of the Inter-Railway Championship plus to and fro journey period is to period is to be treated as “on duty”

(ii) Preparatory camps, prior to participation in Inter Railway Tournament will continue to remain as on SCL.

(iii) Actual duration of various Inter-Railway Tournaments will not exceed on period specified in Annexure “B”

(iv) In the team games, the maximum number of members and the officials accompanying a team will be as specified in Annexure “B”.

(v) Number of referees, umpires, technical officials required for proper conduct of the Inter-Railway Tournaments, will be specified in Annexure “B”.

(4) The entitlement of these sports persons to SCL, will automatically get curtailed with Inter-Railway participation being treated as “Duty”.

THE RAILWAY SERVANTS (PASS )RULES 1986

The Committee on Subordinate Legislation-VI Lok Sabha in their 14th Report recommended that the existing instructions regarding issue of Passes and Privilege Ticket Orders to railway servants should be replaced by statutory rules so that these instructions will acquire legal authority.

In compliance of the above said recommendation of the Committee on Subordinate Legislation, the “Railway Servants Pass Rules -1986” have been framed. These rules together with schedules were brought out as publication (First edition) in August 1986. Additions alternations/ modifications to these Rules made subsequently, have been suitably incorporated and brought out as a Revised edition (Second edition)”.

In exercise of the powers conferred by the proviso to Article 309 of the Constitution, the President hereby makes the following Rules, regulating the issue of Passes and Privilege Ticket Orders to Railway servants for travel by train namely: -

1. Short Title, Commencement and Application - (1) These Rule may be called the Railway servants (Pass) Rules, 1986
2. They shall come into force on the date of their publication in the Official Gazette.
3. Except where specifically provided to the contrary they shall apply to all railway servants under the administrative control of the Ministry of Railway (Railway Board) but shall not apply to :
   (i) an apprentice engaged under the Apprentices Act:
   (ii) a person in the casual employment or employed on daily wages:
   (iii) any person under the administrative control of the Ministry of Railway who by a
general or special order is, excluded from the facilities of Pass or Privilege Ticket Order under these rules.

2. Definitions : In these Rules, unless the context otherwise requires:

(i) Adopted child means child for whom there is satisfactory proof of adoption irrespective of the fact whether such adoption is permissible or not under the personal law governing the railway servant concerned.
(ii) Attendant :- means a person exclusively employed on salary in the personal service of Railway Servant.
(iii) Dependent relative in relation to railway servant, whose father is not alive means :-
   a) Mother including a divorced mother
   b) unmarried or widowed sister
   c) brother step-brother under twenty one years of age provided he resides with and is
      wholly dependent on the railway servant.
   d) invalid brother of any age and
e) brother who has attained the age of twenty one years and is a bonafide student of a recognized educational institution.

f) Widow mother-in-law to Female employee who have been appointed on compassionate ground on demise of her husband.

3) **Family includes:**
   (i) Spouse of a railway servant whether earning or not
   (ii) Son or sons who have not attained the age of 21 years and are wholly dependent on the railway servant.
   (iii) Son or sons of the age of 21 and above who are:
      a) bonafide students of any recognized educational institution
      b) engaged in any research work and do not get any Scholarship/ Stipend;
      c) invalid, on appropriate certificate from Railway Doctor.
      (iv) unmarried daughter of any age whether earning or not
      (v) Widowed daughter provided she is dependent on the railway servant;
      (vi) legally divorced daughter who is dependent on the railway servants;

3. “Recognized educational Institution” for the purpose of these Rules means any school, college, university or institution recognized by the Government for imparting education or training in any discipline-general technical professional.

**KIND OF PASS**

1) **Duty Pass:** A railway servant may be issued a duty pass for performing journey while on duty. The categories of railway servants, the circumstances and the conditions under which a duty pass is issued and type of passes issued are as under:

   **Following are the different types of Duty Pass:-**

   A) **Gold Pass:** This Pass is issued to the Chairman Railway Board. Member Financial Commissioner and the General Managers on Indian Railways, Production Units and Chief Commissioner for Railway Safety and all heads of Institutional units where the posts are managed at the level of General Manager. It is available on Indian Railways with wife and minor children. Gold Pass holder while travelling with members of his family may not have more than two berths in First Class ACC or not more than four berths in Second ACC Sleeper.

   The facility of companion on post-retirement account will be available only when the retired Board Member travels alone unaccompanied by eligible members of family. (RB’s No. E(W)97/PS 5-1/23 of 3.6.98; RBE 124/97)

   (B) **Silver Pass:** This Metal Pass is issued to all Senior Administrative Grade Officers. Entitles the holders to travel by ACC 1st Class and the family shall be eligible to travel in ACC 1st Class. On payment of 1/3rd difference of fare between ACC 1st Class and 1st Class subject to reserving a maximum number of four berths.
(C) **Bronze Pass with First AC authority**: Regular J. A. Grade Officers who has completed three year service can travel in ACC 1st Class and for family 1/3rd difference is payable subject to restriction of berths.

(D) **Bronze Pass**: It entitles an officer to travel with his wife, minor children in 1st Class subject to allotment of not more than four berths.

(a) **Cheque Pass**: It is issued to individuals whenever the occasion arises to proceed on duty. Duty passes to the Gazetted Officers will cover their wife/husband and minor sons and daughters but they are permitted to reserve only two berths or coupe.

2. **Privilege Pass**: These are the passes issued to the serving employees and include passes issued on School account. These passes are debited to the pass account of the individual employee. The scale of passes to be issued to Railway servants is as under.

(a) Group “A” & “B” (Gazetted Officers): This category of staff are entitled for First Class ‘A’ pass white in colour. They are entitled for 6 sets of passes and 4 sets of PTOs during the calendar year and enjoy to travel in any class other than ACC 1st Class, in any train other than Rajdhani Express, with 140 kg. Of luggage for each adult member and 70 kg. For each child, with one attendant in second class and can travel in 1st Class ACC on payment of 1/3rd of difference between the fare of 1st Class and 1st Class ACC.

3. **Group “C”** The pay for determining the entitlement of 1st class pass is mentioned in para 2 above and other than those are entitled for second-class pass. They are granted one set of pass upto the end of 5th year of service and 6 sets of PTOs during the calendar year.

Note: The period of apprenticeship of apprentices can be taken into account to determine the eligibility for three sets of passes after their absorption against regular posts.

4. **(R.B.’s No. E(Trg.)64-PS5-1/16 of 1-12-64 and E(W) 94 PS5-1/7 of 27.9.94)**

5. **Group “D”** This category of staff are entitled for second class pass and eligibility of passes and PTOs are the same as mentioned for group “C” above.

6. **Note**: 1 Note more than the two dependents can be included in pass/PTO subject to the condition the total number of persons in the pass PTO shall not exceed five. This limit will not apply if only family members are included in the pass/PTO. A dependent relative in relation to a Railway servant shall be deemed to be wholly dependent on railway servant only if/his/her income w.e.f. 1.7.97 from all sources including pension, dearness relief does not exceed RS. 1,695 p.m.
7. (R.B.'s No. E(W) 87-PS5.1/3 of 6.2.91 amended by RB’s No. E(W)97-PS 5-1/71 dtd. 27.2.98; RBE 51/98)

8. When the railway servant himself or a member of his family or a dependent of railway servant in active service who is blind in both eyes travel alone on privilege pass, one attendant may be allowed to travel in the same class in which the blind person is travelling. This facility is granted on production of a certificate from Distt./Divl. Medical Officer of Railway.

9. Privilege pass for both single and return journey shall be valid for four months from the date of issue. PTO for both outward and return journey shall be valid for three months. Passes/PTO shall be issued for journey from starting station to destination station as desired by railway servant, via. Direct route, provided that a longer route may be permitted on the passes and PTOs if:

10. two alternative route are available for destination, for example Bombay to Calcutta via Nagpur or Via Allahabad and Bombay to Delhi by Central Railway or by Western Railway- such passes may be permitted by either route irrespective of the distance involved; or

11. the distance to destination via a longer route preferred by railway servant does exceed 15% of the distance via the direct route; or

12. The longer route to destination is quicker than the direct route irrespective of distance involved.

13. Break journey is permitted only where it is mentioned on pass and an endorsement is to be taken on the back of pass from the station when the journey is broken.

14. If both husband and wife are railway servants, passes are granted both of them on each other’s account.

15. Apprentices are also entitled passes as admissible to Railway employees but the passes are not issued to the families of apprentices.

16. Passes issued to railway servants should be made available by Mail train irrespective of any distance.

17. Those employees recruited after 30.06.87 shall be eligible for 4 seats of PTOs during year, thus bringing them under the purview of scheme of entitlement of passes to widow/widows after their death while in service or after retirement.

**Period of availability:**
18. Both Outward and return journey passes shall be made available for period of 5 months.
19. PTOs shall be made available for the period 5 months for Outward and Return journey from the date of issue.

20. Note: 1. In cases, where only family is included PTOs shall be made available the period upto, which the pass has been issued irrespective of whether, the PTOs are required from the place of duty or any other station.

21. In cases, where the employee is included and is on leave for more than 14 days and the pass has been issued to him a PTO required for journey from out station shall be made available for the period of 2 months from the date of issue.

22. Railway employees on deputation to non-railway departments shall enjoy full benefits of privilege passes including PTOs and School Passes except monthly season Tickets.

23. For deputation in Public Sector Undertakings, the benefit would be for period of three year and for other 4 years. This benefit does not apply for deputation to the Trade Unions.

24. School Passes: School passes are issued to each student member of the family who is dependent on railway servant on production of a certificate from the recognized institution where the student is studying away from the headquarters of the railway servant. Student sons/daughter of railway servant in receipt of stipend as distinct from merits/means scholarship, will not be admissible for school pass if they are above 21 years of age (R.B.'s No. E(W)85 PS-5-1/8 if 11.9.85 Bahri's 260/85). The passes are issued between place at which either parent is residing to school/college and back when recognized vacations of not less than 3 days consecutive duration or closure of institution due to unforeseen circumstances.

25. Three sets of passes or six half sets are admissible for every child in a calendar year, and are in addition to privilege passes. The school passes issued are debited under the heading 'On School Account'.

26. Such passes can also be issued to a place other than the residence of either parent and back provided the length of such journey does not exceed the distance from the school/college and either parent’s residence.

27. A parent or a guardian may be included in school pass in which a girl of any age or a boy under 18 years age for return journey for parent or guardian or paid nurse to the station from which journey commenced, a separate pass may be issued in the class to which the employee eligible, if guardian be an attendant he will be issued only IInd class pass.

28. With regard to the grant of School Passes towards to Railway employees and inclusion of a guardian therein, where the same is admissible in terms of the exam
orders, i.e. for a boy under 18 years and a girl of any age, the following clarification are given:

29. In cases where a School Pass is sought to/from a place other than the Railway servant’s headquarters or the permanent place of residence of the other parent, if it be different, the grant of such pass shall have the approval of the gazetted officer under whose control the Pass Issuing Office is functioning. The gazetted officer shall take into account the material facts relating to the request and accord his approval recording reasons therefore, after he is satisfied that the said change is justified and not made with a view to receive any unintended benefit.

30. In cases where a School Pass is sought to/form a place other than the Railway servant’s headquarters, where either parent is residing even in temporarily such as during summer vacations, etc. the Pass Issuing Authority shall satisfy itself about the bonafides of such request, with reference to the Passes/PTOs already issued for the parent’s journey to such a place.

31. (c) Before forwarding to the competent authority any request from a Railway servant for inclusion of a guardian, other than the parents, or any other person covered by the definition of ‘guardian’ as given in Rule 1 (e) of the Railway Servants (Pass) Rules 1986, the Controlling officer shall satisfy himself about the justification for the same.

(R.B.’s No. E(W) 85 PS-5—1/15 of 22.1.90 Bahri’s 15/90)

Post –Retirement Passes: An employee who has retired from service and who was eligible for passes while in service may be granted passes for himself and his family (wife and children only), Group ‘D’ employee is eligible for passes for self and wife only and not children. The Class of the pass to be given, would be the Class he was enjoying while in service

32. Retired railway employees covered under RELHS and who are suffering from Cancer, major renal problem and serious heart ailments may be issued special pass on medical grounds for travel from the station where they have settled to the station where approved specialized hospitals are located and back subject to the following considerations: -

33. Any retired railway servant or his/her spouse covered under RELHS and who is suffering from Cancer or major renal problem or serious heart ailment is eligible for the issue of special pass on medical ground.

34. The pass will be issued to them in the event of their referral to Zonal Headquarters Hospital for necessary check up, assessment and treatment from the place where they have settled to the station where zonal Headquarters Hospital is located and back.

35. The pass will be issued to them from the zonal Headquarters Hospital in the event of their Inter-zonal referral for specialized treatment for places where such specialized Railway Hospitals are located and also to the Government Hospital wherever referred.
36. Pass will be issued for the Class of entitlement of the railway servants for Post-Retirement Complimentary Passes. (R.B.'s No, E(W)95-PS5-1/33 of 6.5.96, Bahri's 44/96).

37. Complimentary Passes to Widows: The scheme for issue of complimentary passes to widows of Railway employees shall apply to the widows or railway employees who were/are in service on or after 12.3.1987 and expired after the date. A railway employee on deputation without severing his lien on the Railway during the deputation period shall also be covered under the scheme. It, however, does not apply to those who have got permanently absorbed in Public Sector Undertakings prior to 12.3.1987 though they might be in receipt of post-retirement passes.

38. Scale of entitlement: The scale of complimentary passes to which the widow of Railway employee who was/is in service on or after 12.3.1987, and expired after that date, shall be half the number of post-retirement passes that her husband was either receiving at the time of his demise after retirement or in the case of death while in service, would be notionally eligible to receive by reckoning the date of death as the date of retirement, provided that:

39. The widow(s) of a ‘D’ Group Railway employee, entitled (or notionally entitled) to one set of post-retirement complimentary pass every year, shall be entitled to one set of complimentary pass every alternative year under the scheme.

40. The widow(s) of any Railway employee, who dies while in service, shall be entitled to a minimum of one set of pass every alternative year. Thus she will be eligible to one set of pass in two years, even if the service of the employee before death falls short of the requisite service prescribed for entitlement for post retirement passes.

41. The widow shall be eligible to travel in the same Class to which her husband was entitled to travel on privilege account or on retirement.

42. The scheme of Widow/widower Pass has been reviewed and it has been decided to remove the cut off date i.e. 12.3.87. Accordingly, the widows of the Railway Servants who were in railway service prior to 12.3.87 will also be eligible for complimentary widow pass subject to the condition that they make a one-time payment of RS. 250/- as notional value of two sets of PTOs. In all respects, the Board’s letter No. E(W) 85 PS 5-8/2 of 30.6.87, RBE 174/97, shall be followed.

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ALLOWANCES

Allowances are given to an employee depending upon the circumstances. The following are the various types of allowances existing on the Indian Railways.

1. DA

2. HRA

3. Transport Allowance (This has already been discussed)

4. Compensatory Hill Allowance - To those working at hill station 1000 feet above sea level.

5. Remote locality allowance - Special compensatory allowance is paid to employees posted at remote areas in Jammu & Kashmir, Himachal, Arunachal, Meghalaya, Uttar Pradesh, Assam, Nagaland, Tripura & Manipur.

6. Bad climate allowance - Admissible to employees posted in unhealthy locality.

7. Children Education Allowance: Children Education Allowance has been introduced by the VI Pay Commission. This allowance shall be paid for Classes Nursery to XII Std. There shall be no nexus with performance, can be paid even if child fails (earlier it was for 2 years in same class) Includes Tuition Fees, Laboratory Fees, special fee appliances used by child, library fee, games/sports fee, extra-curricular activity, one set of text books, one set of note books, school shoes. Annual ceiling is Rs. 12000/- per child, up to two children Can be reimbursed at a time any time.

8. Hostel subsidy: Hostel subsidy is payable at Rs. 3000/- per child upto two children per month. Hostel subsidy can be paid if an employee is required to admit his son/daughter in a Hostel for the purpose of pursuing education. However, either of the two, viz. either Children Education Allowance or Hostel Subsidy alone will become payable. Under no circumstance both the allowances will become payable.

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<th>Present Scale</th>
<th>Revised Pay Structure</th>
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<td>S-2</td>
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<tr>
<td>3</td>
<td>S-2A</td>
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<td>4</td>
<td>S-3</td>
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<tr>
<td>No.</td>
<td>Grade</td>
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<td>S-4</td>
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<td>S-13</td>
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<td>S-14</td>
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<td>16</td>
<td>S-15</td>
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<td>17</td>
<td>New Scale</td>
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<td>S-19</td>
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<td>19</td>
<td>S-21</td>
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<td>S-31</td>
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<td>26</td>
<td>S-32</td>
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<tr>
<td>27</td>
<td>S-33</td>
</tr>
</tbody>
</table>

4. Travelling allowances are of following types:–
   i. TA rates vary as per prescribed rates per day, as per the classification of cities. DA and TA is one and the same thing. When the person is travelling it is known as TA, and when the person is halting it is known as DA.
   ii. TA personnel are entitled to double the rates of their usual travelling allowance, in case of embodiment/training. However, only 20% of the TA will be paid in case free messing is given. Duty allowance to Civil Defence volunteers are paid as per prescribed rates per day if the training is bet. 1 ½ and 2 ½ hrs. However, if the training exceeds 2 ½ hrs., he will be entitled as per prescribed rate.
   iii. Rly. servants both Gaz. & N.G. attending courses other than initial i.e. refresher, promotional and Special. courses in Rly. Training School/Institutes where messing is compulsory, shall be provided with free food and in addition 20% of daily allowance will be admissible.

11.Kilometrage allowance - is admissible to staff as per their gradations, i.e. journey by road. In case of employees proceeding on tour, road mileage at prescribed rates is
admissible between duty point/residence at the HQs and duty point at outstation and vice-versa.

12. Conveyance hire at outstation - All N.G. staff on tour in addition to TA as admissible, may also be granted reimbursement of bonafide charge on account of conveyance hire by ordinary means of conveyance available at the locality that he may be required to incur for journeys in visiting offices at a considerable distance from each other.

Taxi fare for journeys from office to residence at late hours - If Officers/staff are detained beyond 20.00 hrs. On special assignment/urgent work, which cannot wait for the next working day, will be entitled to claim taxi hire for journeys performed from office to residence bet. 20.00 hrs. & 6.00 hrs., subject to a maximum of prescribed rate. Officers are entitled to use private motor car/motor cycle/scooter for official purposes and in lieu of this, they are entitled for allowance and log book is required to be maintained. Average journey is arrived at by going through the log book maintained for a quarter. The rates vary for motor car, and for scooter/motor cycle. This is admissible subject to review in every 2 years. This is at the discretion of GM’s sanction.

Consolidated travelling allowances- Permanent or Consolidated Travelling allowance is granted to such staff whose duties required him to travel intensively for more than 20 days in a month on an average. In case they are not able to perform the minimum no. of days, they may draw daily allowance for journeys performed as per normal rule.

Bicycle advance to group ‘D’ employees who are required to travel extensively if provided with bicycle and he maintains it will be given allowance as per prescribed rates.

Conveyance allowance - To medical officers provided they make 20 domicile visits on an average every quarter. The conveyance varies in case the doctor has his own car, own scooter or hires private vehicles.

Allowance to handicapped persons - 5 % of the basic pay subject to a maximum prescribed limit. This is subject to the certification of a medical practitioner.

Running allowances are paid to employees whose duties are connected to moving the train i.e. Drivers, firemen, guards, brakesmen etc. There are 4 types of running allowances viz.

i) Mileage/Km. allowance - granted to him at specified rates on the basis of distance travelled.

ii) Allowance in lieu of mileage/Km. paid to a running staff to compensate the loss of Km. due to his being shifted in non running duties.

iii) Breach of rest allowance - Whenever the rest is aggregated before completing 16 hours will be eligible for breach of rest allowance @ 2 hours for every hour. This is only if the breach is at HQ and not at outstation. Running staffs on suburban trains are not entitled for breach of rest allowance.
iv) Allowance in lieu of running room facilities - Where running rooms are not provided this allowance is paid provided such period of rest exceeds 4 hours between the train arrival and train departure. Where running rooms are provided but cooks are not provided it is admissible at half the prescribed rate.

19. Accident allowance - Due to accidents, trains are held up at any station other than the HQ exceeding 8 hours the employee will be given a credit of 1 Km for every 24 hours or part thereof.

20. Outstation relieving allowance - When he is deputed to work temporarily at stations outside his HQ he is entitled for this allowance and it is restricted to 14 days only.

21. Line Box allowance - Guards, Drivers, Asst. Guards are entitled to initial payment of prescribed amount towards cost of line box which is in addition to supply of air bags once in every 3 years.

22. Project Allowance - It is granted to staff working in undeveloped or underdeveloped places where the construction of major projects is going on. This is granted timely to compensate the lack of amenities such as housing, schools, dispensary etc.

23. Deputation Allowance - This is given to an employee at another organization wholly in public interest which will be 5% of his basic pay subject to a ceiling limit at prescribed from time to time if he is on the same station and 10% subject to a ceiling limit at prescribed rates in other cases. He can draw pay as per the new post or draw salary according to the post in his parent department alongwith the deputation allowance. Deputation is only for 3 years and can be extended in public interest with proper approval of competent authority.

24. Annual allowance to railway doctors on his academic and research papers - This is paid at prescribed rates to all railway doctors on their furnishing a certificate that the amount of annual allowance is spent for the purpose for which it has been drawn. This will not have the connectivity of pay.

25. Breakdown allowance: This is given to those employees who are required to attend accordingly due to which the normal working of trains are disturbed. They are paid at fixed rates according to group of staff of various pay rates. They will also be entitled to TA at the moment they leave HQ till returning back without taking into consideration the percentage applicable when calculating TA in their cases. They should also have the privilege of quarters nearby the railway station. They are also entitled to free food during this period or money in lieu of free food.

26. Night duty allowance: Group ‘C’ & Group ‘D’ staff performing duty from 22/00 hours to 6/00 hours are entitled to night duty allowance. The basis of calculation is 10 minutes for every hour worked and such calculation if less than an hour will be waved. That means minimum 3 hours or more than 3 hours of night duty should be done to claim half
hour night duty allowance. This is calculated as per prescribed rates. Nurses are not paid night duty allowance as they get nursing allowance at a prescribed rate.

27. Washing allowance: This is given to nurses, matrons, midwife as per prescribed rates to wash uniforms and maintain the speck and span.

28. Laundry allowance: This is given to nurses, matrons, midwife as per prescribed rates to but in case they are on leave exceeding 15 days at a stretch they will not be paid this allowance.

29. Uniform allowance: This is given to nurses, matrons, midwife, health visitors as per prescribed rates. It will be reduced and paid proportionate if on leave for a period exceeding 120 days.

30. National Holiday Allowance: This allowance is paid to those employees who are covered by the Industrial Negotiation Act are entitled to only 12 days Public Holidays instead of 16 admissible to others. It will also be paid to them in case such a holiday falls on their day of rest.

31. Messing allowance: Where ever mess facilities are admissible to railway employee, they will be entitled to only 20% of their TA entitlements.

32. Officiating allowance: This is given to a employee when he is asked to officiate in a higher grade subject to a minimum of 21 days.

33. Teaching allowance: This is given to gazetted and non-gazetted staff who are chosen from the fields and posted in Centralized Training Institutes and Zonal Training Institutes Teaching Allowance is payable at 30% of basic pay to faculty posted at CTIs imparting training to Group `A' officers. For those working in the ZRTIs, the rate of teaching allowance is 15%. Those who have been specially recruited for imparting training are not entitled for this allowance.
### Advances and Revenue -

<table>
<thead>
<tr>
<th>Type of Advance</th>
<th>Basic Pay</th>
<th>Amount</th>
<th>Recovery in</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>FESTIVAL</td>
<td>NG ONLY</td>
<td>3000</td>
<td>10 E. Int.</td>
<td>2(^{nd}) not permissible till 1(^{st}) recovered</td>
</tr>
<tr>
<td>TRANSFER</td>
<td>No limit</td>
<td>1 month Basic</td>
<td>3 monthly installments</td>
<td>TA is also permissible and recovered from Pay on submission of T.A. Bills.</td>
</tr>
<tr>
<td>NATURAL CALAMITY.</td>
<td>No limit</td>
<td>3 Basic pay or Rs.5000/-</td>
<td>12 monthly Installments</td>
<td>3 Basic Pay or prescribed rate whichever is less is sanctioned. Certify Mov/Immov. Damages</td>
</tr>
<tr>
<td>CANCER TRTMNT.</td>
<td>No limit</td>
<td>1 month salary</td>
<td>On resumption</td>
<td></td>
</tr>
<tr>
<td>OPTICAL EXP.</td>
<td>No limit</td>
<td>As per P.R.</td>
<td></td>
<td>Only granted in case while on duty. Win no recovery loose full recovery.</td>
</tr>
<tr>
<td>T.A. PERSONNEL</td>
<td>No limit</td>
<td>1 Month Pay</td>
<td>3 Monthly Installments</td>
<td>When embodied recovery is effected.</td>
</tr>
<tr>
<td>BICYCLE ADV.</td>
<td>Below 5000/-</td>
<td>3000</td>
<td>25 Inst.</td>
<td>Produce Pur. Cert. (1mth)</td>
</tr>
</tbody>
</table>

**ALL THE ABOVE LOANS ARE INTEREST FREE**

<table>
<thead>
<tr>
<th>Type of Advance</th>
<th>Basic Pay</th>
<th>Amount</th>
<th>Recovery in</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCOOTER ADV.</td>
<td>8600 /-</td>
<td>6 month basic pay or Rs.30,000/- (less) Amount</td>
<td>70 Inst.</td>
<td>Essentially Certificate is a must. 2(^{nd}) loan Rs. 24,000/-</td>
</tr>
<tr>
<td>MOTOR CYCLE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOTOR CAR</td>
<td>19,530/- excluding GP</td>
<td>Rs.1,80,000 /- or actual cost</td>
<td>200 Inst.</td>
<td>Essentially Certificate is a must. 2(^{nd}) loan Rs. 1,60,000/-</td>
</tr>
<tr>
<td>COMPUTER</td>
<td>19,530/- excluding G</td>
<td>Rs.30,000</td>
<td>150 Inst.</td>
<td>2(^{nd}) after 3 years Rs. 75,000/- use from GRF-24</td>
</tr>
</tbody>
</table>
SALARY

The first pay structure was introduced on Indian Railways in 1931. Thereafter the pay structures have been revised from time to time viz.

i) 1931 - Called as 31 scales of pay
ii) 1934 - 1934 scales of pay
iii) 1947 - Prescribed scales of pay (1st Central Pay Commission)
iv) 1-7-59 - Authorized scales of pay (2nd Central Pay Commission)
v) 1-1-73 - Revised scales of pay (3rd Central Pay Commission)
vi) 1-1-86 - Revised pay scales (4th Central Pay Commission)
vii) 1-1-96 - RSRP (5th Central Pay Commission)
viii) 1-1-06 – (6th Pay Commission)

Succeeding Pay Commissions have reduced the number of scales and initially what started with 153 scales has been presently reduced to 19 scales. The 6th Pay Commission has introduced the concept of pay bands and grade pay for the first time. The entire pay scales have now been merged into into 4 pay bands and 19 grade pays.

Time scale means a scale in which an employee is appointed at the minimum enabling him to reach the maximum by virtue of earning annual increments.

DA:

DA is given due to rise in price index and was first granted to the railway services w.e.f. 19-3-41. As per the new rules this DA is given twice a year i.e. from January payable by March and from July payable by September. Presently, the current rate of DA is 35% w.e.f. 1st January, 2010.

HRA:

It is granted as a relief to employees in view of the higher rent that they may be required to pay for private accommodation due to non-availability of railway quarters. This is also granted according to the classification of cities as indicated below:-

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Classification of City/Town</th>
<th>Rates of HRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X</td>
<td>30% of pay</td>
</tr>
<tr>
<td>2</td>
<td>Y</td>
<td>20% of pay</td>
</tr>
<tr>
<td>3</td>
<td>Z</td>
<td>10% of pay</td>
</tr>
</tbody>
</table>

This will not be granted to any railway servant occupying any type of railway accommodation Central or State. In case Husband, Wife and Children are occupying a government accommodation they will not be entitled for HRA but if occupying a private accommodation all will be entitled for HRA if government servants.
In case a person is sharing accommodation with another government servant having obtained due permission, the person to whom the quarter is allotted will not be eligible for HRA but the one who is sharing will be eligible for HRA.

In case when an employee is transferred from one station to another and though he retains a railway accommodation or a government accommodation at the old station of posting will be eligible for HRA if not occupying any government accommodation at the new station of posting.

RPF staff occupying barracks is entitled for HRA.

**Transport allowance:**

This is also given to employees based on group of scale and classification of cities as per prescribed rates.

**Non practicing allowances:**

This is paid to railway doctors since they are not practicing at 25% of their pay. This is treated his pay for all purposes i.e. TA, DA will be drawn on this also.

**Post Graduate allowance:**

This is given to only those Assistant Medical Officers at prescribed rates for possessing post graduate diploma or post graduate degree to acquire this subsequently and not payable to those who had acquired before joining railways or for whom it is a prerequisite qualification. In case he is transferred from junior scale to senior scale this will not be given to him but what he was getting will be taken into account for fixation of pay in the new grade. This will also be treated as pay.
WELFARE ACTIVITIES

In the past the relation between the worker and an employer was that of a Master and a slave but due to gradual evaluation in the structure of social order of mankind this is changed. The workers have developed a sense of self-consciousness and the employer have realized their duties towards their employees.

Welfare means anything done for the intellectual, physical, moral and economic betterment of the worker by the employer or the Govt. or any other agencies over and above what is laid down by the law or what is normally expected as a part of contractual benefits. The welfare measures should be designed to effect on all round improvement in the employee’s living and working conditions. The Welfare measures do not only bestow benefit to the worker but this also pay immediately and in the long run benefits the employer since Welfare activities improve the mental and moral health efficiently of the worker. On the Indian Rlys we have about 18 lakhs employees working and as such have framed policies regarding the Welfare measures for the employee which has been declared to be the best in India.

WELFARE ORGANIZATION

A Welfare Organization functions on each Rly. to see to the Welfare of the Staff. The Chief Personnel Officer is head of this Organization. A Senior Personnel Officer is posted as a Welfare officer in the Headquarters of each Rly. to look after the day to day work of the Organization. He is assisted by number of Welfare Inspectors.

In the Divisions/Workshops the DRM/CWM/SWM etc. are in charge of the Organization and they are assisted by the Divisional Personnel Officer and Assistant Personnel Officers, Welfare Inspectors etc. The Welfare Inspectors has been assigned various duties such as

1. To maintain direct contact with staff and try to settle their day to day grievances by direct contact with the officer concerned. To assist the employees with regard to appeals and representations and the correct procedures etc. and to deal with representations on various establishment matters.

2. To inspect stations, subordinate offices and sheds and see to the proper maintenance of registers, such as, attendance registers, overtime registers, register of abrogated rest, increment register, register of claims under W.C. Act, duty rosters and classification charts etc. and to see that all statutory notices are displayed at the site of work and provisions of various acts are not infringed.

3. To inspect Workshop, with a view to see and check that provisions with regard to health, hygiene, safety, layout, over-crowding, drinking and washing facilities, lavatories and urinals, rest sheds and tiffin rooms etc. are observed.
4. To survey, organize and supervise various welfare and recreational activities, viz. i) Co-operative Societies, Canteens, Holiday Homes, Educational tours etc., ii) Child welfare and maternity centres, iii) Sports and games amongst the staff, iv) women's activities amongst the wives and daughters of the staff, v) Thrift and national savings schemes, vi) Other activities for the moral, material & cultural development of the employees and their families, vii) To keep watch over the performance of Labour Co-operative societies, etc.

5. To organize and watch the activities of staff councils, wherever existing.

6. To assist the employees in claiming and obtaining payment of their due wages and allowances including overtime allowance, gratuity, P.F., compensation under W.C. Act etc. and also to assist the families and dependents of the deceased employees in obtaining their dues and similar other matters and to check up the settlement cases to see that they are finalized very early.

7. To visit periodically local residential places of staff and take steps to improve cases of bad sanitation, repairs of quarters, etc.

8. To study the needs of individual employees with a view to encourage them to keep out of debt and to acquaint them with the procedure for obtaining loans from Funds, if any.

9. To assist the employees who are in need of medical facilities for themselves and their families.

10. To bring about settlement of disputes amongst the staff themselves.

11. To arrange shows, exhibitions and propaganda lectures etc. for the various welfare schemes, as and when necessary.

12. To attend to all matters with regard to welfare organization, Staff Benefit Fund and to follow up Inspection reports of the Inspectorate of the Regional Labour Commissioner.

   The following are the Welfare Schemes.

1. School Facility and Educational Assistance

   Education though is primarily a state subject, the railways have yet entered the field to a limited extent so that the Rly employees children do not lack from Educational Benefits due to their postings.

   In Rly colonies where there are no schooling facilities Rlys run their own schools. On Rlys we have austerity type of school, Primary schools, Middle school etc. Besides this even Non-Rly schools which are nearby to the Rly colony and which have sufficient
number of students who are sons and wards of Rly employee are given grant in aid by
the Rlys. In cases where none of this facilities are available and then the employee is
required to send his children away from his place of posting for schooling purposes
Educational Assistance is given to the employee with a view to give relief towards their
expenses on school education of their children. Besides this we have subsidized hostels
at some stations where normal Boarding charges are payable by the employee for
keeping each child in such a hostel but no rent is recoverable for the accommodation.
This facility is admissible to Non-Gazetted employee drawing pay not exceeding Rs.

SCHOLARSHIP FOR TECHNICAL EDUCATION

Children of Non-Gazetted staff undergoing technical education in Science or in
applied science subjects, leading up to a Degree or Diploma in Medicine and various
branches of Engineering are given Scholarship from the staff benefit fund so that they
are not economically handicapped for getting their children education in technical
institutions.

2. Uniforms for Children studying in Primary Schools - At the cost of Rly revenue
uniforms of the simple style at a lowest cost may be given to children of Rly employees
whose basic is not more than Rs. 1440 (RPS) and that the childrens are studying in
Railway primary schools. Medical facilities hospitals, dispensaries, maternity centres,
child welfare centre, chest and dental clinics are run by Rlys for different stations for the
benefit of the employee and their dependents. In cases where it is recommended by the
authorized medical attendant the reimbursement of the cost of the medicines from the
local market is also admissible.

3. Social and Cultural Schemes –

a) Sports - Sports is encouraged in Rlys who induce healthy physical exercises.
There are different branches of sports activities functioning on the Rly.

b) Institutes and Recreation clubs - In order to encourage social and cultural habits
amongst Railwaymen institutes and clubs are functioning at different places over the
Rlys. The premises are rent free and the Membership is optional. Assistance is also
given from the Staff Benefit Fund for running this Estt.

c) Mahila Samitis - Female family members and dependent of Rly. employees run the
Mahila Samitis with the aim and the object to foster cordial relations, establish social
contacts, impart technical, vocational Civil and Cultural educations, promote literacy,
physical cultural and domestic economy amongst the members. Fabrication work is
done by these Centres on a very large scale and the members of the families are
remunerated for the job done by the Railways. Thus members of the Mahila Samitis can
supplement the income of their families.
d) Cultural Association - Different Centres have been established with the object of working of Cultural, Musical and Dramatic talents of Railwaymen.

e) Scouting Movement - Scouting Organization is functioning in each railway.

8. Children’s camp - For Non-Gazetted employees camps for their childrens are held from time to time in a healthy and scenic places so that they not only get a change of air but also enjoy places of Historic, Cultural and Educative interest.

9. Education Tour for Industrial Workers - In order to give an all round knowledge about the Industrial Development Educational tours for the Industrial workers are organized for Workshop staff. Employee with outstanding achievements are selected for this tour. They are given lumpsum amount and 15 days special C.L. for this tour. The selected members can also include family members limited to 4.

10. Mobile Library - It is functioning on the Rlys for the benefit of staff at way side stations Library facilities. Elsewhere Libraries are provided either at the office or by the institutes/clubs.

a) Holiday Homes - Holiday homes have been established at different healthy places as a measure of amenities to staff where they are provided accommodation at a very nominal rent. This accommodations are self contained and furnished, also well equipped with store room, Kitchen rooms and utensils. A Rly employee is admissible to this facility at any station on Indian Railways where such holiday homes are available. Besides at these holidays homes indoor and outdoor games are also provided for the benefit of the staff visiting Holiday Homes. Even close relatives related to the husband or the wife is also entitled if accompanying the family of the Railway employee.

b) Trips are organized to Popular Holiday resorts at Phalgaon and Srinagar for the benefit of the Non-Gazetted staff and Childrens of Rly Employees in batches. They are charged nominal lumpsum as per pay range. The balance of the amount is met from the staff benefit fund. Welfare inspectors accompanying these trips see to the facility of the staff such as Boarding, Lodging and Catering etc. and arrange excursion tours. As far as the real journey is concerned the employee has to make use of his own privilege pass.

5. Quarters - Residential accommodations are provided to Rly employees in turn according to their status./ The staff belonging to essential categories are given preference above the non-essential categories. Housing committees are formed for the allotment of Quarters. Besides this administration provides loan at nominal interest to Rly employee to enable them to purchase/construct their own houses.

6. Canteen Facilities -

There are two types of Canteen existing on Railways namely Statutory Canteens and non-statutory canteens.
a) Statutory Canteen - are based on the provisions of section 46 of the Factories Act 1948 wherein the administration is required to set up canteens in establishment where there are 250 or more working peoples employed. It is the legal responsibility of the Rly administration to ensure proper Mgt. Of canteens either by way of making a committee of Mgt. And or by appointing agents or cooperative societies.

b) Non statutory canteens - are provided as a measure of staff welfare by encouraging development on cooperative basis the committee of Management consists of duly elected representatives of staff for whose benefits the canteen is run and they have the full power to operate the canteens. Loans as initial capital is sanctioned from the Staff Benefit Fund and should be repaid in installment within 2 to 3 years as determined by the staff benefit fund Committee.

Canteens should be opened where considerable employees are employed such as Workshops, Sales, large stations etc. wherever the staff strength is more than 25 out less than 100 room should be provided is but in cases where the staff strength is more than 100 effort should be made to provide a regular canteen. Canteen should be, as supporting and the sales rise should be based on “No Loss No Profit” and also taking into account cost procurement running expenses etc.

2. The canteen should not involve loss in working hours and as such efforts should be made to see that light refreshment reaches them and the meals if any provided should be reconstructed to only during lunch hour or outside office hours.

Incident of cost

The railway administration may provide necessary accommodation sanitary, electrical installations, furniture and cooking utensils and also bare the rent and service tax and charges for the same canteen should be provided.

Handicraft Centre

These are set up in the Rly colonies for the benefit of the families of the Railwaymen for imparting training in Handicraft such as weaving, knitting, spinning, dealing of agreement with the object of learning some trade to augment the family income. Expense on the scheme is made from the SBF and these Centres should be provided in spare Rly building free of rent. Administration encourages this handicraft centres by placing orders of supply and fabrications of articles required by the Rlys.

Cooperative Societies

There are 3 types of cooperative societies namely consumer cooperative society, cooperative credit societies and bank and cooperative housing societies.
1. Consumer cooperative society - Consumer cooperative society means the retail society to cater the needs of the Railwaymen at reasonable prices with a minimum element of profit. The Rly will provide suitable accommodation on nominal rent of Rs. 1 per month and actual municipal taxes if the society is running a fair price shop. It will also provide one ceiling fan free of cost, electrification of premises, supply of water and electric current at concessional rates, recovery of credit sales through pay bill of members, special passes and special CL to the members of the Mgt. Committee land for construction of own building on nominal rent of Rs. 20/- per year. Deputation of Rly employees to the society with protection of rights of promotion etc.

In cases where the societies ceases to function for want of finance Rlys can give loan contribution upto Rs. 2500/- and an interest bearing loan of Rs. 10,000/- repayable on certain terms and conditions.

The membership of this credit societies will be opened to all Rly. servants and in order to be a member he should purchase atleast 1 share of not less than Rs. 10/- along with the admission fee. Retired and ex-railway servant are not to be considered for the membership.

The Mgt. Of these societies are carried out by the Mgt. Committee formed from amongst the shareholders of the society who on being formed, elect a Chairman, Secy. And treasurer. In cases where the cooperative society has been given lean the administration should nominate on the Mgt. Committee, Gaz. Officer representative up to 1/3rd of the Mgt. Committee a strength.

Subsidy

Subsidy amounting to not more than ½ the administrative and Estt. charges for the 1st 3 years is given subject to the condition that the state cooperative department certifies that the society is functioning properly.

Co-operative Credit Banks/Societies

The main object of Co-operative Credit Banks/Societies is to encourage habit of thrift among members rather than provide loans to them at reasonable rate of interest. The rate of subscription recoverable from subscribers every month, rate of interest on the subscription, withdrawal of sum from compulsory thrift deposit, penal rate of interest in case of compulsory monthly subscription falling into arrears, deduction of amount to a society from the subscription at the time of making an advance from compulsory deposit should be as per bye-laws of respective registered Co-operative Credit Societies/Banks.

The following facilities are extended to co-operative credit societies and banks -

a) recovery of loan, bank deposits and compulsory thrift deposits through salary bills of staff concerned.
b) privilege pass, PTOs for the employees of the societies available as per scale laid down in pass rules.
c) special casual leave and passes for members of managing committee to attend meetings.
d) provision of accommodation at reasonable rent as per para 1960E.
e) free publication of their notices in Railway Gazettes.
f) medical facilities in railway hospitals and health units to the staff and to the members of their family at per capita charge.
g) Cooperative credit societies and banks should pay for rent of accommodation and for telephones, electricity and water.

Cooperative Housing Societies
Railway servants or Cooperative Housing Societies consisting of such Railway servants are eligible for loan under low income Group Housing Schemes for construction of houses. The loans will be available to them through the head of department. No more than one loan or advance can be obtained by the Railway servants from any Government service. In order that would be desirable for Co-operative Housing Societies to acquire suitable land and allot to members after development.

10. Mobile Libraries
They are intended to supply reading material to staff posted at wayside stations where number of books may be set up either attached to the existing institutes or independently, and the following provisions may be looked into:

a) Conversion stock/Coaches for use as mobile library and the haulage cost shall be borne by Railway Revenues.
b) Where set up independently, the cost of staff, shall be borne by Railway.
c) Where Institutes take up the libraries, the cost of staff shall be borne by Staff Benefit Fund.
d) The cost of books shall be met from Staff Benefit Fund.

11. Medical Facilities.

This subject has been dealt with separately and so far as Staff Welfare is concerned, it could be said that:

Railways have provided Railway hospital dispensaries; Child welfare centres, family planning centre for the benefit of Railway servants, their family members including dependents and the assistance of Welfare Inspector could be availed of in case any difficulty arisen or guidance required.
12. **Staff Benefit Fund**

Each Railway Administration maintains a Railway Staff Benefit Fund which is financed from:

a) receipts from fines.
b) all receipts from forfeited Provident Fund bonuses other than those of gazetted Railway servants, and
c) an annual grant from the railway revenues at a per capita rate of Rs. 500/- for the Financial year 2010-11 in respect of each non-gazetted Railway employee employed on the Railway (other than in a Capital construction project) at the end of the previous year.

The fund is administered at Headquarter level, for the benefit of non-gazetted staff, by a committee consisting of:

<table>
<thead>
<tr>
<th>Chairman</th>
<th>Chief Personnel Officer of Zonal Rly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Members</td>
<td>Chief Medical Officer</td>
</tr>
<tr>
<td></td>
<td>Dy. General Manager ( General) or C.E.</td>
</tr>
<tr>
<td></td>
<td>12 selected members from each union</td>
</tr>
<tr>
<td></td>
<td>viz., 6 from NRMU &amp; 6 from CRMS.</td>
</tr>
<tr>
<td>Secretary</td>
<td>Personnel officer (Labour &amp; Welfare)</td>
</tr>
</tbody>
</table>

The objects of the Fund are as under:

a) to aid education of the staff and their children when no assistance is admissible under the rules;
b) recreation and amusement for the staff and their children;
c) relief and distress amongst the members of the staff and their families;
d) such schemes from sickness or maternity leave to the families of the employees as are not covered by the Medical Attendance and Treatment Rules;
e) Any other object with the approval of General Manager:

Annual Inter-Railway Cultural Competitions should be financed from Staff Benefit Fund, and out of the head “Recreation other than Sports” for which an amount of Rs. 2 per capita has been earmarked as per capital contribution of 5 paise will be earmarked for being spent on Inter-Railway Cultural Competition every year. Allotment of this part of the Fund to the various organizing railway as may be decided by Railway Board, will be made centrally by the Board. However, the amount of fund are spent according to the following proportion:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Education</td>
<td>31%</td>
</tr>
<tr>
<td>b) Recreation of staff and children</td>
<td>21%</td>
</tr>
</tbody>
</table>
c) Relief of distress, Sickness 41%
d) Miscellaneous 7%

Divisional Staff Benefit Fund Committee consists of an officer nominated by Divisional Railway Manager, two representatives from each union and a nominated Welfare Inspector shall be the Secretary, and presided over by Divisional Personnel Officer.

In Workshop, Workshop Staff Benefit Fund Committee would be same as prescribed for Divisional Committee and if there is no Senior Personnel Officer attached to Workshops his place shall be taken by the Works Manager.

The following are the activities under the heading "General Activities"

**Education**

1. for technical education in Engineering, Medical and Scientific courses.
2. assistance in the shape of stipend for courses of Chartered Accountancy Cost Accountancy.
3. for opening of Vocational training centres.
4. educational assistance to Group ‘D’ appearing in School final examination.
5. for deaf, dumb and blind children educational expenses.

**Recreation**

1. Grants to Institutes, Sports Clubs, Children Camps, Cultural activities, Recreation centres, Mahila Samities.
2. Supply of books to Railway hospitals for indoor patients.
3. Loans of Canteens.
4. Mid-day meals to children of Primary schools.
5. For uniforms to school children of Primary schools.

**Sickness and distress relief**

1. For funeral expenses of low paid staff.
2. Assistance to staff suffering from T.B., Cancer, Mental diseases when they are on leave without pay.
3. For purchase of artificial limb, spectacles, dentures
4. Distress due to natural calamity.
5. Assistance to low paid staff for loss due to fire.

**Miscellaneous**

1. Provision of libraries and mobile libraries.
2. Railway Reading rooms
SBF committee shall hold office normally for period of one year. General Manager shall arrange for keeping the accounts of fund and audit of accounts shall be carried as prescribed by President and G.M. shall also submit an annual report to Railway Board on Working of fund during the previous financial year.

**Salient Points**

a) where assistance is given under Educational Assistance Rules, no further assistance from the SBF to be given.

b) In deserving cases of distress of ex-members or their families, relief may be sanctioned for the purpose of educational assistance but this cannot be as a regular measure as the serving employees have a prior claim.

c) Retired Railway employees or persons dismissed/removed or outsiders cannot be nominated to the SBF Committee.

d) Railway employees under suspension should not be allowed to attend the meetings of the SBF. However, there is no objection for substitute taking his place.

e) Expenditure on maintenance of maternity centres on the Railways is to be borne from 1.4.55 from Railway revenues instead of contribution from SBF.

f) Railway employees serving on various Railway Recruitment Boards will continue to derive the individual benefit from the SBF of their parent Railway. For collective benefit, such as recreation, sports, etc. they will be attached to the Railway who has the Administrative control of the Railway Recruitment Boards.

g) The number of permanent staff of open line in the Railways on their regular transfer to Construction Projects except RE and COFMOW should be taken into account for the purpose of working out per-capita contribution to SBF.

h) The cost of the stationary, printing charges of forms, postage charges and other contingent expenses relating to the Funds is met from the Railway revenues. Expenditure on entertainment during SBF meeting should be met from the Fund itself.

i) Elected representatives when attending meetings of the SBF committees will be issued passes of the Class to which they eligible on privilege account as Railway servants.

The accounts of the SBF will be monitored and internally checked by the office of the FA & CAO and the Audit will make the checks.

Annual reports on the working of the SBF should be submitted by each Railway Administration to the Railway Board.
Reading Material
For Group “A” Foundation Course

Signal & Telecommunication
# RAILWAY SIGNALLING AND TELECOMMUNICATION

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</tbody>
</table>
Chapter 1
Introduction and History of Railway Signalling

1.1 Introduction :- Signalling may be defined as methods and means adopted to control the movement of trains. The purpose of signalling is threefold.

(1) To ensure safety in train operations.

(2) To improve efficiency of working.

(3) To increase throughput/line capacity of a section.

1.2 Necessity of Signalling :- The necessity of signalling arises mainly because of the flexibility to go around the obstruction not being available in case of trains as compared with the road vehicles. The vehicles are always guided by the rails and the only way to avoid accidents in case of trains is to stop the train short of an obstruction. Hence it becomes necessary to pass on information from track to the train. The information is communicated to the train driver by means of signals. The signals act as a vital link between the track and the train.

There is yet another important difference between rail traffic and road traffic, that relates to the braking distance. In case of trains since the friction between the steel rail and the steel wheel is very less as compared to the pneumatic tyres and rough road surface, the braking distance required to stop trains is much longer. Hence, the information regarding an obstruction on the track must be passed on at a sufficiently longer distance in rear of the obstruction to enable the train to be stopped short of the obstruction.

1.3.1 History of Railway Signalling :- The first railway line in the world was opened from Darlington to Stockton in UK in 1825 for goods trains only.

Uniformed men on horses’ back called "Bobbies' used to guide the trains. The first passenger train was run between Liverpool and Manchester in 1830. The first passenger train on its inaugural run started off with a fatal accident, running over the
Member of Parliament who inaugurated the train. The signalling adopted for the trains also changed from 'Bobbies' to 'Policeman' posted at a fixed intervals. The Policeman used to display proceed signal by standing erect, and stop signal by 'stand at ease' position.

1.3.2 When the train services increased and night services introduced, policemen were replaced by fixed mechanical signals around 1838. These signals were called 'Semaphore' signals. Semaphore is a latin word, 'sema' mean sign and 'phore' means to bear. Since these signals bear a sign to the driver of a train, they are called Semaphore signals. The signals conveyed two information to the driver. When the signal arm is horizontal, the information conveyed was stop. When the signal arm is lowered by 45 degree, the information conveyed was 'proceed'. Different forms of semaphore signals were tried and it took about 50 years to adopt a standard mechanical signal.

Semaphore Signal at 'On' position

1.3.3 In the early days, there were a number of safety hazards and accidents used to happen at frequent intervals. In fact, accidents like collision of trains were accepted as unavoidable and steps were taken to reduce the impact by hanging large bags of wool at the back of the last coach and also between the coaches.

1.3.4 Since the wheels of a rail vehicle are guided by the rail, to divert a train from one track to another, points are used at regular intervals. The point assembly consists of fixed rails called stock rails and movable rails called switch rails. A point is said to be correctly set when the stock rail and the switch rail are housed properly. Improper setting of points would result in a derailment. In the early days, the setting of points had to be ensured by the station staff before lowering signals. The lowering of a signal did not positively ensure setting of points, since the checking was dependent on human element. This hazard was overcome by the introduction of 'interlocking', which ensures that signals can be lowered only after the points are set properly. The first interlocking was installed in Bricklayer's arm Junction in England. This interlocking system was considerably improved by 1856.

1.3.5 In the early days, trains were run with definite time interval between the trains. This system of working was called time interval system. The time interval used to vary from 5 minutes to 15 minutes depending on the total number of trains run in a section. In this system, the safety is dependent entirely on the vigilance of the drivers of the following trains. If the Train ahead stopped in between stations due to some reason, and the following train driver not vigilant enough, would cause a collision. There used to be a number of such collisions. The only way to avoid such collisions and eliminate this safety hazard was to maintain definite distance between two trains. This system is called 'space interval system'. The whole length of track is divided into number of small sections called 'block sections' and at any time, there can be only one train in any
block section. This system was first started in U.K. in 1856. Introduction of space interval system eliminated, to a great extent, midsection collisions.

1.3.6 There was yet another safety hazard in the early years. This was due to inadequate brakes provided in the trains. The brakes were provided in the engine and the last vehicle. The brakes provided were found to be not adequate enough to stop the train especially when the train was running on a rising gradient. The train used to roll-back and collide with the following trains. The braking system was improved by providing brakes in every vehicle in 1874. This system was called 'continuous braking system'.

1.3.7 The introduction of lock (interlocking), block (space interval system) and brakes (continuous braking) considerably enhanced the safety of trains.

Even though number of accidents, especially collisions, were drastically reduced because of these safety arrangements, collisions could not be totally eliminated because of two main reasons :-

(1) Reception of a train on an occupied line especially at a station (2) Drivers ignoring and passing the signal at danger.

An important safety arrangement called 'track circuit', to prevent the reception of a train on an occupied line was first introduced in U.S. in 1872.

A device called Auxiliary Warning System (AWS) was introduced in 1906, which would apply brakes if driver ignores and tries to pass a signal showing danger. This equipment is generally provided only when the speed of the train exceeds 100 kmph.

Development of Rail Signalling: Worldover

![Diagram of Development of Rail Signalling: Worldover]
Chapter 2
Development of Signalling on Indian Railways

2.1 The first train service was started on Indian Railways in 1853 between Wadi Bunder and Thane, in Mumbai. Even though, semaphore signals were provided at most of the stations, there was no interlocking introduced on Indian Railways.

2.2 Two British Signal Engineers, List and Morse were the first to introduce interlocking in N.W. Railway’s 23 stations between Ghaziabad and Peshawar in 1894. They are called 'Fathers of Indian Railway Signalling'.

All other important Company Railways like GIP (Great Indian Peninsular) Railway, BB&CI (Bombay-Baroda Central India) Railway, MSM (Madras-South Maratha) Railway, started introducing interlocking on their important routes.

2.3 There was another important development in 1920. A Signal Engineer of Assam Bengal Railway (present North Frontier Railway) introduced a new system of mechanical signalling called double wire signalling, which has many advantages over single wire system which was in use. Many company Railways did not want to adopt this system in spite of many advantages. However, in 1950, the Double wire system became very popular and had to be necessarily used for providing a signalling system known as 'Multiple Aspect Upper Quadrant' (MAUQ) signals.

2.4 Indian Railways started modernising their signalling system in late 50's. The first modern signalling system called Route Relay Interlocking was introduced for the first time in Indian Railways in 1958. In this system, the operation of a major junction station can be controlled from a single central location, as compared to decentralised mechanical operation from many cabins. Another important landmark in the history of Indian Railway Signalling was the introduction of 'Centralised Traffic Control' (CTC) in North Eastern Railway in 1966 between Gorakhpur Cantonment and Chupra. In this system all the signals located over 175 kms were controlled from Gorakhpur Cantonment. A similar system was introduced in North Frontier Railway between Bongaigaon and Chaunsari in 1968. Both the system were totally imported from U.S.A. An all indigenous CTC was commissioned between Madras Egmore-Tambaram in Southern Railway in 1970. Presently, however, there are no working CTC Installations on Indian Railways.

2.5 Indian Railways introduced for the first time a device called Axle Counter, which is used to detect whether a section is occupied or clear, in 1972. This device was imported from West Germany. An indigenous development was taken up by Indian Institute of Technology, Delhi & Research Designs and Standards Organisation, Lucknow alongwith two Signal Workshops at Byculla of Central Railway, and Podanur of Southern Railway, in 1973 and completed in 1976. Indigenous axle counters are extensively used on Indian Railways.

2.6 The first Auxiliary Warning System (AWS) was installed in Gaya-Mughulsarai and Howrah-Burdwan sections of Eastern Railways in 1972. However due to large scale thefts of track equipments, the effectiveness of the system could not be evaluated. However, AWS was introduced in the most busy suburban section of Western Railway i.e. between Churchgate-Virar in 1987. This equipment is working quite satisfactorily.
The latest development in signalling is the introduction of computers in interlocking called 'Solid State Interlocking' (SSI). The first SSI was commissioned at Srirangam station (near Trichy Junction) in Southern Railway in 1970.

Another, modern Signalling achievement on Indian Railways has been the commissioning of the Train Management System on Churchgate Virar section of Mumbai Suburban Section. This project, commissioned in 2003, provides live train movements of the entire 60 KM Churchgate Virar Section in the Control Centre at Mumbai Central. Train Timings are automatically logged. Announcements at stations are triggered automatically from the central servers. “Countdown in Minutes” keeps the commuters informed about train arrivals at stations...in how many minutes the trains shall arrive at the platform.

Mobile communication has also been provided between Control Centre and the Suburban trains. Train Management System (TMS) is the first modern Project of its kind on Indian Railways.

**Anti Collision Device**: ACD is a 'state-of-the-art', 'Non-Vital' safety device, developed 'indigenously' by Konkan Railway. When installed on Locomotives and Guards' SLRs/Brake Vans and networked with other 'stationary' ACDs provided at Stations and Level Crossing Gates (both Manned and Un-Manned), it provides an 'electronic' Additional Safety Shield to its users, namely, Drivers, Guards, Station Masters and Gatemen. ACD is

- A micro-processor based equipment to prevent head-on, side and rear-end collisions at high speed. Also Provides warning at level crossing gates.
- Works on Global Positioning System (GPS) and Angular Deviation Count principle.
- All ACDs communicate with each other with in 3 kms range.

ACDs fitted on a Locomotive and Guard's SLR/Brake Van continuously monitor the 'emergency' situations that may lead to 'collision-like' situations, while the train is either stationary or on move. They also detect presence of other train/s, Level Crossing Gate/s, Station/s etc., en-route, in their vicinity, by exchanging information with ACDs fitted on them.

Based on the 'relevant' train working rules programmed in it, the 'Loco ACD' analyses the situation on 'real-time basis and applies brakes 'automatically', either to reduce train speed to a 'pre-determined' level or to a STOP, as the case may be. It releases the control on braking mechanism for the driver, as soon as the task is accomplished.

ACDs exchange 'data' and 'commands' with each other when they are within their 'radio-range' of influence and also accept 'specific' manual inputs, in 'emergencies' or for 'initialisation' purposes.
3.1 Requirements of Railway Signalling :- Railway Signalling acts as a vital communication link between the track and the moving train, and therefore has to meet the following important requirements: Fail Safe; Reliability; Simplicity & Unambiguity.

3.1.1 Fail Safe: All signalling systems, equipment and components have to be fail safe. Failure of any signalling equipment or component should either result in signal displaying its most restrictive information i.e. danger or impose a restriction on the movement of trains. This is a very vital requirement and hence the use of electronic components and computers, which are inherently not fail safe, was delayed by 20 years till the successful development of fail safe designs with these devices.

3.1.2 Reliability: Reliability of signalling equipment is a very important requirement like any other mechanical or electrical equipment. In one of the busiest suburban sections of the Indian Railways, Mumbai Suburban Section, more than 2000 trains are running every day because of advanced signalling systems. If the reliability of the signalling is not of very high order, this would cause a serious repercussion on rail operations. Further, signalling equipments eliminate the dependence on human element to a great extent in train operation. However, in case a signalling equipment or device fails, the safety is dependent entirely on human element and if the staff in charge of train operations, do not exercise proper vigil, there is possibility of occurrence of a serious accident.

3.1.3 Simplicity: The signalling systems/equipment are installed by signal staff and operated by non-technical staff belonging to operating department. Hence, the operation of these equipment should be simple to be understood by such staff.

3.1.4 Unambiguity: Safety of trains depends on the information conveyed by a signal. Hence the information conveyed by a particular aspect of a signal should be same everywhere at all times...with no ambiguity whatsoever. Under no circumstances, should the drivers be required to interpret the information conveyed by a signal on their own.

3.2 Important Definitions from General Rules: - The rules to be followed in the operation of trains are given in General Rules and Subsidiary Rules, (revised in 1976). Chapter I of General Rules deals with Definitions and Chapter III with Signals. Important definitions pertaining to signals are given below:

3.2.1 Block Section: The trains are worked with 'Space interval system' or 'Absolute block system' on Indian Railways. The whole length of track is divided into number of small sections of length varying between 6 kms to 15 kms depending on the density of traffic. No train is allowed to enter a block section unless permission has been obtained from the station at the other side. This permission is called Line Clear in Railway Terminology.
Authority to Proceed: The line clear which is the permission to enter a block section, is obtained by the train operating staff. However, this information has to be conveyed to the driver of the train. Authority to proceed is the means adopted to convey this information to a driver. This may be (i) in the form of tangible authority viz. token, which is tied in a pouch and handed over to the driver, (ii) clearing of a signal, called Last Stop Signal (iii) issue of paper line clear, when there is a failure or the movement is not a normal movement (as in the case of running a train in the wrong line due to an accident on the normal line).

Running Line: The definition of running line is important as most of the main signals are meant for the running lines. Running lines are defined in G.R. as the lines with points or connections and governed by signals, used by a train when (i) entering a station (ii) leaving a station (iii) running through a station (iv) running between stations. If the line is used in any other condition, then that line is not a running line.

In the above sketch the siding is not a running line, because no train can directly enter or leave or run through the siding.

Running Train: A train can remain at station or a block section. Normally, in a station a train can cross or take precedence over another train. Hence train standing at a station is not considered as a safety hazard as compared to a train at a block section, which requires more attention. The running train generally refers to a train in the block section.
section. The running train is a train which has started under an authority to proceed and not completed its journey.

3.2.5 Fouling Mark :- The width of rolling stock is fixed on Indian Railways and the overall fixed dimensions of which is given in the schedule of dimensions. When two tracks are running parallel the distance between them should be such that two trains running in these tracks simultaneously do not infringe with each other. Hence a distance of (15’ 6”) in case of B.G., and (13’) in case of M.G., between the adjacent tracks are maintained. When two tracks join each other or cross each other, this distance between the two tracks starts reducing. The point at which the distance starts reducing from a standard distance of (15’ -6”) - in case of B.G. and - (13’) in case of M.G. is very important from safety point of view.

No train standing in any of the two lines is permitted to cross this point, which would infringe the other line and result in an side collision, when there is a movement in this line. A permanent mark (FM or FP) is provided at the track level. This mark is called Fouling Mark and is the mark at which infringement to Standard Dimensions occur where two lines meet or cross each other. It is the responsibility of the driver to ensure that the engine is clear of the Fouling Mark and the guard to ensure that the Fouling Mark is cleared by the last vehicle.

No train standing in any of the two lines is permitted to cross this point, which would infringe the other line and result in an side collision, when there is a movement in this line. A permanent mark (FM or FP) is provided at the track level. This mark is called Fouling Mark and is the mark at which infringement to Standard Dimensions occur where two lines meet or cross each other. It is the responsibility of the driver to ensure that the engine is clear of the Fouling Mark and the guard to ensure that the Fouling Mark is cleared by the last vehicle.

3.2.6 Facing and Trailing Points :- Points are used to divert a train from one line to another. Points are classified as facing or trailing depending on the direction of movement of trains over the point.

If the direction of movement is such that the trains get diverted while going over the points, these points are classified as facing points. In case of facing points the trains can move to any of two lines. On the other hand, if train approaches a point with two lines converging to one, that point is called a trailing point. Facing points are considered more important than trailing because any improper setting of facing points would result in derailment of vehicles moving over the point.

On the contrary, in case of trailing points, even if the points are not set properly, the train is able to pass through the point safely causing damage to the point equipments. This is called 'trail through' or 'bursting of point'.

<table>
<thead>
<tr>
<th>Facing point</th>
<th>Trailing Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Line to Any one of Two Line Diverting Point</td>
<td>Any one of Two Line to One Line Converging Point</td>
</tr>
</tbody>
</table>
3.2.7 Aspect of a Signal : - The physical appearance of a signal as seen by a driver is called the 'aspect of a signal'. The aspect may be a position of the arm (0 degree, 45 or 90 degrees) of a semaphore signal during day time or colour of the roundel (red, yellow or green during night time) or colour of a lens in case of colour light signals, both during day and night.

3.2.8 Indication : - The information the aspect of signal conveys is called the indication. Two types of signals called 'stop signals' and 'permissive signals' are used on Indian Railways. Stop signals can have a maximum of 4 Aspects and Permissive signals 3 Aspects. The various names of aspects and indications of a Stop and Permissive Signals are given below :-

<table>
<thead>
<tr>
<th>Name of the Aspect</th>
<th>Indication</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Stop Signal</td>
</tr>
<tr>
<td></td>
<td>Permissive Signal</td>
</tr>
<tr>
<td>STOP : RED</td>
<td>STOP DEAD</td>
</tr>
<tr>
<td></td>
<td>NOT APPLICABLE</td>
</tr>
<tr>
<td>CAUTION : YELLOW</td>
<td>BE PREPARED TO STOP AT NEXT SIGNAL</td>
</tr>
<tr>
<td></td>
<td>BE PREPARED TO STOP AT NEXT SIGNAL</td>
</tr>
<tr>
<td>ATTENTION : DOUBLE YELLOW</td>
<td>BE PREPARED TO PASS NEXT SIGNAL AT RESTRICTED SPEED</td>
</tr>
<tr>
<td></td>
<td>BE PREPARED TO PASS NEXT SIGNAL AT RESTRICTED SPEED</td>
</tr>
<tr>
<td>PROCEED : GREEN</td>
<td>PROCEED</td>
</tr>
<tr>
<td></td>
<td>PROCEED</td>
</tr>
</tbody>
</table>
TWO ASPECT LOWER QUADRANT STOP SIG.

MAUQ:-

ON

OFF

ASPECT — STOP

INDICATION — STOP DEAD

PROCEED

CAUTION

PROCEED

MACL :-

STOP

CAUTION

PROCEED

Bogshah CON RSC
Types of Signals :-
1. Fixed Signals
2. Hand Signals
3. Detonator Signals
4. Flashing Hand Signal Lamp or Flag

Fixed Signals :-
1. Running Signals
2. Subsidiary Signals

Running Signals

a. Stop Signals

b. Permissive Signals

a. Stop Signals

<table>
<thead>
<tr>
<th></th>
<th>LQ</th>
<th>MAUQ / MACLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception</td>
<td>Outer (FSS), Home</td>
<td>Home (FSS)</td>
</tr>
<tr>
<td>Despatch</td>
<td>Starter, Advanced Starter</td>
<td>Starter, Advanced Starter</td>
</tr>
</tbody>
</table>

b. Permissive Signals  Warner ;  Distant

Subsidiary Signal

1. Calling on Signals
2. Shunt Signals
3. Repeating Signals
4. Starter Indicator

Calling on Signals

1. Placed below a Stop Signal governing the approach of a train.
2. Not worked at the same time as the Stop Signal
3. Taken OFF only after the train has been brought to a stop (Achieved by Track-circuit and Time-delay circuit.)
Shunt Signal

Used for shunting purposes and not applicable to a running train. May be separately located on posts or close to the ground or below a stop signal.

Shunt Signal May be of

1. Miniature ARM
2. DISC
3. The position light type

Can be used for number of Diverting routes without showing a particular route.

1. Miniature arm is like a STOP Signal in miniature on a separate port.

2. DISC TYPE :-

![Diagram of Shunt Signal Types]
Repeating Signal

A Signal placed in rear of a fixed signal for the purpose of repeating to the driver of an approaching train the aspects of fixed signal in advance is called a Repeating signal.

Repeating Signal. May be of
1. Banner type
2. An arm type
3. A Colour loght signal

Starter Indicator

Provided to repeat aspect of starter. May be provided at a convenient place. Exhibits no light when starter is ON and yellow when it is OFF.

Hand Signal

Day- Red Flag, Night-Red light
Proceed hand signal
Day-Green Flag, Night-Green light

Proceed with caution Hand signal
•Day-Waving green flag, Night-Waving green light

Hand signal for shunting
•Move away
Day-Green flag moved up down, Night-Green light up down

•Move toward
Day-Green flag side to side, Night-Green light side to side
•Move slowly
Day-Red and Green flag held above head, Night-Green light Held above head

Detonating Signal

Utilized in
•Fog
•Obstruction in line

Appliances fixed on Rail, When Engine or vehcile passes,they explode

Method of using
Thick foggy weather
•Two 10 mt apart
•270 mt from signal concerned
In case of obstruction
•One at 600 mts from obstruction
•Three at 1200 mts from obstruction 10 mts apart
Possession of Signal

• Guard
• Driver
• Station master
• Gateman
• Gangmates

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Chapter 3
Evolution of Signalling Systems

4.1.1 Rudimentary Interlocking: The signalling system provided initially at a station, where two trains from the opposite directions can cross, consisted of an elementary type of interlocking between points and signals. The maximum speed was restricted to 15 kmph. Only one signal was provided at each side as shown in the figure given below. Since the location of the signal happened to be the place where policemen used to have their homes, this signal was named as Home Signal. The signal has two aspects viz., 'ON' when the arm is horizontal, 'Proceed' when the arm is lowered to 45 to 60 degrees below the horizontal.

4.1.2 The disadvantage with this arrangement is that there is only one signal protecting any obstruction in the station. If by mistake any driver ignores this signal, there is a possibility of a serious accident. Hence it is necessary to have a second line of defense by adding one more signal in rear of home signal. This signal is called an Outer signal.

Provision of an Outer Signal also facilitated shunting within the station, as the movements between home signals at either ends at a station can be permitted without the need to take line clear from the other station. Since the maximum speed permitted on all lines at a station is only 15 kmph, no separate indication is given to driver at the home signal as to which line his train is being received.

However, it is always desirable to indicate to the driver the line on which his train is being received. For this purpose point indicators are provided at the points which will indicate whether a point is set for the straight or for the turnout. This type of signalling is called Modified Non Interlocked or Standard “0” Interlocking (Standard Zero Interlocking).
4.2 The next stage in the evolution is to permit a higher speed of **50 kmph** when the train traverses the straight route over a point. The speed of a train is always restricted to 15 kmph when it traverses the other route because of curvature. The line on which a higher speed was permitted is called a 'Main Line' and all other lines are called 'Loop Lines'. Indication is also given to the driver at the home signal itself whether the train is being received on the main line or loop line by having a bracketed home signals with the number of arms equal to the number of lines at a station and the arm corresponding to the main line placed at a higher level.

Since the route is indicated by some signal itself, the point indicators are eliminated in this system. This system is known as Standard I interlocking. This system has bracketted home signals and outer signals for the reception of a train. However, no signals are provided for the dispatch of a train. Start permit memos are given to the driver as an authority to start the train. The lay out of a standard I interlocked station is given below. The maximum speed permitted over the facing point on the **main line is 50 kmph**. The maximum speed on the **loop line is restricted to only 15 kmph**.

4.3.1 The next stage in the evolution is to permit unrestricted speed subject to the maximum permissible speed on the main line. This system is called **Standard III** interlocking. Two requirements are considered very essential in this system. Firstly, it is essential to provide dispatch signals for authorizing driver to leave the station. Secondly when the speed permitted on the main line is quite high, it is essential to inform the driver while he is approaching the station whether he is running through the station. This information will facilitate the driver in maintaining the maximum speed while
passing through the station and thus result in considerable reduction of running time between stations.

4.3.2 The signals used in this system is capable of displaying only two information to the driver viz., stop or proceed, it is necessary to adopt some means to indicate the third information of run through main line. This is achieved by providing one more arm below the outer signal. This arm is called **Warner** signal. The Warner signal has a fishtailed arm, unlike other signals which have square ended arm, and is called a ‘Permissive’ signal. The different information conveyed by the combination of Outer and Warner signals are as indicated below :-

Outer Horizontal & Warner Horizontal : Stop Dead

Outer lowered 45-60 & Warner Horizontal : Stop at Station

Outer lowered 45-60 & Warner lowered 45-60 : Run through Main line

4.3.3 This system is called **Lower Quadrant, B Class** where the first approach signal at a station happens to be **Outer** signal, which is a stop signal. The driver approaches this signal without pre-warning and when this Signal is at ON, the driver has to necessarily stop at this signal. The safety depends entirely on the vigilance of the driver and the visibility offered by the outer signal. Hence this system is not considered suitable for speeds higher than 100 kmph. **For high speeds, the first signal should not be a stop signal and the first stop signal should also be pre-warned.** The layout of a station with Standard III interlocking is shown in the following figure.

4.4.1 As pointed out in para 4.3.3 the main disadvantage of Lower Quadrant B Class is that First approach signal at a station is a stop signal and the driver approaches this signal without pre-warning. To overcome this shortcoming, a system of signalling was adopted in 50's on Indian Railways especially on high speed and heaving density double lines. In this system, called Lower Quadrant 'A' Class, the first signal at a station is not a stop signal but a permissive signal. The Warner which is provided in 'B' Class system below an Outer was separated and provided as a separate signal at braking distance in rear of Home Signal and the Outer Signal is eliminated. The arrangement is shown in the figure given below.
4.4.2 Since Warner is a permissive signal, this does not have a stop aspect and has only two aspects. When the Warner arm is horizontal, it means caution, i.e. the train may be required to stop at Home signal, which is the First stop signal. Warner lowered to 45-60 degrees means proceed i.e. the train is running through the main line. For run through, via loop line, Warner cannot be lowered. Thus, Warner is lowered only for run through via Main Line.

Hence this system is ideally suited for a section where number of trains run through most of the stations. Warner can convey only two information, viz., Caution or Proceed. When the train has to be stopped at the station either on main line or loop line, the Warner has to display only Caution aspect. The Caution aspect of Warner thus gives ambiguous information. The caution aspect may be due to a train stopping at Home signal or main line Starter or loop line Starter. Since the most restrictive of these three information is stop at Home, the drivers are forced to apply brakes when the Warner is displaying Caution aspect. The other two information can be confirmed only after seeing the aspect of the Home signal. Since the brakes must have already been applied, the trains which are stopping at station lose considerable time. This system has the advantage of having first signal viz., Warner a Permissive signal. However, the disadvantage of ambiguous indication is due to LQ system, where two information can only be displayed. So the only way to eliminate an ambiguous information is to go in for multiple aspect signalling where signals can display more than two information.

4.5 MAUQ System :- In this system the signals can display three information. Since for high speed operation, the first signal at a station has to be a Permissive signal, in MAUQ system also the first signal is a Permissive signal, but called Distant Signal and has three aspects. The change of name of the first signal from Warner to Distant is necessitated because Distant signal is not going to convey the information, which was conveyed by Warner in Lower Quadrant system. The main purpose for which Warner signal was introduced was to convey the information of running though main line. Thus Warner is a Speed signal, because if Warner is cleared, the train can go at a maximum speed through station and Warner can be cleared only after all the dispatch and reception signals for the main lines have been cleared. However, Distant signal displays three aspects - arm 0 degree or arm raised to 45 degrees or arm raised to 90 degrees. The information conveyed by these three aspects are –
Distant Signal | Name of the Information
--- | ---

**Arm Aspect**

<table>
<thead>
<tr>
<th>Degree</th>
<th>Caution</th>
<th>Stop at Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>0Degree</td>
<td>Caution</td>
<td>Stop at Home</td>
</tr>
<tr>
<td>45Degree</td>
<td>Attention</td>
<td>Proceed and be prepared to pass next signal at such restricted speed as may be prescribed by Special Instructions. Train is being received either on Main line and is required to stop at the Starter signal; or on a Loop line required to stop at the Starter signal or to pass run through via Loop Line</td>
</tr>
<tr>
<td>90Degree</td>
<td>Proceed</td>
<td>Run Through Via Main Line</td>
</tr>
</tbody>
</table>

4.6 Since MAUQ signalling has the advantages of pre-warning and having first signal a Permissive signal, this system is being extensively used on all important routes. In sections provided with 25 KV traction, Semaphore signals cannot be used, as the visibility of Semaphore signals are very much affected by the presence of overhead traction wires and fittings. Hence it is necessary to go in for Colour Light Signals in electrified section.

This system is called Multiple Aspect Colour Light Signals (MACLS) and is identical to MAUQ except the identification of a Permissive signal and display of route. The Permissive signal is identified by a painted black letter P on a white board. In case the signal is blank, (P) marker is an authority for the driver to pass this signal. The route in case of MACLS is indicated by a single yellow or green light for main line or yellow with a row of 5 white lights for loop lines. The row of 5 white lights is called a junction type indicator. It is possible to indicate up to a maximum of 6 loop lines and a main line with Junction type route indicator. In case of junction stations or terminal stations where there are more than 7 lines, a different type of route indicator called multilamp indicator is used. Multilamp indicator displays the line number by an arrangement of lamps with 7 rows and 5 columns. It is possible to display up to 19 lines with this multilamp indicator.

4.8 Comparison of different systems

1. **Lower Quadrant ‘B’ Class :- No. of aspects .. Two**

First stop signal is Outer. Run through main line given by lowering of Outer and Warner. First approach signal is a stop signal with no prewarning. Safety depends on the visibility of the first stop signal. Not suitable for high speeds. Also not suitable for stations where there is rising gradient at the approach to the station, where a loaded goods train if stops, will not be able to restart. Shunting is possible in station section without taking line clear from the other station.
2. Lower Quadrant 'A' Class :-

No. of Aspects .... 2

First approach signal - Permissive signal - Warner on a separate post.

Suitable for high speed section, especially on a double line where most of the trains run through.

Also provided on single line stations with a rising gradient at the approach to the station to avoid stopping of trains on rising gradient.

Ambiguous indication given by caution aspect of Warner.

Not suitable for sections where most of trains stop at number of stations.

Shunting is possible only between Starter to Advanced Starter without taking line clear.

Line clear can not be granted if all the reception lines are occupied. Hence generally full train length is provided in advance of starter to draw ahead a train and grant line clear, when all reception lines are occupied.

3. MAUQ Signals/MACLS :-

No. of Aspects ........ 3

First approach signal is a Permissive signal.

Prewarning of all stop signals.

Suitable for run through and stopping trains single line or double line, high speed section.

Shunting is possible in station section.

Run through indication given close to the station.

4.9 Comparison between Distant and Warner signals :-

<table>
<thead>
<tr>
<th>WARNER</th>
<th>DISTANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. APPEARANCE</td>
<td></td>
</tr>
<tr>
<td>Fish tailed arm</td>
<td>Fish-tailed arm</td>
</tr>
<tr>
<td>Red with white band</td>
<td>Yellow with black band</td>
</tr>
<tr>
<td>Location</td>
<td>Night - Green/Red</td>
</tr>
<tr>
<td>----------</td>
<td>------------------</td>
</tr>
<tr>
<td>Two Aspects.</td>
<td>Two/Three Aspects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. LOCATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On a separate post at braking distance in rear of First stop signal.</td>
<td>Always on a separate post at braking distance in rear of First stop signal.</td>
</tr>
<tr>
<td>Below Outer/Home.</td>
<td>MAUQ/MLQ/MACLS Sections.</td>
</tr>
<tr>
<td>LQ/MLQ Sections.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. CLEARANCE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Can be cleared only all stop signals for main line are cleared.</td>
<td>Can be cleared after Home signal is cleared.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. INDICATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearance indicates run through main line.</td>
<td>Cleared to 45 degrees</td>
</tr>
<tr>
<td></td>
<td>Proceed and be prepared to pass next signal at such restricted speed as may be prescribed by Special Instructions. Train is being received either on Main line and is required to stop at the Starter signal; or on a Loop line required to stop at the Starter signal or to pass run through via Loop Line;</td>
</tr>
<tr>
<td></td>
<td>Cleared to 90 degrees</td>
</tr>
<tr>
<td></td>
<td>Run through via Main Line</td>
</tr>
<tr>
<td>Speed signal.</td>
<td>Route Signal.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. NORMAL ASPECT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Caution (Permissive signal) stop at Home, Main line reception, loop line reception. Ambiguous. Can be fixed in case of junction/terminal stations non-working.</td>
<td>Stop at Home Unambiguous. Always working.</td>
</tr>
</tbody>
</table>
5.1.1 Braking Distance :- Braking distance is an important concept in signalling and is a very crucial factor in determining intersignal distances. The distance covered by a train after the brakes are applied is defined as the braking distance.

5.1.2 Factors affecting Braking Distance :- Important factors affecting braking distances are -

1. Train Speed
2. Train Load
3. Gradient
4. Brake Power
5. Types of Brakes
6. Condition of Rails
7. Rail/Wheel Adhesion

5.1.3 The most important factor affecting braking distances is train speed. The braking distance is proportional to the square of the speed. The next important factor is load of the train. The momentum of a train depends on the load. Therefore, goods trains have longer braking distances than passenger trains. Gradient also has an effect on the braking distance. If there is a fall in gradient, the momentum of a train is increased and the braking distance will also be more. Therefore, in case of very steep gradients, as in the case of Bombay-Ghat Sections, it may be necessary to impose a speed restriction to reduce the braking distance.

5.1.4 The two other important factors affecting braking distance are brake power and types of brakes. Since in trains continuous braking is necessary, it has to be ensured before starting a train that the brake power is adequate. A certificate to this effect called Brake Power Certificate is given by a Train Examiner (TXR) to the driver/guard of a train. It has also been stipulated that in case of passenger trains the brake power availability should be 100% (brakes are effective in all coaches) and in case of goods trains brake power availability should be at least 85%. Drivers are also required to conduct brake tests while the train is in motion and satisfy themselves that brake power available is adequate. In some cases, specific tests are also conducted on all the trains to check the brake power availability. Fixed boards are provided on the track for this purpose. The drivers are required to apply the brakes when they approach the board and the trains should stop before the board provided ahead. The distance between the two boards is equal to the normal braking distance at the maximum load/speed gradient. If the driver is not able to stop within the board provided ahead, he has to immediately inform the train examiner from the next station about the inadequacy of brake power.
5.1.5 The braking distance is also influenced by the type of brakes provided. The different types of brakes used are - (i) vacuum brake (ii) air brake (iii) electro pneumatic brakes and (iv) disc brake. Most of the passenger coaches and goods wagons on Indian Railways are fitted with vacuum brakes. Since the destruction of vacuum from the engine to the last vehicle takes more time as compared to other types of brakes, vacuum brakes are least efficient of all and require longer braking distance. Besides, maintenance required in case of vacuum brake fittings is also more. Hence vacuum brakes are gradually being replaced by air brakes, especially in case of high speed trains like Rajdhani Express/Shatabdi Express and in case of wagons used for heavy haul operations. These wagons are painted green. The braking distances required with air brakes are only 40% to 50% of the braking distances required with vacuum brakes. Even air brakes require some time for application to all coaches. To further reduce the delay in the application, Electro-pneumatic brakes are used, where brakes at all coaches can be applied simultaneously. This will result in the minimum braking distance. Electro-pneumatic brakes (EP) are provided in the suburban electric multiple unit trains (EMU). A suburban train running with super dense crush load at 90 kmph can be stopped within a distance of 400 metres because of EP brakes. Disc brakes are normally used for speeds higher than 160 kmph to reduce the braking distance.

5.1.6 The condition of rail would also affect the braking distance. If the rail table is wet, braking distance would be more. Another factor affecting braking distance is rail/wheel adhesion. The normal adhesion ranges from 0.035 to 0.12. Too much of adhesion is also not considered desirable as this would cause the wheels to skid.

5.1.7 Types of Braking Distances : - The brakes can be applied suddenly or gradually. When the brakes are applied suddenly, the braking distance required would be less but the rate of deceleration may cause discomfort to passengers and in case of freight trains, may damage the consignments. The braking distance with sudden application of brakes is called Emergency Braking Distance (EBD). The drivers are not supposed to apply sudden brake application unless there is emergency. The drivers are normally supposed to apply brakes gradually, so that the braking may not cause discomfort to passengers. The braking distance obtained with gradual application of brakes is called Service Braking Distance (SBD) or Normal Braking Distance (NBD). SBD is 1.2 times EBD. The intersignal distance is always based on Emergency Braking Distance.

5.1.8 Actual Braking Distance : - RDSO had conducted Emergency braking trials with Mail/Express trains at various speeds and with freight trains. The details of braking distances are given below :

<table>
<thead>
<tr>
<th>Main /Express Trains</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EBD for Mail/Express trains at 100 kmph</td>
<td>1.0 km</td>
</tr>
<tr>
<td>EBD for Rajdhani Express at 130 kmph</td>
<td>1.3 kms</td>
</tr>
<tr>
<td></td>
<td>(level gradient)</td>
</tr>
<tr>
<td></td>
<td>1.5 kms</td>
</tr>
<tr>
<td></td>
<td>(1 in 200 falling)</td>
</tr>
</tbody>
</table>
EBD for Shatabdi Express at 140 kmph 1.8 kms

Freight Trains

EBD for a freight train with 72 4-wheeler wagons at 72 kmph with a trailing load of 2700 t. 1.3 kms - 1.4 kms (level gradient)

The braking distances with air brakes in case of freight trains is only 50% of the EBD with vacuum brakes. However in case of Mail/Express trains, provision of air brakes will not result in the reduction of EBD because braking rate can not be increased beyond a limit in case of passenger trains. However additional coaches can be attached without an increase in the braking distance.

5.1.9 Since the EBD for a Mail/Express train at 100 kmph is 1 km, inter-signal distance has been kept as 1 km. The difference between SBD and EBD is provided as an additional visibility distance for every signal.

5.2 Reaction Time: - When the driver approaches and observes a signal, he can not be expected to instantaneously react to the aspect of a signal, but only after some time. This time is called the reaction time. When the driver is in the process of reacting to the aspect of a signal, the train is running at maximum speed and distance covered during this reaction time is called 'reaction distance' (RD). The reaction distance on Indian Railway is taken as 200 m. Reaction Distance plays a crucial role while determining the minimum visibility required for a signal. In case of Lower Quadrant 'B class', the minimum visibility required for outer signal should be at least equal to Emergency Distance + Reaction Distance i.e. 1.2 km. This is the disadvantage in having a stop signal without prewarning.

5.3.1 Minimum Visibility Requirements: - Railway Board have specified the minimum visibility required for signals in different systems. The minimum visibility requirements as stipulated by Board are given as under:-

Lower Quadrant System

OUTER -

if the approach speed >100kmph 1.2 km.

if the approach speed <100kmph 0.8 km.

Home 400 m.

Main Line starter 400 m.

Loop Line starter 200 m.

For MAUQ/MLQ/MACLS All signals 200 m. (RD)

5.3.2 The visibility required for Home signal is only 400 m because Home signal is pre
warned by Outer signal. The Outer signal can be cleared only after clearing any one of the Home signals. The visibility requirement of MAUQ/MACLS/MLQ is equal to Reaction Distance since all signals are pre warned in these systems. However, if only 200 m visibility is provided for a signal, then the driver is required to apply Emergency brakes when a signal is showing On aspect, since Intersignal distance is kept as Emergency Brake Distance. Normally, the drivers are required to apply service brakes. Hence the practical visibility should be equal to RD + (SBD - EBD). Since SBD - EBD = 200 m., the practical visibility required would be 400 m. This visibility should be insisted for all signals.

5.3.3 Sighting Committee :- Fixed signals can be commissioned only after ascertaining the minimum visibility available for these signals. The visibility test is done by a Committee called Sighting Committee consisting of senior supervisors from motive power department (Electrical or Mechanical), traffic department and signal department. They will go by Footplate, or trolley and check the visibility during day and night. The signals can be commissioned only on clearance by Sighting Committee. Efforts are taken to improve visibility of semaphore arm, by providing tall posts so that the signal could be seen from a long distance. Similarly, in case of colour light signals, the visibility is improved by superior lens system. However, visibility of signal becomes a problem in case of semaphore signals during night time. Night visibility is normally provided by kerosene lit lamps. The night visibility entirely depends on the upkeep of lamps by station staff. There is also a problem of kerosene lamp going out in which case it is a problem to lit the lamp again especially if the signal is located far from the station. Hence the kerosene lit lamps which are far away from the station like outer/Warner/distant are being replaced by electrically lit lamps.

5.4.1 It is essential to provide a safety margin ahead of a stop signal to act as a cushion in case driver passes a signal at danger. This safety margin can only take care of minor equipment failure or misjudgment by the driver. It can not offer protection when the driver is negligent or disregards a signal. The safety margin is defined as adequate distance in the General Rules. First stop signal is considered more important from the safety point of view as the drivers approach the signal with maximum speed. Hence safety margin provided should be more in case of first stop signal.

5.4.2 The safety margin provided for the first stop signal should be kept clear, before the line clear is granted for a train to enter block section, as the Station Master in advance can not have any control over the train once the line clear is granted. The granting of line clear is also called block operation. So this safety margin ahead of first stop signal is known as block overlap.

5.4.3 The other type of overlap is required for any stop signal is called signal overlap. The length of track in advance of a signal which should be kept clear before the signal in rear can be cleared is signal overlap. In manually operated signals, the signal overlap is generally provided for Home signals. In case of automatic signals, all signals are provided with signal overlap.

5.4.4 The point from which the signal overlap is to be considered for Home signal depends on whether a section is a double line section or as single line section. In case of double line section, since there is unidirectional traffic, the overlap is considered from next stop signal viz., Starter. Whereas in case of single line, the traffic is from both the
directions, hence an extra safety margin is required. So the signal overlap is considered from the outermost trailing point as shown in the figure below. However, with the approval of Commissioner Railway Safety, even in case of single line also, the signal overlap for Home signal can be considered from starter signal.

5.4.5 The details of two types of overlaps are given below:

<table>
<thead>
<tr>
<th>Name of overlap</th>
<th>Meant for signal</th>
<th>Point of consideration</th>
<th>Overlap distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block</td>
<td>Last stop signal of the station in rear</td>
<td>From first stop signal</td>
<td>LQ - 400 m&lt;br&gt;MAUQ/MACLS/MLQ - 180 m</td>
</tr>
<tr>
<td>Signal</td>
<td>Normally for Home signals (manual sections)</td>
<td>From starters (double lines) from outermost trailing point (single line)</td>
<td>LQ - 180 m&lt;br&gt;MAUQ/MLQ/MACLS - 120 m</td>
</tr>
<tr>
<td></td>
<td>All signals (Automatic sections)</td>
<td>From next signal in advance</td>
<td>120 m</td>
</tr>
</tbody>
</table>

5.5.1 Warning Boards: The Warning Board is an indication to the driver that he is approaching the first stop signal or a gate signal. This board, however, does not indicate to the driver the aspect displayed by that signal. Since the Emergency Braking Distances are different for passenger and goods trains, there are two types of Warning Boards, one for passenger and the other for goods trains. The drivers are required to look for the signal from the Warning Board. If the signal aspect is not visible, the driver should immediately apply brakes.
5.5.2 **Passenger Warning Board** :- The Passenger Warning Boards are placed at 1 Km. in case of B.G. and 960m. in case of M.G. in rear of the first stop signal. If the first stop signal is pre-warned by a Warner signal (LQ/A Class) or a Distant signal (in case of MAUQ/MACLS/MLQ), no passenger Warning Board is provided, the permissive signals themselves serve the purpose of Warning Board.

5.5.3 **Goods Warning Board** :- The Goods Warning Boards are provided in case of B.G. where goods train speeds are above 72 kmph. And located at 1.4 km. to 1.6 km. in rear of first stop signal (Outer/Home). Since EBD for Rajdhani Express is almost equal to that of Goods trains, the Goods Warning Board will be used in case of Rajdhani Express also.

5.5.4 The Warning Boards are provided with reflectors to give good visibility during night time.

5.6.1 **Isolation** :- In any station or yard there could number of simultaneous movements. These movements should not interfere with each other. Besides, when loose vehicles (vehicles not attached to an engine) could roll and obstruct important lines, isolation is a method adopted to protect important lines in a station/yard. The important lines are those - (i) where speed is above 50 kmph, (ii) all passenger lines as compared to goods lines/siding and (iii) goods lines as compared to sidings.

5.6.2 **Rules of Isolation** :- There are three rules of isolation as given in Rules for Opening Railways. These rules ensure the protection of important lines. The rules are -

(i) The line on which speed is higher than 50 kmph should be isolated from all other running lines.

(ii) All passenger line irrespective of the speed should be isolated from goods lines/sidings.

(iii) It is desirable to isolate goods lines from sidings.

Rules (i) and (ii) are obligatory. Rule (iii) is optional.

5.6.3 **Methods of Isolation** :- In all the methods of isolation, the two lines are not directly connected but through a cross over. The different methods are -

(i) **Trap Points** :- Trap points are points with single switch. In the normal position or open position, when any vehicle passes over the point, it gets derailed. So, it is not desirable to provide trap points on lines where there are frequent movements.
(ii) **Dead End** :- This is another method where instead of a trap point, the unimportant line is connected to a dead end, so that when any vehicles escape from this line or when there is simultaneous movements, the line will be set to dead end. The only disadvantage is that dead ends serve only as a method of isolation and no vehicle is permitted to be stabled on this line. Since the dead ends are connected to running lines, it is necessary to isolate them from sidings. IF any vehicle is stabled on a line it becomes a siding. In case, a stabling facility is required, dead end with trap point is provided.

(iii) **Dead End with Trap Points** :- This method is adopted wherever a stabling facility is required.

All these three methods are used only for the purpose of isolation and protecting an important line from an unimportant line. However there is one more method which serves two purposes viz., isolation and a substitute for signal overlap. Hence this method is very extensively used.

(iv) **Sand Humps Or Snag Dead Ends** :- Sand hump or snag dead end is a small length of 60 m of track connected to a running line normally loop lines. This track is on a slightly rising gradient and filled with sand. Hence is called sand hump. The purpose of the rising gradient and sand is to retard the movement of any vehicle over the sand hump. The advantage with this method is this sand hump is a substitute for signal overlap and can be used for simultaneous reception/despatch of trains. In a single line since signal overlap is to be considered from outermost trailing point, when two trains approach simultaneously from either direction, one of the train has to be kept waiting at home signal while the other train is being received. Stopping of a train besides resulting in loss of time, increases fuel consumption. Hence simultaneous reception is considered very advantageous. Two trains can be received simultaneously on loop lines by making use of sand humps. There are two layouts with sand humps. One is called economical layout, where only two sand humps are used. This has the disadvantage that the simultaneous reception can only be directional. The other called
universal where 4 sand humps are used and simultaneous reception can be in any direction. The two different layout are shown in the diagram given below.

5.6.4 Normally, no sand humps are permitted on main lines where speeds are high. But there are two exceptions where sidings are provided on the main line to protect the main line. All station yards are to be located at a gradient flatter than 1 in 400. But there could be a falling gradient towards a block section in the vicinity of station. In such cases it is necessary to protect the block section from loose vehicles escaping from the station. So the main line is normally connected to a small siding called slip siding. Any vehicle escaping from the station slips into the siding and thus protecting the block section. The slip siding is protected by a stop signal and the signal can be cleared after the siding is set for the mainline. As soon as the train passes the slip siding, a warning bell sounds in the cabin to remind that the point is required to be restored to the normal setting. Slip siding is required to be provided wherever there is falling gradient of 1 in 100 or steeper towards block section.

The other exception is the in the case of ghat section, where is a continuous falling gradient in the block sections, it is necessary to protect the station section as there is possibility of a train getting out of control and collide with a vehicles at the station. The main line in the block section is connected to a siding called catch siding. The length of catch siding may vary from a short length to full train length depending on the gradient in the section. Catching siding are required wherever the gradients are 1 in 80 or steeper. The catch siding is also protected by a signal. The signal can be cleared only after the train comes to a stop at the signal, in case of trains stopping at a station. In effect, the signal overlap for this signal is extended to on block section.
Chapter 6
Signal Layouts

6.1 The layout of signals at a station depends on the type of signal system adopted. For speeds above 50 kmph, five types of system can be adopted:

i) Lower Quadrant "B" Class

ii) Lower Quadrant "A" Class

iii) Multiple Aspect Upper Quadrant (MAUQ)

iv) Multiple Aspect Colour Light Signals

In the layout of signalling, signals at a station will be shown besides Warning Board. In the layout, Block Overlap, Signal Overlap, Station Section and Station Limits are also indicated. In addition, for each system, an aspect control chart is also given, which shows the aspects of various signals at a station for different conditions of train receptions. The reception of a train at a station can be classified as:

i) Stop at Home Signal

ii) Main Line Reception - Stop at M/L Starter

iii) Loop Line Reception - Stop at L/L Starter

iv) Run Through Main Line

v) Run Through Loop Line

6.2 The engineering layout at a station has to fulfill the requirements specified by rules. The aspects to be considered and shown in the Engineering Layout are:

i) Indication of fouling marks, where two lines cross or join with each other.

ii) Requirements as per rules for isolation. Normally, trap points are provided for isolation purposes. However if simultaneous reception/despatch is required, sand humps are provided.

iii) In case of double lines, a facility to change over to the other line should be provided. For this purpose, a cross over connecting up and down lines is provided in the trailing direction. The reason for providing cross over in the trailing direction is that the safety requirement for such cross over is far less as compared to a cross over in the facing direction. However, if only an emergency cross over in the trailing is provided on a
double line station, in case of emergencies to divert a train from the normal to the other line, lot of effort and time is required. Hence, in order to save time, it is advisable to provide one cross over in the facing and one in the trailing direction at a station to give the facility of receiving train from both directions on one of the loop line called "common loop". This will facilitate direct dispatch of trains from one loop and thus result in saving of considerable time.

iv) Reception lines should have the length to accommodate a longest goods train from FM to FM. This length is called clear standing room (CSR). The CSR is calculated as the length of 72 veh. (4 wheeler goods wagons) + 2 E + 1 IC (Inspection Carriage) + 7% (of total length of wagons) for brake pipes etc. This will work out to 686 m in case of BG. In case of MG it will be about 600 m. It is necessary to provide CSR of at least 686 m. in case of BG between starter signal to starter signal or Fouling Mark to Fouling Mark where starter signals are not provided.

6.3 The signalling arrangement can be shown after the Engineering layout is prepared. The signalling arrangements for four systems are shown in the next 4 paras.

6.4.1 Signalling with Lower Quadrant ‘B’ Class on single line :-

6.4.2 Locations of Signals

- Starters are located at the Fouling Marks
- Advanced starter is located at 180m. (Signal Overlap) from outermost trailing point
- Home signal is located at 15m. from the first facing point
- Outer/ Warner is located at 400m. (Block Overlap) from advanced starter to provide the facility of simultaneously receiving a train from one direction and giving line clear for a train in the opposite direction
- Passenger Warning Board located at 1 km. (EBD) from Outer Signal (First Stop Signal)
- Goods Warning Board Located at 1.4 to 1.6 km. from Outer
- Block Overlap 400 metres from first stop signal (Outer)
- Signal Overlap 180 metres from outermost trailing point (upto Adv. Starter)
- Station Section Advanced Starter to Advanced Starter
6.5.1 Signalling with Multiple Aspect Upper Quadrant signals on single line.

6.5.2 Location of various signals
- Starter located at the fouling mark.
- Advanced Starter located at 180 m (signal overlap distance) from outermost trailing point.
- Home signal located from 180 m (Block Overlap from Advanced Starter).
- Distant signal at 1 km (EBD) from Home Signal.
- Goods Warning Board at 1.4 to 1.6 km from first stop signal (Home)
- Block Overlap 180 m from Home (First Stop Signal)
- Signal Overlap 120 m from Outermost trailing point
- Station Section Adv. Starter to Adv. Starter

- Station Limit Distant to Distant

6.6.1 Signalling with LQ 'A' Class on Double Line
6.6.2 Location of Signals

Starters located at the Fouling marks

Adv. Starters located at Full train length (686m. B.G.) from outer most trailing point.

Home signal located at 15m. from the first facing point

Warner located at 1Km. from Home

Goods Warning Board at 1.4 - 1.6 km. from Home

Block Overlap Home to Starter

Signal Overlap 180m. from Starter

Station section Starter to Adv. Starter

Station Limit Warner to Adv. Starter

6.7.1 Signalling with MCLS on Double Line
6.7.2 Location of Signals

Same as MAUQ single line except Home signal is located at 180m. from the Block Section Limit Board, Where there is a trailing crossover, as shown in the dia

Block Overlap:- 180m. from Home Signal

Signal Overlap:- 120m. from Starter.

Station Section:- Block Section Limit Board to

Adv. Starter or First Facing Point to Adv. Starter

Station Limit Distant to Adv. Starter in either direction
Chapter 7
SIGNAL OPERATION

7.1 Two types of signals are used on Indian Railways: (i) Semaphore and (ii) Colour light signals. Semaphore signals can be operated mechanically or electrically. Mechanical operation of semaphore signals can be through either single wire or double wires.

7.2.1 Single Wire: This was the first mechanical system adopted for semaphore signals. A single wire is run from the cabin to the signal. The signal is operated by pulling the wire from the lever which in turn raises the counter weight lever at the signal post. The counter weight lever is connected to the semaphore arm through a down rod. The raising of the counter weight lowers the signal. When the lever is put back to normal, the counter weight lever drops down by gravity and brings the signal to ON. The main disadvantage of single wire operation is erratic operation due to expansion or contraction of signal wire cause by temperature change. When the wire expands, the wire length increased and causes a sag in the wire. The signal can be operated properly only after removing the sag. Otherwise the signal may get lowered to 20-25 degrees below the normal. Similarly contraction of the wire cause slight drooping even when the signal is not operated. When the distance of signal is more than 300 m, a device called cabin wire adjuster is provided in the cabin. The cabin wire adjuster is operated before pulling the signal lever to remove the sag. It should be ensured that cabin wire adjuster is brought back to the normal position after every signal operation. If the cabin wire adjuster is left in the pulled condition, a signal may drop due to contraction.

7.2.2 The other disadvantages of single wire operation are -

(i) More possibility of outside interference. The signal can be operated by pulling the wire from outside or pressing the signal arm.

(ii) Range of operation is only 950 m.

(iii) It can be used only for two aspect signalling.
(iv) Signal return is gravity based. Damage to down rod more prominent due to return impact of signal arm.

7.3.1 **Double Wire** - In this system, for operating any function viz. signal, point etc., two wires are used. Hence the system is called double wire. The two main advantages of double wire system are - (i) outside interference totally eliminated and (ii) automatic compensation of temperature effects.

7.3.2 The wires of the system form a continuous loop between the lever in the cabin and signal or point mechanisms as shown in the diagram given below. The lever used in the cabin is of a rotary type. When the lever is operated, the lever drum gets a rotation. This causes pull in wire (1) and push in wire (2). This pull and push in the wire causes the point or signal mechanism to operate the points or signal. The rotary motion of the mechanism is converted into a linear movement by using cams and cranks. The signal arm is connected to the signal mechanism by a rigid down rod.

7.3.3 The outside interference is eliminated by pre-tensioning the pull and push wire of the double wire system to 150 lb. by means of 205 lb. weights in the cabin. Because of pre-tensioning, it will not be possible to pull the wire from outside. The temperature effects are compensated by a device called compensator. Double wire compensators are provided for every point/signal and are generally located in the ground floor of the cabin. The three main functions of the double wire compensators are -

(i) Pre-tensioning the wires to 150 lb. with 205 lb. weights.

(ii) To maintain the transmission in constant tension by self-adjusting the variations in length due to temperature changes.

During static conditions, tensions in pull and push wires are almost equal. Since the two wires in the loop have the same length and are run out under similar atmospheric conditions, any variations in these tensions due to expansion or contraction will be equal and thus the mechanism drum will not move except the length of the transmission wires will increase or decrease as the temperature rises or falls. This change in length of the wire is compensated in the double wire operation by D.W. compensators. The two wire are loaded with 205 lb. floating weights which keep the transmission wires in constant tension and therefore at constant effective length, irrespective of expansion or contraction, by the weights of the compensator either falling to take up the expansion or rising to pay out the wires to cater for contraction.
(iii) When a break or disconnection occurs, the falling compensator ensures that the signal resumes its most restrictive aspect.

7.3.4 The advantages of double wire operation of signals are -

(i) Outside interference eliminated.
(ii) Automatic compensation against temperature changes.
(iii) Range of operation increased to 1400 m.
(iv) Can be used for two aspect or MAUQ signalling.
(v) Signal return due to the operation of lever. Hence it is smooth and impact on the signal arm considerably less.
(vi) Since the range of operation for signals is more, it is possible to have one central cabin and operate all points and signals from this cabin.

7.4 **Electrical Operation** :- The range of operation is 950 m in case of single wire and 1400 in case of double wire. If any signal is located beyond this range, it will not be possible to operate this semaphore signal by mechanical means. In such cases electrical operation using signal machine is adopted. Signal machine consists of a 12v. direct current motor and other mechanical parts. The signal machine can be operated through primary cells or secondary cells charged by solar panels, provided at signal location.

7.5.1 **Colour Light Signals** - Colour light signals are used in modern signalling systems. The main advantages to colour light signals over are semaphore signals are

i) Day and night aspects are same.

ii) Range is considerably more.

iii) It can be used to display more than 3 aspects.

iv) Ease of operation.

v) No moving points

vi) Night visibility is far superior to semaphore signals. In electrified section the visibility of semaphore signals is very much impaired by the presence of OHE (Overhead Equipment) structures, insulators and catenary wire. It is necessary to go in for colour light signals to get better visibility.

7.5.2 In colour light signals, an electrical lamp operated with 12v and a superior lens assembly are provided to get a visibility around 1 km. The lens assembly consists of an inside coloured lens (red, yellow or green) and an outside plain lens. The assembly is called double combination of lenses. The signal lamp is kept at the focal point of the inner lens. It is possible to tilt the signal lamp both vertically and laterally to bring it to
the exact focus of inner lens. This operation is called focusing the signal. All lenses are provided with hoods to prevent the sun's light from falling on the signal and reducing the visibility.

7.5.3 There is one serious problem of signal displaying no aspect with colour light signal. This can happen due to a signal lamp fusing or power supply failure. A signal lamp fusing is taken care of by procuring good quality lamps from approved suppliers after thorough inspection and testing before using them on the signals. In spite of these precautions, it is quite possible that some signal lamps fuse prematurely before their normal rated life of 1000 hours. So, a safety feature called cascading or cutting in arrangement is adopted to prevent a blank signal. In the cascading arrangement whenever, a signal lamp of an aspect fuses, the next restrictive aspect is automatically brought in. For example, if a signal lamp is displaying green and the green lamp fuses, an yellow aspect will be displayed automatically. Similarly, if a signal is displaying yellow and the yellow lamp fuses, a red aspect will come automatically. But if a signal is showing red and the red lamp fuses, the signal will be blank. To prevent this occurrence, all red lamps are provided with two filaments. One main filament and an auxiliary filament. The life of the auxiliary filament is prolonged by rating it for higher voltage (16v) and operating at a lower voltage (12v). When a main filament fuses, the signal will be dim with auxiliary filament. All other aspect lamps are provided with single filaments. Red aspect lamps of the stop signals and yellow aspect lamps of the Distant signals are provided with double filaments.

7.5.4 The power supply failure is taken care of by providing three sources of power for colour light signals. In case of double line sections with 25 kv electric traction, the three sources of power are -

i) power tapped from Down Line - Normal source

ii) power tapped from Up Line - Standby source

iii) local power (power from Electricity Board or diesel generator).

Single line sections with 25 kv electric traction

i) power tapped from Up/Down line - Normal source

ii) local power (EB)

iii) diesel generator

Sections without electric traction

i) local power - Normal traction

ii) 2 - diesel generators

Even though 3 sources are provided, when one source fails, the power supply has to be changed over to the alternate source manually. During this change over time, the signal will be blank. This situation is not considered desirable especially in a heavy
density route with electric traction. So, in such section an uninterrupted power supply (UPS) with battery and inverter is provided.
Chapter 8
POINT OPERATION

8.1 Points are the most important equipment provided to change the path of a train from one line to another. Points are classified as facing or trailing. Point assembly consists of two fixed rails called stock rails and two movable rails called switch rails. These two switch rails are kept in position by two stretcher bars, leading and following stretcher bars. At any time, one of the switch rails should be housed with stock rails and there should be sufficient gap between the other switch rail and stock rail. The switch rail, which is housed with the stock rail, is called closed switch. The switch which has a gap is called open switch. The point assembly is shown in the following sketch.

8.2 There are some safety considerations to be fulfilled in the operation of a point especially facing point. The considerations are -

i) A suitable means to set the point to one of the two positions.

ii) A lock to prevent the movement of the switches due to the vibration of train.

iii) To prevent the operation of point when it is occupied by a vehicle.

iv) Means to ensure that closed switch is housed and locked properly.

8.3.1 Setting - A point is said to be set:

i) when the gap between open switch and stock rail is less than 5 mm and

ii) when the gap between open switch and stock rail is 115 mm in case of BG. and 100 mm in case of MG.

8.3.2 The points can be set either locally or from a central location. The local operation of point is used where the train density is low or in case of unimportant points like siding points, goods lines points etc. A spring type lever is provided at the point and is connected to the leading stretcher bar. When the lever is operated, the point moves to
the other position. Whenever point is required to be changed, an operating staff has to go the point to operate it.

8.3.3 Central Operation: where the train density is heavy, it will not be feasible to send a man to site to change the position of points. Hence the points and signals are operated from the same central location. The central operation can be through (I) Mechanical means and (ii) Electrical means.

Mechanical Means - Points can be mechanically operated from a central location. The mechanical operation can be provided through (I) Rodding or (ii) Double wires.

8.3.4 Rodding - The levers in the central cabin connected by means of point rodding to the point at site. The point rodding is made of 32 mm diameter solid or tubular mild steel rods. The stroke from the cabin is transmitted through the rodding to the point. The range of operation is generally restricted to about 350 m. (even though theoretically a range of 450 m. is possible). The point rodding should be provided with some arrangement for compensation against temperature effects. The mild steel used for point rodding has a linear expansion coefficient of 5 mm/90 m per 100°F. It is therefore necessary for all the point roddings exceeding 12 m in length to be compensated for changes in temperature, which is done by inserting, a Rodding compensator, of the type shown below, exactly midway in the rodding run.

![Rodd Compensator Diagram](image)

The compensator consists of an obtuse angle crank and an acute angle crank connected by a link. Any movement of the rod on one side due to expansion or contraction is neutralized by an equal and opposite movement on the other side of it.

8.3.5 Double Wire Operation - Where signals are operated by double wire, points can also be operated by double wire. The double wire operation has a range of about 700 m. The double wires are provided with a compensators for automatic compensation. In the cabin rotary type of lever is provided and at the points, double wire point mechanism, is connected to the points. Double wire point mechanism converts a rotary movement to linear movement and also provides broken wire protection.

8.3.6 Electrical Operation - In modern signalling systems, the points are electrically operated. The main advantages of electrical operations are:-

i) Range unlimited

ii) Ease of operation

iii) More reliable
iv) Less maintenance

Points are electrically operated by a point machine. Point machine consists of a direct current electric motor operated by 110v, with the associated mechanical parts like gears etc. to convert rotary to a linear movement. The operation by point machines is generally fast taking about 2.5 seconds. This machine is considered suitable for most of the points. But in case of marshalling yards provided with humps, where two wagons follow one another in quick succession, the points are required to operate within a time of ½ second. In such cases electric points are not suitable, but points are operated by compressed air mechanism controlled electrically. Such a method is called Electro Pneumatic point operation.

8.4.1 Locking of a point - It is necessary to lock a point especially a facing point to prevent the movement of switches due to the vibration of a train. Different methods can be adopted for locking depending on the maximum speed permitted over the points.

8.4.2 Padlock locks and clamps - In this arrangement, a clamp is provided between closed switch and stock rail and the clamp is locked with a padlock. This arrangement is suitable for speeds up to 15 kmph.

8.4.3 Key Lock - Key lock is an arrangement provided between the tracks in a point assembly to lock the switches. The switches are locked by means of a plunger in the key lock unit. When the locking is proper, a key is taken out from the key lock.

8.4.4 Hand Plunger Locks - This is an improved system of key locking and can be used with locally operated point for speeds up to 75 kmph.

8.4.5 Facing Point Locks (FPL) - This arrangement is adopted with mechanically operated points from a central cabin. The locking is actuated by a plunger in the Facing Point Lock unit at the point through point rodding from the cabin. The point rodding for FPL are also provided with rodding compensator for compensation against temperature effects.

8.4.6 Point Machines - Point machines which are used to operate the points electrically have also the locking facility provided inside the machines.

8.4.7 The points are operated from central cabin by (1) Rodding (2) Double wire and (3) Point machine. In case of rod operated points, the points normally remain unlocked. Only before clearing a signal, the facing points are locked. The trailing points are only correctly set. Whereas in case of points operated by double wire/point machine, all points whether facing or trailing, are normally locked.

8.5.1 Route Holding - It is very essential to ensure that the points are not unlocked when a vehicle is over the point. The arrangement provided for this purpose is called route holding. In case of key locked points, by virtue of location of a key lock unit in between the tracks, route holding feature is available. If the vehicle is over the points, the key lock is not accessible and hence, it will not be possible to insert the key and unlock a point.
8.5.2 In case of facing point locks, a device called lock bar is provided for the purpose of route holding. Lock bar is a mild steel angle of size 50 mm x 50 mm and of length 13 m (42') in case of BG and 12.2 m (40') in case of MG. The lock bar is fitted closed to the tip of the switch and remains 38 mm (1 ½") below the rail top. When a point is to be unlocked, the lock bar rises to the rail top and then goes below. If there is a wheel standing on the rail, i.e. point is occupied, the lock bar cannot rise and hence the point can not be unlocked. The length of the lock bar has to be more than the maximum distance between the longest wheel base of any rolling stock.

8.5.3 In case of electrically operated points, route holding is achieved by a device called track circuits, which is described in detail in chapter 11.

8.6.1 Detection - It is necessary to ensure that in case of facing points, the closed switch is housed properly (gap less than 5 mm) with stock rail and points are locked before clearing a signal. This is achieved by a device called detection. This is the most important safety device as far as points are concerned. The detectors are provided at the point itself. They are classified into mechanical detectors or electrical detector.

8.6.2 Mechanical Detectors - Two types of mechanical detectors are used. One is with single wire and the other is with double wire. The single wire transmission operating the signal is passed through a detector, provided at the facing point, called 'unit detector'. The unit detector ensures that signal transmission wire can move only if the facing points in the route are set correctly and locked. In case of a double wire operated point, a rotary type detector is used. This detector lever is required to be operated before the operation of the signal lever. If the points are not set properly, the detector lever cannot be operated and hence signals cannot be operated.

8.6.3 Electrical detectors are used with colour light signals. In this device, one set of electrical contacts will be made when points are correctly set and locked in one position, other set of electrical contacts corresponding to other point position. Indication is also given in the cabin through these contacts and colour light signals are also controlled through these contacts.

8.6.4 Point machines have electrical contacts inside the machine to ensure that the points are correctly set and locked. Point machines perform three operation viz, setting, locking an detection.

8.6.5 Detection being an important safety device, its working has to be periodically checked. Whenever there is a derailment at an interlocked point, it is also essential to check the proper functioning of detectors. The functioning of the detector is checked by test called an 'obstruction test'. In this test a physical obstruction is provided between the stock rail and closed switch and it is seen whether the detector fails with this obstruction. All the signal inspectors/maintainers are provided with an obstruction piece made of mild steel of size 5 mm. This obstruction piece is kept at a distance of 50 mm from the tip of the switch between the stock rail and the switch rail. The point is operated with this physical obstruction and the detector should fail.
Chapter 9
ESSENTIALS OF INTERLOCKING

9.1 Points, signals and other connected equipments should be operated in a proper sequence. This sequence cannot be left to the human element, but is ensured by interlocking. Interlocking is a safety arrangement to ensure that points, signals and other connected equipments are operated in a predetermined sequence. The four essentials of the interlocking as stipulated in the Signal Engineering manual are given below :-

9.2.1 Essentials of Interlocking :-

It should not be possible to take off a signal unless the Route is properly set. Route setting involves (1) setting of all points viz. facing, trailing and isolation, (2) locking the facing points in case of rod operated points, locking all points in case of D.W. or electrically operated points, (3) closing and locking the interlocking level crossing gate against road traffic, not only for the line on which the train is going to run but also for the signal overlap. This condition is called route setting condition.

9.2.2 It should not be possible to change a point, unlock a facing point (in case operated by rodding), unlock any point (in case operated by D.W. or electrically), unlock level crossing gate in the route or the signal overlap portion unless the signal is replaced to ON. This condition is called route holding condition and ensures that the route set for a signal remains in tact as long as signal is Off.

9.2.3 It should not possible to take off the conflicting signals at the same time. The signals which can lead to head on collision, if cleared simultaneously are called conflicting signals. Main signal and subsidiary signals cleared for the same route are also conflicting signals. The examples of conflicting signals are -

On single line
Home and Starter of opposite direction.
Home and Home of opposite direction.

On Single/Double Lines
Main Signal - Shunt Signal (for the same route)
Main Signal - calling on signal

9.2.4 Whenever feasible, conflicting points should be locked. Two trailing points taking off from the same line are called conflicting points, as shown in the figure:-
If points 1 and points 3 are set for line 1 and line 3, and two simultaneous movements from these lines to the main line are permitted, there is possibility of side collision. This essential is required to protect against such happenings during shunt moves. When any main signal is cleared from these lines, this is ensured by the rules of isolation. However, in case of major yards there may be many trailing points from the main line. In case where there are heavy shunt moves, sometimes two or three of these points may be required to be operated for simultaneous shunt moves. Hence in this essential clause 'wherever feasible' is given so where flexibility is required, the interlocking between conflicting points need not be provided. Generally, wherever the distance between the trailing points is 100 m - 150 m, there could be no parallel moves possible and interlocking between conflicting points is provided. Where the distance is greater than 150 m, conflicting points interlocking is not provided to provide flexibility.
Chapter 10
STANDARDS OF INTERLOCKING

10.1 The maximum speed of a train over facing point on the main line of a station depends on the equipments used at the points, signals provided, type of interlocking and provision of isolation between main line and other lines. There are four standards of interlocking used on Indian Railways permitting 15 kmph to maximum permissible speed. The set of equipments to be provided for different standards of interlocking is stipulated in the Signal Engineering Manual.

10.2 Requirements for different standards of Interlocking

<table>
<thead>
<tr>
<th>Type of Equipment /arrangement</th>
<th>Rudimentary Std. 0</th>
<th>Std. I</th>
<th>Std. II</th>
<th>Std. III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Max. speed over the Facing Point unrestricted on the main line in kmph</td>
<td>15</td>
<td>50</td>
<td>75</td>
<td>maximum permissible</td>
</tr>
<tr>
<td>2. Point equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Setting</td>
<td>Local operation</td>
<td>Location operation</td>
<td>Local operation</td>
<td>Central operation</td>
</tr>
<tr>
<td>ii) Locking</td>
<td>Padlocking</td>
<td>Key lock</td>
<td>Hand plunger</td>
<td>Facing point lock or point machine</td>
</tr>
<tr>
<td>iii) Route holding</td>
<td>No arrangement</td>
<td>No arrangement</td>
<td>Lock bar or track circuits</td>
<td></td>
</tr>
<tr>
<td>iv) Detection</td>
<td>No required</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>3) Isolation</td>
<td>Not Required</td>
<td>Not Required</td>
<td>Not Required</td>
<td></td>
</tr>
<tr>
<td>4) Interlocking</td>
<td>Indirect</td>
<td>Indirect</td>
<td>Indirect</td>
<td>Direct</td>
</tr>
<tr>
<td>5) Signals LQ</td>
<td>Outer common Home</td>
<td>Outer bracketed home</td>
<td>Outer bracketed home starter</td>
<td>Outer bracketed home starter warner</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Advanced starter (if necessary)</td>
</tr>
<tr>
<td>MAUQ</td>
<td>Distant home starter</td>
<td></td>
<td>Distant Home starter</td>
<td>Distant home starter Home starter Advance starter (if necessary)</td>
</tr>
</tbody>
</table>
10.3 In case of Std. I and Std. II, interlocking points are locally operated and locked by key locks. The key released from the key lock is inserted in the lock on the signal post before a signal can be cleared. Once the signal is cleared the key locking the points can not be taken out. Hence there is indirect interlocking between points and signals. The difference between Std. I and Std. II interlocking is the requirement of isolation, i.e. main line from other lines, as the maximum speed permitted is 75 kmph in Std. II.

10.4.1 The main difference between Std. II and Std. III interlocking is the types of interlocking. Since in Std. II, points are operated locally and signals from a cabin, there is indirect interlocking between points and signals. Whereas in case of std. III, points and signals are operated from the same location and hence there is direct interlocking between points and signals. Standard II interlocking is not generally adopted in view of the necessity to send the staff for operating the points locally. The signalling system is upgraded to std III directly from std. I. There are about 25 stations with std. II interlocking on Indian Railways.

10.4.2 In case of major and terminal stations, full compliments of Standard III interlocking are provided. In spite of that these stations are classified as std. I because no isolation between passengers lines is provided at these stations.
The provisions of the new revised Para 7.131. will only apply to future signaling & interlocking installations.
Chapter 11
TRACK CIRCUITS

11.1 Interlocking is one of the vital safety features provided in signalling to ensure that a route is properly set before a signal can be cleared. Interlocking, however, does not ensure that the route on which the train is to be received, is clear of vehicles. This aspect has to be verified by Operating staff. In signalling whenever we depend on human element, we involve at least two agencies, if not more, to verify the safety aspects. In spite of associating more than two persons, large number of accidents had occurred in India and abroad due to the reception of a train on an occupied line. It is very essential to eliminate the human element from this important and vital check by providing suitable safety arrangement. Such an arrangement is called 'Track Circuits'.

11.2 Track circuit was first invented in the year 1872 in U.S.A. by William Robinson. Since this arrangement was very simple, nobody would have thought that the track circuit would make such an impact on signalling. Track circuit has become one of the most important safety devices in Railway signalling and has become an essential and integral part of modern signalling systems.

11.3 The principle of track circuit is quite simple. The presence of a vehicle in a particular section is checked by passing an electric current through the rail from one end. If the current reaches the other end, then the track is clear. If any vehicle remains in the section, the wheels and axles of the vehicle will short circuit the current and prevent it from reaching the other end. Since the current is passed through the rails and rails form an electrical circuit, this arrangement is called 'Track Circuits'.

11.4 The track circuit consists of the following components:

1) To ensure that the flow of current is restricted to a particular section, insulated joints are provided at both ends of the section. The insulated joints consists of insulating material made of Nylon 66, which prevents the flow of current between rail to rail, fish bolt to rail, fish bolt to fish plate and fish plate to rail of the adjacent rail joints.

2) Rails of 13 m standard length are provided in most of the stations and they are joined together by fish plates. The fish plates do not provide reliable electrical connection and hence they are bridged by two mild steel wires to get good a electrical connection. These wires are called bond wires.

3) The current is passed by means of battery (2v) at one end and current is regulated by a resistance.

4) The current at the other end is sensed by a device called Relay. This is an electromagnetic device, the relay remain energized when track is clear due to the current flowing through the relay. But when a vehicle occupies a track circuit, most of the current is diverted through the wheel and axle of the vehicle and very little current flows through the relay. Hence he relay will be de-energized. It is possible to control the signal as well as indicate the occupancy of a track through the relay contacts. A red indication is given when the track is clear. Since normally the track is clear, the relay remains in the energized position. The relay used in track circuits is of a special design compared to the conventional electrical relay. A conventional relay works with a current...
or no current. But a relay used in track circuit has to sense a drop in current. Since we can not positively say that the current through the relay will be reduced to zero value when a wheel and axle occupies a track circuit, when the current through the relay reduces to 32% of the normal current, the relay should get de-energized. Such relays are called relays with high percentage release.

5) The sleepers used in the track circuits should be of an insulating type viz. wooden or concrete sleepers. Cast iron or steel sleepers can not be used in track circuited section as they would directly short circuit the rails.

11.5 The arrangement of a track circuit is shown in the following sketch:-

11.6.1 Requirement of track circuits - There are two very important requirements of track circuits - one concerning the safety aspect and the other concerning the reliability. The ideal condition of a wheel and axle occupying track circuit is causing a dead short circuit across the rails. Normally, the resistance offered by wheel and axle of a train is about 4 to 5 milli ohms which is almost zero. However, it is very essential to provide some factor of safety. Hence our, track circuits are designed in such a way that even when wheel and axle offers a resistance of 0.5 ohms, the relay would be able to sense it. This provides a factor of safety of \( \frac{500}{0.5} = 100 \). This resistance of 0.5 ohms is called Train Shunt Resistance. Indian Railways is one the few world Railways who have adopted such a high train shunt resistance.

11.6.2 Sometimes a track circuit will show as occupied though the track is clear. This is due to the continuous leakage of current through the ballast especially under wet and poor drainage conditions. This affects the reliability of a track circuit. It is stipulated in Signal Engineering Manual that the ballast resistance should not be less than 2 ohms/km in station section and 4 ohms/km in block sections.

11.7 Applications of Track Circuits

(i) To prove the track occupancy: the main application is to prove that a particular section is clear of vehicles. The track circuits in a station is normally done under three priorities.

(a) First priority is for track circuits between fouling mark to fouling mark on the run through/main line. Second priority is for track circuits between Home Signal to Fouling Mark and Fouling mark to Advanced Starter. Third priority is for providing track circuits on loop lines.
(ii) Automatic Replacement of a signal :- A small track circuit of 3 rails length (60 m) is provided ahead of Last Stop Signal (LSS) so that as soon as the train occupies this track circuits, the LSS signal is replaced to On. This small track circuit is called FVT (First Vehicle Track). This arrangement is required to ensure that only one train can enter the block section with the clearing of Last Stop Signal.

(iii) To indicate clearance of block overlap :- A small track circuit of 3 rails length (60 m) is provided at the block overlap limit from First Stop Signal. When the train occupies and clears this track circuit, an indication is given in ASM's Office to inform the arrival of a train. The ASM/SM must ensure complete arrival of the train by checking the tail lamp/LV Board. This small track circuit is called Last Vehicle Track.

(iv) Route Holding - Wherever electrical operation of point is provided, track circuits are used to hold the route. The track circuits will be provided over the point portion. When the first point is occupied, it will not be possible to operate the point.

(v) Fouling Protection - Track circuits are also provided over point portion with mechanically operated points and lock bar to ensure that the fouling mark is clear. This will help to prevent side collision of two trains, whenever there is an infringement of fouling mark.
(vi) **Automatic Warning for LC Gate** - Track circuits are also provided in rear of the level crossing gates at a distance of about 2 kms so that when the trains occupy the track circuits, the gate-men will get a warning to close and lock the gate before the train approaches the gate signal.

(vii) **Approach Lighting of signals** - It is also possible to light the signals only when the train is approaching by having track circuits at a distance of 4 kms from the signal. The signals are lit up only if this track circuit is occupied by a train. This arrangement will help to reduce energy consumption.

(viii) Track circuits are essential part of all modern signallng systems like panel interlocking, route relay interlocking, axle counter etc.

11.8.1 Types of Track Circuits - The following types of track circuits have been used on Indian Railways :-

(i) **DC Direct Current Track Circuit**
(ii) Alternating Current Track Circuit 50 C/S or 83-1/3 C/S

(iii) High Voltage Impulse Types Track Circuits

(iv) Jointless Track Circuits

11.8.2 The most widely used track circuits in Indian Railways is Direct Current Track Circuits. Direct Current Track Circuits cannot be provided in sections with Direct Current Electric Traction like Bombay-Poona, Bombay-Igatpuri Sections. Track Circuits with Alternating Current at 50 C/S frequency is provided in these sections.
12.1 Interlocking provides safety by ensuring proper sequence of operation. Interlocking can only ensure that the levers in the cabin are operated in a predetermined sequence. However, if the function at site fails to correspond to the operation in the cabin, interlocking cannot provide safety. For example, in case Outer and Home signal, Outer signal can be operated only after the operation of Home signal. Interlocking ensures this condition. However if Home signal fails, to correspond with the operation in the cabin, the Outer signal also should fail. This is achieved by slotting. Normally, all signals have a minimum of one control viz. the lever controlling the signal. But in case of some signals there may be more than one controls, like Outer, Distant, Warner, Advanced Starter. In case of such signals a method called slotting is used. The two important principles involved in slotting are -

(i) the slotted signal can be cleared only if all the controls required for the signal have been received.

(ii) any one the controls should be able to independently replace the slotted to 'ON' position.

12.2 Two types of slotting devices are used on Indian Railways viz. (i) Mechanical Slotting and (ii) Electrical slotting. Mechanical slotting can be used where there are only two controls for a signal. Two types of Mechanical Slotting devices are in use - (i) Disengager - This is provided at the foot of the Home signal and ensures that the Outer signal can be lowered only after one of the Home signal arm is lowered to 45 degrees - 60 degrees. In case Home signal goes to danger, Outer signal is also replaced to 'ON' position.

(ii) Three Lever Slot :- This is provided at Outer/Warner signal to ensure that Warner signal can be cleared only after Outer signal is lowered to 45 degrees to 60 degrees. Three counter weight levers are provided on Outer/Warner post. One weight is connected to Outer lever in the cabin and arm. The second weight is connected to Warner lever in the cabin. The third (middle) weight is connected to Warner arm. The weights are balanced in such a way that Warner signal can be lowered only if both weights connected to Outer lever/arm and Warner lever are raised. In case Outer lever goes 'ON' Warner also goes to 'ON'.

12.3 The mechanical slotting can be used with two controls. Besides, if an electrical track circuits is to be proved on a mechanical semaphore signal, an interface is required. Such an interface is provided by electrical slotting arrangement. In electrical slotting, there can be more than two controls for a signal. In case of electrical slotting, the transmission from the signal cabin and the arm are physically connected through an interface called Electrical Signal Reverser (ESR). The transmission and the arm are connected only if the ESR is electrically energized. If ESR is not energized, the transmission is delinked from the signal arm and even if the signal lever is operated, the signal cannot be lowered. The ESR is energized only if all the controls are received. Now a days all slotting arrangement provided is of electrical type.
12.4 One of the applications of slotting is inter cabin. The clear standing room required for B.G. = 686 m. If a central cabin is provided, the Outer most point will be located at a distance of 423 m (686/2 + 100 m. cross over length). This distance is beyond the range of rod operation. Hence if rod operation is to be adopted, two cabins are used, one at either end. With two cabin working, whenever Home signal is to be cleared, the overlap portion will be with the control of the cabin at the other end. A control from the other cabin is required to ensure that the overlap points are properly set and locked, before lowering a Home signal. Such a control is called inter cabin control. In addition, it has been stipulated by Board, that all reception and despatch of trains have to be controlled by Station Master/Assistant Master. So, SM's control is provided in ASM/SM's office for giving control on Home and Advanced Starters. Inter cabin control consists of a control from other cabin and SM/ASM in case of Home signal, a control from SM/ASM in case of Advanced Starter. A safety feature known as 'one slot one train' is provided with inter cabin control. A control given by the other cabin and ASM/SM is valid for one train only. With the same control, the signal cannot be cleared for the second time, after the passage of the first train. The control lever/slides have to be replaced to the normal position and again given for the second train. This feature is called 'one slot one train'.
CHAPTER 13
BLOCK INSTRUMENTS

13.1 The trains are run with space interval systems, maintaining definite distance between two trains. The equipments provided at stations for ensuring space interval system of working are called 'Block Instruments'. Each block section has one instrument at either end electrically connected by overhead wires in case of non-electrified section or by underground cable/wireless in case of electrified sections. No trains can enter a block section, even when the block section is clear, unless line clear is taken from the other side. The block section normally remains closed. The working of trains with block instruments can be called 'Closed Block' working.

13.2 Block instruments provided can be classified into two categories viz. (i) Cooperative and (ii) Non-cooperative type. In case of cooperative type, block instruments for doing any operation on the instruments, cooperation from the other side is required. For example, granting line clear for a train or closing a block after the arrival of a train can be done only with the cooperation from the other side. In case of non-cooperative type block instruments, all these operations can be done without the cooperation from other side. All single line token instruments and single line tokenless instruments (Daido Make and Kyosan make) are cooperative type. All double line block instruments and single line tokenless instruments with push buttons (Podanur Make) are non-cooperative type.

13.3 Single line token instruments are provided with operating handle having three positions. Normally, operating handle remains in the centre position. The handle is turned to 'Train Coming From' (TCF) position at the receiving end and 'Train going to' or TGT position at the sending end. When the handle is turned to TGT position, a token comes out, only one token can come with one operation, thus ensuring there can be only one train in a block section. Once a token is taken out, the block instruments are locked in TGT position at the sending end and TCF position at receiving end. The instruments can be normalized only after the token is inserted either at the sending end or at the receiving end, with the cooperation from the other side.

13.4 The sequence of operation in case of sending a train from A to B is given as below :-

<table>
<thead>
<tr>
<th>Station A</th>
<th>Station B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sending Station</strong></td>
<td><strong>Receiving Station</strong></td>
</tr>
<tr>
<td>ASM gives one beat by pressing the plunger to call the other side ASM</td>
<td>ASM responds with one beat.</td>
</tr>
<tr>
<td>Asks for line clear by giving two beats and at the end of the second beat keeps the plunger pressed (cooperative working)</td>
<td>Turns the handle from line closed to TCF position and gives two beats keeping the plunger pressed at the end of second beat (cooperating)</td>
</tr>
<tr>
<td>Turns the handle from line closed to TGT. Token comes out, hands over the token to the driver as the authority to</td>
<td></td>
</tr>
</tbody>
</table>
Train enters block section, gives 3 beats (train on line)

Acknowledges train on line with 3 beats, clears Reception signals. Train passes the signals. ASM checks the LV Board/Tail Lamp. All reception signals replaced to 'ON'. Inserts the token into the block instrument & gives four beats (train out of section) and keeps the plunger pressed at the end of the fourth beat (cooperating).

Turns the handle to line closed from TGT and gives 4 beats keeping plunger pressed at the end of fourth beat.

Turns the handle to line closed from TCF.

13.5 Disadvantages of Token Working

(i) Block operation time is more because of the need to get the token from the driver for normalizing the instruments. Hence with token instruments the crossing time, taken by the trains to cross each other on a single line, is about 10-15 minutes. This reduces the line capacity to about 18 trains each way (total 36 trains) in 24 hours. By introducing tokenless working, the crossing time can be reduced to about 5 minutes and increasing the capacity to 21 trains each way (42 trains total) in 24 hours.

(ii) The difficulty in picking up token at high speed.

(iii) The problem of damaged token. If the tokens are not handed over in a proper pouch, the tokens are likely to get damaged due to dropping of token from the engine.

(iv) Missing tokens or lost tokens. If the token is missed or lost, considerable delay is caused to the train.

(v) Balancing of token. There are 36 tokens, normally 18 in each instrument. If the traffic in one direction becomes heavy, the tokens get accumulated in one instrument. The tokens will have to be physically brought to the other instrument and inserted. Indication is given in the block instrument when the number of tokens in an instrument is 5.

(vi) In view of number of mechanical parts inside the block instruments, periodical attention required is more and the block instruments are required to be overhauled once in 10 years.

13.6 Single line tokenless instruments and double line block instruments are worked on the principle of lock and block.
The essentials of lock and block working are -

(i) The last stop signal (Advanced Starter) is interlocked with block instrument and can be cleared only after the line clear is taken from the other side. This is the lock condition.

(ii) Automatic replacement of Last Stop Signal to ON :- A short track circuit provided just ahead of LSS (FVT) replaces the LSS to ON as soon as the train enters block section, to prevent the entry of second train with the same line clear. This ensures one line clear one train condition.

(iii) The last stop signal can again be lowered for a second train only after the first train clears the block overlap at the receiving station, all reception signals are replaced to ON at the receiving station, the block instruments are normalized and again fresh line clear granted.

The instruments remain blocked till these conditions are satisfied. Hence the working is called lock and block working.

13.7 Double line Block Instruments :- Double line block instruments work on the lock and block principle. They are non-cooperative type. All the block operations are done at the receiving end. The instrument is much simple to operate as compared to single line block instruments. These instruments are called SGE type instruments (Siemens and General Electric). The instruments consists of a commutator with three positions, two needles having each three indications one for Up and Dn lines. The two corresponding needles at each ends are connected electrically. The commutator normally remains in the centre position i.e. line closed. The line clear is granted by the receiving end station by turning the commutator to right (line clear - LC position), when the needle corresponding to this line at both ends will indicate 'Line Clear'. As soon as the train enters the block section the sending end station will give three beats to the receiving end. The Station Master at the receiving end turns the commutator handle from Right (line clear) to Left position (TOL position) when the needles at both ends will indicate 'TOL'. This is the most important operation in double line. Only when this operation is done, the blocked condition as stipulated in lock and block working is ensured. When the handle is turned from LC to TOL, the handle is electrically locked in TOL position. This electrical lock is released only after the train clears block overlap at the receiving station and all reception signals are replaced to ON. The Station Master only after verifying the complete arrival of a train must turn the commutator handle from TOL to Line Closed position.

If the Station Master at the receiving end fails to turn the handle from LC to TOL, the block instrument will fail for the subsequent train. The main difference between single line tokenless and double line instrument is that in case of single line tokenless, the TOL is automatic, as soon as the train enters block section. Train on line indication comes on instruments at both side whereas in case of double line block instruments, the TOL indication comes only after the commutator handle is turned manually at the receiving end from LC to TOL position.

The commutator handle can be turned at any time from centre position line closed to TOL (left). When such an operation is done, the electrical locking at TOL position will
not be effective. The electric locking at TOL is effective only if the handle is turned from LC to TOL position, the normal sequence in a train working. The turning of the handle from line closed to TOL is required to be done whenever there is obstruction in the block section or a shunting is to be done from the receiving end side in the block section.
CHAPTER 14
AUTOMATIC BLOCK WORKING

14.1 The double line block instruments are non-cooperative type. In spite of this feature, the maximum number of trains that can be run on a double line section is 45 trains each direction in 24 hours (90 trains total). This capacity can be increased to 60 trains each direction by splitting the long block sections into two by the provision of Intermediate Block Signalling (IBS). This is the maximum capacity that can be achieved with manual block working. In case of suburban sections like Bombay, Calcutta, etc. the train density is much higher than 60, hence it is necessary to adopt a system, where space interval between trains is maintained by trains themselves, and not by manual operation of block instruments. Such a block working is called Automatic Block Working.

14.2 Essentials of Automatic Block Working :-

(i) The section should be provided with complete track circuiting or Axle Counter (substitute for track circuits to ensure a particular length of track is clear) and colour light signals.

(ii) The normal aspect of an automatic signal is 'proceed' unlike the manual signals whose normal aspect is 'stop'.

(iii) The automatic signal turns to 'ON' as soon as the train enters the block section.

(iv) This signal displays 'caution' aspect when one block section and a overlap of 120 metres is clear.

(v) This signal displays 'proceed' aspect when two block sections and a overlap of 120 metres is clear.

14.3 The aspects of a signal are changed by the movement of trains. In case an automatic signal displays Red aspect, the driver must get an authority to pass the signal at danger. This authority is given by (A) Market. When any automatic signal is 'ON', the driver can pass the signal after waiting for 1 minute by day if the visibility is good and for two 2 minutes in case of night and during poor visibility. But he should proceed at 15 kmph till he reaches the signal post ahead and then guided by that signal. Most of the accidents in automatic block section occurs due to drivers not following this rule.

14.4.1 Signals in Automatic Block Section :- Three types of signals are used in automatic block section :-

(i) Automatic Signal

(ii) Manual Signal

(iii) Semi Automatic Signal
In a section provided with automatic block working, automatic signals are used in sections where there are no points or level crossing gates.

Manual signals are used at the approach to stations, since in case of stations, signals are manually operated.

Semi-automatic signals are those which can work either automatically or manually. Semiautomatic signals are provided in sections with a point or a level crossing gate or both. The semiautomatic signals are fitted with an illuminated (A) Marker. When the A marker is lit up, the signal works as an automatic signal. When the A marker is extinguished, the signal works as a manual signal.

14.4.2 Automatic Section with a point

Generally, points are provided in the trailing direction in case of an automatic block section to divert a train from one line to other line as shown in the following figure:

![Diagram](image)

When the points are correctly set for the normal main lines, the signals in both directions work as automatic signals and illuminated A markets are lit up. The rules for passing this signal at 'ON' remains the same as that of an automatic signal. If the points are not correctly set for the normal main lines, the signals in both directions work as manual signals and A market is extinguished. The driver should get a written memo to pass this signal at 'ON'.

14.4.3 Automatic Block Section with a Level Crossing Gate:

When there is a level crossing gate in an automatic block section, the signals are provided with an illuminated A marker and painted G Board (black G on a yellow background). The normal position of a level crossing gate is open to road traffic, the signal works as a gate signal with A marker extinguished. If this signal is at "ON" the driver should wait one minute by day and two minutes by night and pass the signal at a slow speed of 15 kmph, and must watch for the gate. If the gate is closed, he can proceed at 15 kmph, till he reaches the signal post head. If the gate is open and the gate-man is not present, the driver should stop the train before the gate, close the gates, draw ahead the train till train clears the gate, again stop the train to enable the guard to open the gates. Then he should proceed at 15 kmph till he reaches the signal post ahead.
14.4.4 Automatic signal with a Gate and a Point - When there is a gate and a point in an automatic block sections, two illuminated markers A and AG are provided. The indications given by these marks are -

<table>
<thead>
<tr>
<th></th>
<th>Point set for normal main lines and gates</th>
<th>A marker is lit up</th>
<th>Signal works as an automatic signal.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>Point set for normal main lines and gates open</td>
<td>AG marker is lit up</td>
<td>Signal works as a gate signal</td>
</tr>
<tr>
<td>(ii)</td>
<td>Point not set for normal main lines Gate open</td>
<td>A marker and AG marker extinguished</td>
<td>Signal works as a manual signal</td>
</tr>
<tr>
<td>(iv)</td>
<td>Point not set for normal main lines gate closed.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14.5.1 Headway - The main purpose of providing an automatic signal is to increase the train density. The train density can be increased if the trains can follow one another at close intervals. The train density is generally indicated by the term headway. Headway is defined as the distance between two trains running in the same direction always getting proceed aspect.

14.5.2 Headway with the three aspect signals - The second train can get a proceed aspect after the first train clears two block sections and an overlap of 120 m. Since the minimum visibility required is 200 m., the headway in an automatic block section with three aspect signal (as shown in the figure given below) is 2EBD + 200 + 120 m + TL = 2.320 km + TL.

14.5.3 Automatic Block Section with four aspect signals - In case of an automatic section with 4 aspect signals, an automatic signal displays

Caution Aspect (Y) - When one block section + overlap of 120 m is clear.

Attention Aspect (YY) - When two block section + overlap of 120 m are clear.

Proceed Aspect (G) - When three block sections + overlap of 120 m are clear.
The inter-signal distance in case of 4 Aspect signals is emergency braking distance between a signal showing 'Attention Aspect' (YY) and a signal at 'On' as shown in the following figures -

The headway in case of 4 Aspect signals is \( \text{EBD} + \frac{1}{2} \text{EBD} + 200 + 120 + \text{TL} \)

\[ = 1.820 \text{ km} + \text{TL} \]

With the provision of 4 aspect signals, Headway is reduced by 500 m, i.e. 25% and hence the train density can be increased by 25% as compared to 3 Aspect signals. Therefore, in very busy suburban sections like Bombay, four aspect automatic signals are provided.
Chapter 15
Route Relay Interlocking/Panel Interlocking & Solid State Interlocking

15.1 BRIEF DESCRIPTION OF SYSTEM: Route Relay Interlocking

This system is based on a geographical layout of signal switches and push buttons. All that is required by an operator to move trains is to know where a particular train is and to which line it has to be routed. Therefore, to set up a particular route, the operator is required to perform some action on the geographical layout of Control Panel at these two points, viz., at ENTRANCE and EXIT.

15.2 CONTROL PANEL: All the points and signals are operated from a combined indication diagram cum control panel located in the cabin/Station Master’s Room.

The combined indication diagram cum control panel consists of an inclined console on which a clear geographical representation of the entire track layout with signals, points, Control switches, push buttons and various types of indications and alarms available. The track layout is sub-divided into track sections according to the track circuit configuration with distinctive colour for each track circuit section. (All colours except Red).

When a route is set and locked, the route is illuminated by white strip lights in the track circuit configurations throughout the route (except the overlap). This indication remains lit as long as the route is locked and disappears only after the relevant signal switch is restored to normal position and the route is released. This indication turns to Red when track is occupied or track circuit failed, irrespective of whether the route is locked or free.

When the speed and frequency of the trains are to be increased, Relay interlocking is ideal. In Relay Interlocking the Interlocking is achieved through relay circuitry at a centralised place. The time required for installations is also less. The Relay Systems are generally trouble free since the moving parts involved are less and replacement is easier. Indian Railways are having time tested experience in Relay Interlocking since 1958.

Route Relay Interlocking is a system in which Interlocking is achieved by means of Relays.
15.3 REQUIREMENTS OF RELAY INTERLOCKING

Relay interlocking systems are popularly divided as Route setting type (RRI) and Non route setting type (panel interlocking). The features of Relay Interlocking in general are as follows. The RRI will have the additional facility of automatic operation of all points in route, overlap and isolation with a single command by Entrance-Exit System.

15.4 FEATURES OF RELAY INTERLOCKING.

- All operations are controlled from a Control panel by the operator.
- Knobs are provided for operating signals and points and they will bear the same number as the functions indicated in Signalling Plan.
- Colour light signals are provided.
- Yard is Fully track circuited, between home to home signals in single line and Home to advanced starter on either direction in double line. Approach track is optional.
- Stand by power supply is provided from a D.G. set or from traction supply.
- Track circuit occupied /failed indications are also given in Red Colour.

Note:- Before going for PI/RRI it is necessary to ensure reliable and stable power supply for smooth working after commissioning.
Comparison of RRI and PI:

<table>
<thead>
<tr>
<th>Route Setting Type (RRI)</th>
<th>Non Route Setting Type (PI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Automatic Route setting facility is available, which means that with single command, points in the Route, Overlap and Isolation can be operated to the required condition.</td>
<td>1. Automatic Route setting facility is not available. Points have to be operated individually for setting the Route.</td>
</tr>
<tr>
<td>2. RRI is adopted for bigger yards generally.</td>
<td>2. PI is adopted for smaller yards.</td>
</tr>
<tr>
<td>3. Provision of Colour light signalling is compulsory.</td>
<td>3. Colour light signalling is compulsory.</td>
</tr>
<tr>
<td>4. Sectional route release facility is compulsory</td>
<td>4. Sectional route release facility is not compulsory</td>
</tr>
</tbody>
</table>

15.5 Electronic Interlocking:

Presently Indian railways with a network of 62,000 route kilometers have approx. 247 Route Relay interlocking (RRI) and 2428 Panel Interlocking (PI) installations. These installations use thousands of Electro- mechanical relays requiring complex wiring and Inter-connections. The wiring diagrams for such installations run into hundreds of sheets. Individual relays, wiring and interconnections along with thousands of soldered joints are required to be physically examined and certified. This exercise requires traffic blocks of long durations and large manpower to manage the traffic during blocks. Even for small yard re-modeling like addition of a loop line, all the above activities are required to be redone. Therefore, the advantages of relay based interlocking installations are being nullified.

With development of modern fault tolerant and fail safety techniques, electronics and particularly microprocessors have found acceptance in the area of railway Signalling world over. Railways in advanced countries of Europe, North America & Australia have gone for large scale introduction of microprocessor based Solid State Interlocking (SSI). This system occupies considerably less space, consumes less power, is more reliable and is easy to install and maintain. Also, initial commissioning & changes due to yard re-modeling can be carried out in negligible time requiring skeleton manpower for traffic management during the blocks.

Presently on Indian Railways 76 SSIs have been commissioned up to March’05.
15.6 Advantages of Electronic Interlocking System:

(a) System can be tested at factory level using simulation panels.

(b) Non-Interlocking period is less (Typically few hours instead of few days,) both for initial installation and also for yard alterations (which can be done using application software compiler which is user friendly.)

(c) Modular in design and easy for maintenance, thus requiring less staff. Expertise of hardware and software is not much needed for maintaining the equipment at initial stage.

(d) Requires less number of relays - vital EI replaces interlocking circuits Thus less space required for signal equipment room (Relay rooms).

(e) Less power supply as compared with existing PI/ RRI’s. Less failures, less wiring, less soldering, less complexity in the circuit.

(f) Enables usage of OFC (with Object Controller) which reduces requirement of Copper cables , their cost & maintenance.

(g) Remote operation of signals, points, and level crossings controls is feasible. Thus Compatible with centralized traffic Control.

(h) All EI’s are designed and manufactured as per the international safety committees - such as CENELEC STANDARDS (European countries).

(i) Standard of safety and reliability is higher as compared with existing relay interlocking systems (PI/RRI).

(j) Datalogger / Event logger is an integral part of EI.

(k) Self-diagnostic in feature: i.e. error code/ alarm code messages will be displayed on display cards or on the front panel of printed circuit boards. Hence easy for rectification of failures and reduces the failure duration.

Policy on type of Interlocking to be adopted :

Board has decided the following policy to be adopted on IR vide Board’s letter Nos. 2003/Sig/G/5 dt. 10-09-2003 and 2003/Sig/G/5/Pt. Dated 30th January, 2006

Up to 50 routes Relay based interlocking of Metal to Carbon or Metal to Metal type according to the expertise available on the railway.

(In special cases, EI may also be adopted in installations below 50 routes on a case to case basis. Such proposals for EI at signalling installations below 50 routes have to be justified on a case to case basis based on life cycle cost including capital cost, annual maintenance cost, depreciation provision, saving due to avoidance of repeated relay wiring due to anticipated yard remodeling etc. and concurrence of the associate finance obtained.)
50 to 200 routes  Electronic interlocking.

Above 200 Routes  RRI with relay based interlocking of Metal to Carbon or Metal to Metal type according to the expertise available on the railway.

(Note: Bd has directed RDSO to finalise new Specification for EI for above 200 routes also vide Lr No. 2008/SIG/SGF/4 /EI /GEN dt 29/07/09)

Note: The above policy will be applicable to all new works and such of those sanctioned works where detailed estimates are not yet sanctioned.

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Chapter 16
TELECOMMUNICATION

Telecommunication is the key to effective control and efficient working of each and every organization. In Railways, for effective, efficient and economical train operations, a wide telecommunication network is required. Broadly the railway’s requirements can be classified as

a. Administrative
b. Operational

I. ADMINISTRATIVE (MANAGEMENT SUPPORT)

Communication amongst Area Control Office, Divisional Offices, Zonal Offices, Railway Board office etc :-

a. Telephone Exchanges and
b. Microwave/UHF/Optical cable networks.

Location not on Railway network are provided with administrative communication on hired trunk lines from DOT (P&T)

Major Administrative Communication Services are :-

1. Telephones (STD, OTD, Trunk working)
2. Teleprinters
3. Fax/Telex
4. Intercom
5. Data Circuits

II OPERATIONAL COMMUNICATION

1. Telecom which spread over Long Distance

1. Control Communication
2. Hot lines for train operation
3. Magneto phone communication for L/C
4. Block phone commun.
5. Pagers for train crew
2. Telecom limited to station yard etc.

1. Paging and talk back  
2. PA system  
3. C.C.T.V.  
4. Walkie Talkie (VHF)  
5. Station intercom

3. In addition, the telecommunications play a vital role in the areas of

1. Passenger Amenities and
2. Disaster Management

For Passenger Amenities the important services are :-

1. Public Address System  
2. PRS (Data communication)  
3. Enquiry : Auto Announcing System, IVR  
4. Train indicators (Arrival/Departure)  
5. Platform clocks (Master-slaves network)

Communication during emergencies (Disaster Management)

1. VHF  
2. Satellite phone communication  
3. HF (SSB)  
4. Single channel Radio through DOT network

**CONTROL COMMUNICATION**

Omnibus telephone ckts. Which provides common with each train working point.

1. Section control/Train control :-

For the control of train movements and effective utilization of section capacity.

Connected to way side stn., Jn. Stn., cabins, loco-sheds, yards.

2. Deputy control circuit :-
For supervision of traffic operation.
Communicates with important stns., Jns, terminal stns, YM office, Loco sheds.

3. Loco power control :-
For the optimum utilization of the locomotives, electrical, diesel or stream locos.
Connected to various loco sheds, important stns., yards.

4. Traction power control :-
Special circuit in electrified section
For the efficient maintenance and operation of the electric overhead system.
Provided between TPC and SM, Grid stns. Feeding posts, sectioning posts, subsectioning posts,

5. Emergency control circuit :-
Spl. Ckt. in electrified sections. For the train crew in emergencies. Terminated at every 1 km.

6. Engineering control :-
To obtain traffic block and to monitor ballast/material trains.

FUNCTIONS OF TRAIN CONTROL

1. Ensuring speedy and smooth movement of trains
2. Abnormal working
3. Control of engineering and other blocks
4. Recording train movement
5. Synchronizing of clocks at stations
REQUIREMENT OF TRAIN CONTROL

1. Controller able to talk to all stations
2. Ring up individually or simultaneously all stations
3. Ring back tone from way station Eqpt.
4. Way station able to call the attention of controller
5. Ringing should not interfere with speech
Harnessing Railway’s “Right Of Way” : Optic Fibre backbone for IR : RAILTEL:

- RailTel Corporation of India Limited has been established on September 26, 2000 as a Public Sector Undertaking (a 100% subsidiary under Ministry of Railways).
- RailTel has been set up primarily to exploit Railways’ communication assets lying idle commercially. Railways have built a large telecom infrastructure over years for meeting their own communication requirement for train operation and safety.
- RailTel will augment and modernize the existing infrastructure for providing communication facilities to Railways and for commercial purposes.

OBJECTIVES of RAILTEL:

- To expeditiously modernise Railways' train control, operational and safety systems and networks.
- To create a nationwide broadband telecom and multimedia network to supplement national telecom infrastructure to spur growth of telecom internet and IT enabled value added services in all parts of the country specially rural, remote and backward areas.
- To significantly contribute to realisation of goals and objectives of National Telecom Policy, 1999 and
- To generate much needed revenues for implementing Railways’ development projects, safety enhancement and asset replacement programmes

IMPLEMENTATION PLAN

RailTel has plans to build high speed OFC based network using DWDM/SDH technologies on 40,000 route kms in phased manner.

- RailTel has laid OFC upto 37000 km.
- It is planned to lay OFC on 46338 route km.
- RailTel has plans to lay Optical Fibre Cable for providing communication to the Railways as well as for commercial use of surplus capacity. As Railways communication requires dropping of channels at each station, bandwidth will be available at each railway station. Railways will need 2-8 MBPS out of 155 MBPS the remaining capacity will be used for other purposes like for Internet, STD/ISD services in rural and remote areas.
Infrastructure Provider Services: RailTel would provide leased lines to telecom services providers to begin with along with other infrastructure like tower space, co-locational facilities under IP-I and IP-II licenses.

**Mobile Communication on Indian Railways**

Indian Railways is also going in for provision of Mobile Communication in a big way. Known as MTRC (Mobile Train Radio Communication)

GSM(R) technology has been selected for the MTRC Works (R stands for Railways). GSM(R) Global System for Mobile Communications is specially suited for railway applications. It has facilities of Broadcast Call, Group Call, Emergency Call as well as feature of calling trains by their train nos.

Loco Pilots, Motorman and Guards are entitled for CUG with Rs. 300 monthly CUG usage charges including rental.

**Communication between Driver & Guard in Rajdhani & Shatabdi Trains**

Magneto phone between Driver & Guard was provided in Rajdhani & Shatabdi Trains. At times it creates problem.

In place of Magneto Phone, Walki Talki VHF Sets are to be provided.
Chapter 17

Common Abbreviations Used in Signalling & Telecom

AWS: Auxiliary Warning System
ATO: Automatic Train Operation
AFTC: Audio Frequency Track Circuits
ACD: Anti Collision Device
BPAC: Block Proving by Axle Counters
CTC: Centralised Traffic Control
DWDM: Dense Wave Division Multiplexing
ERTMS: European Railway Traffic Management System
FOIS: Freight Operation Information System
GPS: Global Positioning System
KBPS: Kilo Bits Per Second
LED: Light Emitting Diode: LED Signals
LQ: Lower Quadrant
MBPS: Mega Bits Per Second
MPLS: Multi Protocol Label Switching
MTRC: Mobile Train Radio Communication
MACLS: Multiple Aspect Colour Light Signalling
MAUQ: Multiple Aspect Upper Quadrant
MRTS: Mass Rapid Transit System
OFC: Optic Fiber Communication
PI: Panel Interlocking
RRI: Route Relay Interlocking
SDH: Synchronous Digital Hierarchy
STM: Synchronous Transfer Module
SSI: Solid State Interlocking
TMS: Train Management System
TPWS: Train Protection & Warning System
TAWD: Track Actuated Warning Device
VSAT: Very Small Aperture Terminal
Wi Fi: Wireless Fidelity

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भाषा कासहिन - भाग-5(120), भाग-6(210) और भाग-17(343 से 351)
भाग-5
अनुवंश-120 : संसद मैपर्स्कुल होजेवलीभाषा
भाग-6
अनुवंश-210 : वधिन-मांड मैपर्स्कुल होजेवली
भाषा।
भाग-17
अनुवंश-343 : संध कीरा भाषा
(1) संध की राजभाषा हदिनी और लिथि दवेनागरी हगी। संध के शासकी पर्योजनों के लए पर्योज होजेवले अक्सर कारपु भाषती अक्सोका अस्तर्णद्वरी रपु हगी।
(2) सबधिन लगूहोजेसे (26 जनवरी 1950) 15 वरष (26 जनवरी 1965) तक अधर्मी भाषा सरकारी स्थापामैपर्स्कुलत्वातीरहगी।
(3) संसद 26 जनवरी 1965 अर्थ हे 15 सल के बाह भी अधर्मी भाषा या दवेनागरी अक्सो के
पर्याय कोविधितिदिव्याविदीरिदिशिष्ट पर्यायाओं में ज़रीरख सकेगी।

अनुच्छेद-344: राजभाषालिए आयो और ससंद कीसमहिलििि

अनुच्छेद-345: राजय कीरजभाषायारजभाषाइिे 

अनुच्छेद-346: एक राजय और दसरेरेबी में अथवाराजय और सहं केबी मेसजेंस के लिए राजभाषा।

अनुच्छेद-347: कसीराजय केजनससाद्व के कसीभाग दक्षाबोधीजनेवारीभाषाके सबधं मैनशिले उपन्याय।
अनुच्छेद-348: उच्चतम नयंशब्द और उच्च
नयंशब्दयोगमेंस्थानीकृति विधियों
आदिमेंपयो कीजनेवजीभणा।

अनुच्छेद-349: भ्रासबंधीकछ विधियोंको
अधिनियमति करनेकोलए वशिष्ये पर्कर्यिया
।

अनुच्छेद-350: कसिीद्वथाकेनकिसण कोलिए
सघं यार्ज्जु केकसीपद्रधिकिर्शीया
परधिकिर्शीकोयथास्थितिमिसघं मेंया
राज्जु मैप्यो ग्रन्थवानीकसीभजामें
अभयवदेन दबेकापरत्यक कोहक होगा।

अनुच्छेद-351: हद्दीभाषाकेविस कोलिए
नदिशेष सघं कायक कर्तवः गोकविह
हद्दीभाषाकापरस्सा बढः उसकाविस
करेतकविवह भाषत कीसमासकि ससकृति के सभीतत्वोकी अभवियककत्रिकामध्यम बन सकें और उसकीप्रकृतीमेंसत्तकः कपि बनिखड़सत्तनीकेए आठवी अनुसूचीमेंविशिष्टिति भाषत कीअन्य
भाषोंकेव्यक्त रुप, शब्दीको आत्मसत करतेहए और जहााँअवश्यक यावाशनये होवहाँउसकेशबद्ध-भंडंग के लए मखय्त्तससंकः सेोर गृहोत्अनय भाषओंसेशबद्ध गर्हण करतेहए उसकी समदृश्निशिष्टिति करे।

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राष्ट्रव्यास सबधिनीसंबंधिनक तथाविधि उपबंध

सामन्य- संघ कीर्तिभाषावेंगरालिफिमें हदीहै परत्रहदीकेअतरिक्त अगर्ज़ीभाषज्ञका प्रयोग भीसरकसीकमकाम मेंकथियाजासकता है (संबंधिन अनुच्छेद 343 (1) तथार्शभाषा अधिनियम कीथाँ3)

1.1 संसद मैंस्थाकृत हजेवजीभाषा
संबंधिन केअनुच्छेद 348 केउपबंधांकेअधी रहतेहए संसद मंजकाम हदीमेंयाअगर्जीमें कथियाजासकता है परत्रहथ सभाका सभापतियालके सभाका अध्यक्ष अथवा ऐसे रघु मंजक्ष्य करनेवालार्थिस्टिदन के कसीसदसय कोअपनीमंजक्ष्यामेंस्टिदन का सबंधित करनेकी अनमुत्तिदेरकता है

1.2 कसी प्रयोगोनीकेलए केलेह हदीकाप्रयोग कथियाजानहै कलिकेलए हदीही और अगर्ज्ञीदलनें
भाषाओं कार्यों आवश्यक है किसी अगर भाषा कार्यों का क्या जाना है और किसी कार्यालय के हिंदी अगर जीदें अभाष आकांक्षों पर्यों का क्या जाना सकता है यह राजभाषानियम 1963, राजभाषानियम 1976 और उनके अन्तर्गत समय-समय पर राजभाषाविभाग, गहू महत्त्व की ओर से सीमित गए नदिशों द्वारा शासन राज्य के क्षेत्र या कार्यालयों

1.3 राजीवादियों और कदनधी सरकार केकाश्मयोंकोछ्नेर दसरे कार्यालयों

याबुज्जमिंसेपत्यु वषवहारा
कदनधी सरकार के कार्यालय से क्षेत्र क में किसी राज्य या संघ राज्य क्षेत्र के कार्यालय को या ऐसे राज्य या संघ राज्य क्षेत्र में कदनधी सरकार के कार्यालय को छोड़कर किसी अन्य कार्यालय या व्यक्ति को पत्र आदि असाधारण दशाओं को छोड़कर हिंदी में भेजे जाएं। यदि उनमें से किसी को कोई पत्र आदि अंग्रेजी में भेजा जाता है तो उसके साथ उसका हिंदी अनुवाद भी भेजा जाए।

(राजभाषानियम 3 (1)

1.4 कदनधी सरकार के कार्यालय से क्षेत्र ख में किसी राज्य या संघ राज्य क्षेत्र के कार्यालय को या ऐसे राज्य या संघ राज्य क्षेत्र में स्थित कदनधी सरकार के कार्यालय को छोड़कर किसी अन्य कार्यालय को या व्यक्ति को पत्र आदि
सामान्यतया हिंदी में भेजे जाएं। यदि उनमें से किसी को पत्र आदि अंग्रेजी में भेजे जाते हैं तो उनके साथ उनका हिंदी अनुवाद भी भेजा जाए।

(राजभाषा नियम 3 (2))

1.5 केंद्रीय सरकार के कार्यालय से क्षेत्र ग में किसी राज्य या संघ राज्य क्षेत्र को, या ऐसे राज्य में केंद्रीय सरकार के कार्यालय को छोड़कर किसी अन्य कार्यालय या व्यक्ति को पत्र आदि अंग्रेजी में भेजे जाएं।

(नियम 3 (3))

1.6 क्षेत्र ग में केंद्रीय सरकार के कार्यालय से क्षेत्र क या ख में स्थित किसी राज्य या संघ राज्य क्षेत्र के कार्यालय को या केंद्रीय सरकार कार्यालय के क्षेत्र को छोड़कर ऐसे राज्य में स्थित अन्य कार्यालय या व्यक्ति को पत्र आदि हिंदी या अंग्रेजी में भेजे जा सकते हैं राजभाषा विभाग द्वारा प्रतिवर्ष वार्षिक कार्यक्रम में निर्धारित किया जाता है कि पत्र आदि में हिंदी का प्रयोग किस अनुपात से किया जाए।

(नियम 3 (4))

1.7 केंद्रीय सरकार के एक मंत्रालय या विभाग और किसी दूसरे मंत्रालय या विभाग के बीच पत्र आदि हिंदी या अंग्रेजी में हो सकते हैं।

(नियम 4 (क))

1.8 केंद्रीय सरकार के एक मंत्रालय या विभाग और क्षेत्र क में स्थित संबंध या अधीनस्थ कार्यालयों के बीच पत्र आदि हिंदी में या उस अनुपात से भेजे जाने हैं, जो राजभाषा विभाग प्रत्येक वर्ष वार्षिक कार्यक्रम में निर्धारित करता है।

(नियम 4 (ख))

1.9 केंद्रीय सरकार के मंत्रालय या विभाग को छोड़कर क्षेत्र क में स्थित केंद्रीय सरकार के कार्यालयों के बीच पत्र आदि हिंदी में भेजे जाएं।

(नियम 4 (ग))

1.10 क्षेत्र ख और क्षेत्र ग में स्थित कार्यालयों का आपस में, और क्षेत्र क में स्थित केंद्रीय सरकार के कार्यालयों के साथ, पत्र व्यवहार हिंदी या अंग्रेजी में हो सकता है। यह पत्र व्यवहार किस अनुपात में किया जाए, यह राजभाषा विभाग द्वारा हर वर्ष जारी किए गए वार्षिक कार्यक्रम में निर्धारित किया जाता है।

(नियम 4 (घ) व (ड))
1.11 क्षेत्र क या क्षेत्र ख में स्थित किसी केंद्रीय सरकार के कार्यालय को संबोधित पत्र आदि का दूसरी भाषा में अनुवाद भेजने की आवश्यकता नहीं। इसका दूसरी भाषा में अनुवाद, पत्र आदि प्राप्त करने के स्थान पर किया जाएगा।

(नियम 4 का परंतुक (1))

1.12 क्षेत्र ग में स्थित केंद्रीय सरकार के किसी कार्यालय को यदि कोई पत्र हिंदी में भेजा जाता है और ग क्षेत्र में स्थित यह कार्यालय राजभाषा नियम 10 (4) के अनुसार व्यवस्थित नहीं होता। क्षेत्र ग में स्थित केंद्रीय सरकार के दूसरे कार्यालयों को यदि पत्र हिंदी में भेजा जाता है तो उसका अंग्रेजी भाषा में अनुवाद उसके साथ भेजा जाए।

(नियम 4 परंतुक (11))

1.13 हिंदी/अंग्रेजी पत्रों की संबंधितता
हिंदी में पत्र आदि का उत्तर चाहे वे किसी भी क्षेत्र से प्राप्त हों और किसी भी राज्य सरकार, व्यक्ति या केंद्रीय सरकार के कार्यालय से प्राप्त हों, केंद्रीय सरकार के कार्यालय से हिंदी में दिया जाए।

(नियम 5)

1.14 आवेदन, अभ्यावेदन आदिकी संबंधितता
कोई कर्मचारी आवेदन, अपील या अभ्यावेदन हिंदी या अंग्रेजी में कर सकता है। यदि कोई कर्मचारी अपना आवेदन, अपील या अभ्यावेदन हिंदी में करता है या उस पर हिंदी में हस्ताक्षर करता है तो उसका उत्तर हिंदी में दिया जाए।

(नियम 7 (1,2))

1.15 संयुक्त आदेश या तथ्यों
यदि कोई कर्मचारी यह चाहता है कि संयुक्त आदेश (जिसके अंतर्गत अनुशासनिक विषयावली भी है) से संबंधित कोई आदेश या सूचना, जिसको कर्मचारी पर लागू किया जाना अपेक्षित है, हिंदी या अंग्रेजी में होना चाहिए, तो वह उसे किसी विज्ञापन के बिना उसी भाषा में दिया जाए।

(नियम 7 (3))

1.16 दस्तावेजों आदिकी अनुशासनिक भी नकारात्मक
निम्नलिखित दस्तावेज आदि हिंदी और अंग्रेजी दोनों भाषाओं में जारी किए जाएं:-
(1) संकल्प, साधारण आदेश, नियम अधिसूचनाएं, प्रशासनिक या अन्य प्रतिवेदन या प्रेस विज्ञप्ति।
(2) संसद के किसी सदन या सदनों के समक्ष रखे गए प्रशासनिक तथा अन्य प्रतिवेदन और राजकीय कागज़ पत्र।
(3) संविदाओं और कारों का निष्पादन लाइसेंस, परमिट और टेंडर के लिए नोटिस और प्रस्तुत।

(अधिनियम की धारा 3 (3)

1.17 मैनुअल, संहिताएं, प्रक्रिया संबंधी अन्य साहित्य, लेखन सामग्री आदि

(क) सभी मैनुअल, संहिता और प्रक्रिया संबंधी अन्य साहित्य हिंदी और अंग्रेजी में द्विभाषी रूप में मुद्गित या साइक्लोस्टाइल किया जाए और प्रकाशित किया जाए।
(ख) केंद्रीय सरकार के किसी कार्यालय में प्रयोग किए जाने वाले रजिस्ट्रेशन के प्रस्तुत और शीर्षक हिंदी और अंग्रेजी दोनों भाषाओं में हो।
(ग) केंद्रीय सरकार के किसी कार्यालय में प्रयोग के लिए सभी नाम पत्त, सूचना पत्त, पत्र शीर्षक और लिफाफ़ पर उत्कीर्ण लेख तथा लेखन सामग्री की अन्य मद्दे हिंदी और अंग्रेजी दोनों भाषाओं में लिखी जाएं व मुद्गित या उत्कीर्ण की जाएं।
यदि केंद्रीय सरकार ऐसा करना आवश्यक समझती है तो वह साधारण या विशेष आदेश द्वारा केंद्रीय सरकार के किसी कार्यालय को इस नियम के सभी या किसी उपबंध से छूट दे सकती है।

(नियम 11)
इस प्रत्यक्ष के अधीन छूट के लिए कोई प्रस्ताव उसका पूरा औपचारिक दिखाते हुए राजभाषा विभाग को भेजा जाए।

1.18(क) केंद्रसध्यक जब्त
यह समझा जाएगा कि किसी कर्मचारी को हिंदी का कार्यसंगठक ज्ञान प्राप्त है, यदि उसने
(1) मैट्रिक परीक्षा या उसके समतुल्य या ऊंची परीक्षा हिंदी विषय के साथ उत्तीर्ण कर ली है, या
(2) केंद्रीय सरकार के हिंदी शिक्षण योजना के अंतर्गत आयोजित प्राप्त परीक्षा उत्तीर्ण कर ली है, या यदि केंद्रीय सरकार द्वारा किसी विशिष्ट पदों के संबंध में उस योजना के अंतर्गत कोई निम्नतर परीक्षा विनिमित्त है तो वह परीक्षा उत्तीर्ण कर ली है, या
(3) केंद्रीय सरकार द्वारा इस बारे में विनिमित्त कोई अन्य परीक्षा उत्तीर्ण कर ली है, या.
(4) वह राजभाषा नियम के संलग्न प्ररूप में यह घोषणा करता है कि उसने हिंदी का कार्यसाधक जान प्राप्त कर लिया है।

(नियम 10)

1.18 (ख) पर्यालोचना
किसी कर्मचारी के बारे में यह समझ जाएगा कि उसने हिंदी में प्रवीणता प्राप्त कर ली है, यदि उसने-
(1) मैट्रिक परीक्षा या उसके समतुल्य या उससे ऊँची कोई परीक्षा हिंदी में माध्यम से उत्तीर्ण कर ली है, या
(2) स्नातक परीक्षा में अथवा स्नातक परीक्षा के बराबर या उससे ऊँची किसी परीक्षा में हिंदी को एक वैकल्पिक विषय के रूप में लिया है, या.
(3) वह राजभाषा नियम में संलग्न प्ररूप में यह घोषणा करता है कि उसे हिंदी में प्रवीणता प्राप्त है।

(नियम 9)

1.18(ग) केन्द्रीय सरकार के कार्यालयों में प्रयोग किया गया नियम आदि
केंद्रीय सरकार ऐसे कार्यालयों को जिनमें कार्य करने वाले कर्मचारियों में से 80 प्रतिशत ने हिंदी का कार्यसाधक जान प्राप्त कर लिया है और जो राजभाषा नियम 10 (4) के अंतिम अधिष्ठात्रित किए जाएंगे हैं, विनिर्देश कर सकती है कि उनमें ऐसे कर्मचारियों द्वारा जिन्हें हिंदी में प्रवीणता प्राप्त है, टिप्पणी, प्रारूपण और ऐसे अन्य शासकीय प्रयोजनों के लिए, जो आदेश में विनिर्देश किए जाएं केवल हिंदी का प्रयोग किया जाएगा।

(नियम 8(4), 10 (2) और 10(4)

1.19 उपर्युक्त को छोड़कर कोई कर्मचारी किसी फाइल पर टिप्पणीं या कार्यवृत्त हिंदी या अंग्रेजी में लिख सकता है और उससे यह अपेक्षा नहीं की जाएगी कि वह उसका अनुवाद दूसरी भाषा में प्रस्तुत करे।

(नियम 8(1)

1.20 कर्मचारीद्वारा अंग्रेजी अनुवाद कीमत
केंद्रीय सरकार का कोई भी कर्मचारी, जो हिंदी का कार्यसाधक जान रखता है, हिंदी में किसी दस्तावेज के अंग्रेजी अनुवाद की मांग तभी कर सकता है जब वह दस्तावेज विधिक या तकनीकी प्रकृति के हैं, अन्यथा नहीं। यदि यह प्रश्न उठता है कि कोई दस्तावेज विधिक या तकनीकी प्रकृति का है या नहीं, तो विभाग या कार्यालय का प्रमाण उसका निर्णय करेगा।

(नियम 8(2), और (3)
1.21 अनुपस्थित काउंटरस्ट्राइड्यूटीव

पैरा 1.16 में दिए गए दस्तावेजों पर हस्ताक्षर करने वाले व्यक्ति का यह उत्तरदायित्व है कि वह यह सुनिश्चित कर ले कि ये दस्तावेज हिंदी और अंग्रेजी दोनों ही में तैयार किए जाते हैं, निष्पादित किए जाते हैं और जारी किए जाते हैं।

(नियम 6)

1.22 केंद्रीय सरकार के प्रत्येक कार्यालय के प्रशासनिक प्राधिकार का यह उत्तरदायित्व है कि वह यह सुनिश्चित करे कि राजभाषा अधिनियम और राजभाषा नियम के उपबंधों का समृद्धित रूप से अनुपलन हो रहा है और इस प्रयोजन के लिए उपयुक्त और प्रभावकारी जांच के उपाय करे।

(नियम 12 (1) )

1.23 केंद्रीय सरकार (राजभाषा विभाग) द्वारा राजभाषा अधिनियम और राजभाषा नियम के उपबंधों के पूरी तरह अनुपलन के लिए अपने कर्मचारियों और कार्यालयों का समय-समय पर आश्चर्यनिदेश जारी किए जाते हैं। कार्यालय के प्रशासनिक प्राधिकार का यह भी उत्तरदायित्व है कि वह इन निदेशों का पालन सुनिश्चित करे।

(नियम 12(1), व (2) )

1.24 अक्षर

संघ के शासकीय प्रयोजनों के लिए भारतीय अंकों का अंतर्राष्ट्रीय रूप (1,2,3,4,5,6,7,8,9,0) प्रयोग मेंसंयोजा जाए।

(संविधान का अनुच्छेद 343 (1))

1.25 राष्ट्रपति, संघ के शासकीय प्रयोजनों में से किसी प्रयोजन के लिए भारतीय अंकों का अंतर्राष्ट्रीय रूप के अतिरिक्त देवनागरी रूप (१,२,३,४,५,६,७,८,९,०) का प्रयोग प्राधिकृत कर सकते हैं। इसके अधीन राज्यों के राज्यपालों उर्फ़ राज्यमण्डल न्यायालय के न्यायाधीशों और उच्च न्यायालयों के न्यायाधीशों की नियुक्ति के अधिपत्रों के लिए भारतीय अंकों के अंतर्राष्ट्रीय रूप के अतिरिक्त अंकों के देवनागरी स्वरूप का प्रयोग करने की अनुमति दी गई है।

(संविधान का अनुच्छेद 343 (2) और विधि मंत्रालय की अधिसूचना सं. एस.आर.ओ.938ए दिनांक 27 मई, 1952) (संकलन क्रम 2)

1.26 उपयुक्त पैरा 1.25 को छोड़कर केंद्रीय सरकार के कामकाज में जहां कहीं भी अंकों का प्रयोग करना हो वहां केवल भारतीय अंकों के अंतर्राष्ट्रीय रूप का ही प्रयोग किया जाए।

(गृह मंत्रालय, राजभाषा विभाग का जा .सं.1/14034/382.रा.भा. (ख-1) )
1.27 संसद के कार्य के लिए हिंदी या अंग्रेजी कोई भी भाषा प्रयोग में लाई जा सकती है।

(संकल्पन अनुच्छदे 120 और अधिनियम 3 (ख) )

1.28 (1) संसद के किसी सदन या सदनों के समक्ष रखे गए प्रशासनिक तथा अन्य प्रतिवेदन और राजकीय कागज पत्र हिंदी और अंग्रेजी दोनों भाषाओं में होने अनिवार्य हैं।

(अधिनियम 3 (ख) )

(2) उपर्युक्त प्रावधान के अंतर्गत मंत्रियों द्वारा लिखित वक्तव्य जैसे कि ध्यानाकर्षण प्रस्ताव के उत्तर में स्थगन प्रस्ताव के उत्तर में, अपने आप दिए जाने वाले वक्तव्य आदि सदन में द्विभाषी रूप में ही परिचालित किए जाएं।

(गृह मंत्री का.आ.शा.पत्र सं. 12021/3/87-रा.भा. (ख-1))

दस्तिकं 18 दस्तिकं, 1987

1.29 विधेयक, अधिनियम आदि का प्राधिकृत पाठ

(1) संसद के प्रति येक सदन या किसी राज्य विधान मंडल के सदन या प्रति येक सदन में पूरे स्थापित किए जाने वाले किसी विधेयक या प्रस्ताव तालिका किए जाने वाले किसी संशोधन का,

(2) संसद या किसी राज्य के विधान मंडल द्वारा पारित किसी अधिनियम और राष्ट्र दृष्टि या किसी राज्य विधान द्वारा प्राप्त ग्राहित किसी अधिनियम बाहरिल अधिनियम का, और

(3) संविधान के अधीन अथवा संसद या किसी राज्य के विधान मंडल द्वारा बनाई गयी किसी विधि के अधीन जारी किए गए किसी अदेश, नियम, विनियम और उपविधि का प्राधिकृत पाठ अंग्रेजी भाषा में माना जाता है।

संविधान अनुच्छेद 348 (ख)
शासकी राजपत्र मेरेजपतिकेप्रधकिस सेवकशति पर्धकिस पठ-

() कसिकठेंगी अधिलियिम कायारजपति दक्षापरियणति कसिअधयब्लशे का अथवा

(ख) संविधानके अधीन या किसी केंद्रीय अधिनियम के अधीन निकाले गए किसी अदेश, नियम, विनिमय या किसी उपविधि का शासकीय राजपत्र में राष्ट्रपति के प्राधिकार से प्रकाशित हिंदी में अनुवाद, उसका हिंदी में प्राधिकृत पाठ माना जाता है।

(अधिलियिम धारा5 (1)

(ग) संसद कोक्सीवीसदन मैपु सर्थालि कपि जावाये विरियको,सर्थोनोकेअगशेमेेजीचामरगर्मकिस पठ का हिंदीमेंअनवुद सरकारीविधियक याक्सीविधियक के सबंध मैसरका दवापरसचालि सशीषन होके, सबंधति मतनीद्वाराओ वरूटेड सदसय कॉक्सियक या वरूटेड सदसय दवापरदूवति सशीषन दशावाहोके राजयभालोकसभाकेशचिल्लय केपरस्थित अधिकारी कोहसताक्षेठोर्केस्थित कोहिजाजाहै।
(अधिनियम 5(2) तथाराजभाषा/अधिसिद्धानासं)

11011/2/72 राभा (क-1)

दिनां 1 जनवरी 1976

1.31 राज्योंके अधिनियमों अध्यक्षोंके ऐतिहासिक हिंदीपत

जहां किसी राज्य के विधान मंडल ने उस राज्य के विधान मंडल द्वारा पारित अधिनियमों में अथवा उस राज्य के राज्यपाल द्वारा प्रकाशित अध्यदेशों में प्रयोग के लिए हिंदी से बिन्दु कोई भाषा निर्धारित की है, वहां उस राज्य के राज्यपाल के प्राधिकार से उस राज्य के शासकीय राजपत्र में उस अधिनियम या अध्यदेश का हिंदी में प्रकाशित अनुवाद हिंदी भाषा में उसका प्राधिकृत पाठ समझा जाता है।

(अधिनियम कोडशा6)

1.32 उच्चतम/उच्च न्यायालय कीभाषा

उच्चतम न्यायालय और प्रत्येक उच्च न्यायालय में सभी कार्यवाहियां अंग्रेजी भाषा में की जानी अपेक्षित है।

सर्वाधिकार अनंतिचुदे 348 (1) (क))

परंतु किसी राज्य का राज्यपाल, राष्ट्रपति की पूर्व सहमति से उस उच्च न्यायालय जिसका मुख्य स्थान उस राज्य में है, की कार्यवाहियों में (उच्च न्यायालय द्वारा दिए गए निर्णयः डिक्री या आदेश को छोड़कर) हिंदी भाषा का या उस राज्य के शासकीय प्रयोजनों के लिए प्रयोग में आने वाली किसी अन्य भाषा का प्रयोग प्राधिकृत कर सकता है।

(सर्वाधिकार अनंतिचुदे 348 (2)

इस पर्वधन के अधीन उत्तर परदेश, मध्य परदेश, बहिर्र और राजस्थान मैं स्थित इलाकों
जबलपुरु पटनाओं और जोधपुर उच्च न्यायालयों में हिंदीकार्ययों परस्परकिस्त कथित किया गया है

1.33 उच्च न्यायालय के भाषाविभाजन और संशोधन आयोग में वर्तमान राज्यों के लिए परिदृश्य

(1) किसी राज्य का राज्यपाल, राज्य का अध्यक्ष की पूर्व सहमति से अंग्रेजी भाषा के अनुवाद या हिंदी या उस राज्य के राज्यपाल का प्रयोग उस राज्य के उच्च न्यायालय द्वारा पारित या दिए गए किसी निर्णय, डिकी या आदेश के प्रयोजन के लिए भी प्राधिकृत कर सकता है, पर ऐसी स्थिति में उसके साथ साथ उच्च न्यायालय के अधिकार से निकले गए अंग्रेजी भाषा में उसका अनुवाद भी साथ लगा जाएगा।

अधिनियम की धारा (7)

इस परिदृश्य के अधीन उत्तर परदेश, मध्य परदेश, बंगाल और राजस्थान में सूचना प्रदान, जबलपुरु पटनाओं और जोधपुर उच्च न्यायालय में निश्चय, डिकीयारायादेश के लिए हिंदीकार्ययों परस्परकिस्त कथित किया गया है

(2) इन उच्च न्यायालयों द्वारा हिंदी में दिए गए निर्णय, डिकी या आदेश को प्राधिकृत और अधिप्रभावित माना जाएगा। यह अपेक्षा कि ऐसे दो निर्णयों के साथ उच्च न्यायालय के प्राधिकार से निकलेगए अंग्रेजी भाषा में अनुवाद भी सम्मिलित किया जाए, एक अतिरिक्त सांख्यिक अपेक्षा है, इससे हिंदी में दिए गए निर्णय का अधिप्रभावित या प्राधिकृत स्वरूप समाप्त नहीं होता।

(राजभाषा विभाग कार्यालय जापन सं.1/21011/12/76-रा.भा. (क-1) 
दिनांक 6.4.1976, संकलन क्रम सं.11)
1.34 संसदीय राजभाषा समिति

राजभाषा अधिनियम की धारा 4 के अथवा संसदीय राजभाषा समिति गठित की गई है। इस समिति में 30 सदस्य हैं, जिनमें से 20 लोकसभा तथा 10 राज्य सभा के सदस्य हैं, जो क्रमशः लोक सभा के सदस्य तथा राज्य सभा के सदस्यों द्वारा अनुपातिक प्रतिनिधित्व प्रणाली के अनुसार एकल संक्रमणीय मत द्वारा निर्वाचित किए गए हैं। इस समिति का कर्तव्य है कि इस संघ के राजकीय प्रयोजनों के लिए हिंदी के प्रयोग में की गई प्रगति का पुनर्विलोकन करे और उस पर सिफारिश करते हुए राष्ट्रपति को प्रतिवेदन करे। राष्ट्रपति उस प्रतिवेदन को संसद के हर सदन के समक्ष रखवाएंगे और सभी राज्य सरकारों को भिजवाएंगे। राष्ट्रपति इस प्रतिवेदन पर और उस पर राज्य सरकारों ने यदि कोई मत व्यक्त किए हों तो उन पर, विचार करने के पश्चात उस प्रतिवेदन के या उसके किसी भाग के अनुसार निदेश निकालेंगे, पर इस प्रकार निकाले गए निदेश राजभाषा अधिनियम की धारा 3 के उपबंधों से असंगत नहीं होंगे।

(अधिनियम की धारा 4)

1.35 हिंदीकार्यवस्था और विकास

राजभाषा नियम 2 (ख) के अनुसार केंद्रीय सरकार के कार्यालय के अंतर्गत निम्नलिखित भी शामिल हैं -

(1) केंद्रीय सरकार का कोई मंत्रालय या विभाग या कार्यालय लेखन और विभागीय कार्यक्रमों में हिंदी का प्रयोग करने वाली भाषा के रूप में मंत्रालय या विभाग के अधीन शामिल है।

(संविधान का अनुच्छेद 351)

1.36 केंद्रीय सरकार के कार्यवाहीपरिषद अधिकारियों

राजभाषा नियम 2 (ख) के अनुसार केंद्रीय सरकार के कार्यालय के अंतर्गत निम्नलिखित भी शामिल हैं -

(1) केंद्रीय सरकार का कोई मंत्रालय या विभाग या कार्यालय
(2) केंद्रीय सरकार द्वारा नियुक्त किसी आयोग समिति या अधिकरण का कोई कार्यालय और
(3) केंद्रीय सरकार के स्वामित्व में या नियंत्रण के अधीन किसी निगम या कंपनी का कोई कार्यालय।

इसलिए राजभाषा अधिनियम राजभाषा नियम सरकारी उपक्रमों और भारतीय रिजर्व बैंक, राष्ट्रीय बैंक और ग्रामीण विकास बैंक, भारतीय औद्योगिक विकास बैंक सहित सभी राष्ट्रीय बैंकों पर उसी तरह लागू होते हैं जिस प्रकार केंद्रीय सरकार के अन्य कार्यालयों पर लागू होते हैं। संघ की राजभाषा नीति उन पर भी लागू होती है।

(राजभाषा विभाग का कार्यालय जापन सं. 1/14013/35/85-राभा (क-1).
दिनांक 6.6.1985-संकलन क्रम सं.13)
(का.जा .सं.12027/77/86 रा.भा. (ख-2), दिनांक 6.8.1987)

1.37 क,ख तथा ग क्षेत्र

क क्षेत्र - इसके अन्तर्गत बिहार,हरियाणा,हिमाचलप्रदेश,मध्य प्रदेश छत्तीसगढ़,ज्यादां,उत्तराखंड,राजस्थान और उत्तर प्रदेश राज्य तथा अंडमान निकोबार द्वीप समूह, दिल्ली संघ राज्य क्षेत्र शामिल हैं।

ख क्षेत्र - इसके अन्तर्गत गुजरात,महाराष्ट्र और पंजाब राज्य तथा चंडीगढ़,दादरा नगर हवेली संघ राज्य क्षेत्र शामिल हैं।

ग क्षेत्र - इसके अन्तर्गत क तथा ख क्षेत्रों में शामिल राज्यों और संघ राज्य क्षेत्रों के अलावा राज्य तथा संघ राज्य क्षेत्र शामिल हैं।

(राजभाषा नियम 2 (च) (छ) (ज))

(1) 1.38 संघ शासित क्षेत्रों में राजभाषा नीति का कार्यान्वयन

संघ राज्य क्षेत्र दिल्ली और अण्डमान निकोबार द्वीप समूह में केंद्रीय सरकार की राजभाषा नीति को लागू करने की उसी प्रकार व्यवस्था की जाए जिस प्रकार केंद्रीय सरकार के मंत्रालयों / विभागों तथा अन्य कार्यालयों आदि के बारे में की गई है।

फाइल सं 1714034 /12/88 रा.भा. (क-1) दिनांक 4/7/1987
(2) दादरा व नगर हवेली प्रशासन, लक्षद्वीप प्रशासन और दमन व दल्ली प्रशासन में राजभाषा नीति के अनुपालन की व्यवस्था उसी प्रकार की जाए जिस प्रकार केंद्रीय सरकार के मंत्रालयों / विभागों तथा अन्य कार्यालयों आदि के बारे में की गई है।

(फाइल सं. 20034:80/91-राभा (अ.वि) दि. 16.10.1991)

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राजभाषा नीति संबंधी आदेश

2.1 संज्जन्त आदेश कीपरिवर्तना

स्थायी प्रकार के सभी आदेश, निर्णय, अनुदेश परिपत्र जो विभागीय प्रयोग के लिए हों तथा ऐसे सभी आदेश, अनुदेश पत्र, जापन, नोटिस, परिपत्र आदि जो सरकारी
कर्मचारियों के समूह अथवा समूहों के संबंध में या उनके लिए हो, राजभाषा अधिनियम की धारा 3(3) के अधीन सामान्य आदेश कहलाते हैं।

(का.जा .सं.1/14013/2/78-राभा (क-1)दि. 19.5.98 क्रम सं. 14)

2.2 संबंधित नियमों/आदिकर्तिकाहिदिीही और अग्रेजीसभात के।

राजभाषा अधिनियम 1963 की धारा 3(3) के अनुसरण में संसद में प्रस्तुत किए जाने वाले सांविधिक नियमों, आदेशों आदि का हिंदी स्पून्तर विधि मंत्रालय का विधायी विभाग (राजभाषा खंड) तैयार करता है। संबंधित मंत्रालय विभाग को चाहिए कि उल्लिखित प्रतियो (दस्तावेज) की दो प्रतियाँ तैयार करके एक प्रति विधायी विभाग को और दूसरी उसके राजभाषा खंड को उसी पृष्ठांक और उसी तारीख और क्रम संख्या के अन्तर्गत भेजें। विधायी विभाग नियम, आदेश, अधिसूचना का अंग्रेजी रूप को अंतिम रूप देगा और जांच तथा अन्य कार्यों के बाद संबंधित विभाग को लौटाएगा। जिस रूप में विधायी विभाग ने नियम, आदेश अधिसूचना आदि को अंतिम रूप दिया है उसका हिंदी रूपांतर राजभाषा खंड द्वारा करके संबंधित विभाग को लौटा दिया जाएगा। संबंधित मंत्रालय /विभाग दोनों प्रातियों पर विधिवत हस्ताक्षर करके राजपत्र में प्रकाशनार्थ भुगतानकार्य को एक साथ एक ही तारीख में भेजना सुनिश्चित करें।

(आदेश सं. 2/18/68- राभा दि. 20.3.70 क्रम सं. 15)

2.3 कर्मचारी अधिविधीमों नियमों विभिन्न आदिकर्तिकाहिदिीकहिदिीही हिंदीअनुवाद

केंद्रीय अधिनियमों, नियमों और विनियमों का प्राधिकृत हिंदी अनुवाद विधि मंत्रालय (विधायी विभाग) के राजभाषा खंड द्वारा किया जाता है। कभी-कभी प्राधिकृत हिंदी पाठ की 3 या 4 प्रतियां छपवाने की मांग की जाती है। परिश्रम तो लगता ही है, खर्च भी होता है। इसलिए प्राधिकृत हिंदी अनुवाद को छपवाए जाने की प्रतियों की संख्या की सूचना जनता द्वारा मांगी जाने वाली और कार्यालयों में प्रयोग की जाने वाली संख्या को ध्यान में रखकर ही विधि विभाग के राजभाषा खंड को भेजी जाए।

(का.जा .सं.1/14011/2/81-राभा (क-1) दि.21.11.81 क्रम सं. 16)

2.4 भारत मेंसामंतरय कपि जानेनितसामंतरय कपि हिंदीअंग्रेजी अंमेंतया कपि जानेम
(1) मंत्रालय /विभाग संधियों और काराओं के अंग्रेजी पाठों का हिंदी अनुवाद तैयार करें और विदेश मंत्रालय के विभिन्न संधियों और काराओं में जांच करें। भारत में हस्ताक्षर की जाने वाली सभी अंतरराष्ट्रीय संधियों और काराओं के लिए अंग्रेजी के अतिरिक्त हिंदी का प्रयोग किया जाए किंतु निम्नलिखित को हिंदी में निष्पादित न करने की छूट है:-
(क) विदेशों में कीर्तिनाथ संधियों और काराओं,
(ख) तत्काल प्रकार की संधियों और काराओं जिनका समयानुसार के कारण हिंदी अनुवाद तैयार करना संभव नहीं।
(ग) दुरुपश्चिम, अमितसच्चय और
(घ) रक्षा मंत्रालय की संधियों और काराओं किंतु (क), (ख), (ग) में उल्लिखित कागज का हिंदी अनुवाद अभिमेक्षौं में रखने के लिए करवाया जाएगा।

(2) राजभाषा अधिनियम 1963 के अंतर्गत सब काराओं और संधियों में अंग्रेजी के अलावा हिंदी का प्रयोग आवश्यक है। फिर भी, निर्वाचन के संबंध में कोई मतभेद न हो, इसके लिए केवल मात्र किसी एक पाठ को प्रमाणित समझना वांछनीय होगा। इसलिए अंग्रेजी से हिंदी भाषा-भाषी देशों के साथ उनकी अपनी भाषा, अंग्रेजी और हिंदी में किए जाने वाले काराओं और संधियों में यह व्यवस्था करना उचित होगा कि विवाद की स्थिति में अंग्रेजी पाठ प्रमाणित होगा। अंग्रेजी भाषी देशों के साथ किए जाने वाले काराओं और संधियों में हिंदी और अंग्रेजी दोनों भाषाओं का प्रयोग कराने और दोनों पाठों को प्रमाणित बनवाने के प्रयत्न किए जाएं। हां, यदि दूसरा पक्ष इस बात पर आघात करे कि केवल अंग्रेजी के पाठ को प्रमाणित माना जाए तो उसे फिलहाल स्वीकार कर लिया जाए।

(का.जा .सं.16/21/70 राभा. दि. 31.12.70 क्रम सं.17)
(का.जा .सं.16/21/70 राभा. दि. 24.2.72 क्रम सं.18)

2.5 क क्षेत्र में चेक / ड्राफ्ट हिंदी में कैदियों का स्वीकार

के क्षेत्र में स्थित केंद्रीय सरकार के कार्यालयों द्वारा सभी चेक यथासंभव हिंदी में तैयार किए जाएं। के क्षेत्र में स्थित सरकारी बैंकों द्वारा के क्षेत्र के लिए तैयार किए गए चेक और ड्राफ्ट यथासंभव हिंदी में जारी किए जाएं।

(का.जा .सं.1/14011/3/79- राभा.(क-1) दि. 7.2.1981 क्रम सं.21)
2.6 लिखित पतेंद्री मैसेंजर और पतालेखी बलि बनाने-आदिमा मशीनों का उपयोग

दिल्ली में स्थित स्थानीय कार्यालयों और व्यक्तियों तथा अन्य हिंदी भाषी क्षेत्रों को भेजे जाने वाले पत्रों पर पते हिंदी में लिखे जाएं। गुजरात, महाराष्ट्र तथा पंजाब राज्यों में स्थित केंद्रीय कार्यालयों को भेजे जाने वाले पत्रों के पते भी हिंदी में लिखे जाएं।

1) क तथा ख क्षेत्रों में स्थित कार्यालयों में पता लेखी-मशीन के साथ देवनागरी एम्बोसिंग मशीनें लगाई जाएं और चूकि ग क्षेत्रों में स्थित कार्यालयों में भी कई बड़े-बड़े कार्यालय ऐसे हैं जिनमें काफी पत्र -व्यवहार क तथा ख क्षेत्रों के कार्यालयों से होता है। अतः ग क्षेत्र में स्थित कार्यालयों में भी द्विभाषी पतालेखी मशीनों का प्रावधान किया जाए।

2) इन मशीनों पर कार्यरत कर्मचारियों के लिए हिंदी तथा अंग्रेजी दोनों भाषाओं में प्रशिक्षण देने की व्यवस्था की जाए। पतालेखी मशीनों पर कार्यरत कर्मचारियों को हिंदी भाषा का जान होना चाहिए। अतः ऐसे कर्मचारियों को, पतालेखी मशीनों पर हिंदी भाषा में काम करने के लिए आवश्यक प्रशिक्षण देने के लिए पतालेखी मशीन कंपनियों से अनुरोध किया जाए।

(क.जा .सं.15/50/62- राभा. दि. 30.7.62 क्रम सं.22)
(क.जा .सं.6/50/69- राभा. दि. 24.11.69 क्रम सं.23)
(क.जा .सं.11015/51/72 राभा. (ख) दि. 27.6.73 क्रम सं.24)
(क.जा .सं.12015/9/76 राभा. (ख) दि. 16.11.76 क्रम सं.86)
(क.जा .सं.12024/4/90/राभा. (ख-2) दि. 16.5.90)

2.7 नम पटटू, रब्द की बाजें काँटलाखय कीमतुके पतरे शीष और लंगो (परतःक)

1) भारत सरकार के सभी मंत्रालय-विभागों तथा अन्य कार्यालयों में प्रयोग में आने वाली सभी रब्द की मोहरें और कार्यालय की मुद्राएं द्विभाषिक रूप में हिंदी के शब्द उपर रखते हुए प्रयोग का जाए।

2) पदनाम, कार्यालय का नाम, पता आदि के बारे में जो मोहरें वर्तमान आदेशों के अनुसार द्विभाषी रूप में बनाई जाती हैं, वे इस प्रकार बनाई जाएं कि उनमें एक पंक्ति हिंदी की और फिर एक पंक्ति अंग्रेजी की हो या एक ही पंक्ति में हिंदी और उसके बाद अंग्रेजी में लिखा हो। ये निदेश नई बनाई जाने वाली मोहरों पर लागू किए जाएं।
(3) बैंकों के चैकों पर यदि द्विभाषी मोहरें लगाने के लिए पर्याप्त स्थान उपलब्ध न हो तो क और ख क्षेत्रों के कार्यालयों आदि में चैकों पर मोहरें केवल हिंदी में और ग क्षेत्र के कार्यालयों में केवल हिंदी या अंग्रेजी में लगा दी जाएं।

(4) जो मोहरें टिप्पणी आदि की जगह पर बनाई जाती हैं वे या तो द्विभाषी बनाई जाएं या क और ख क्षेत्रों के कार्यालयों आदि में केवल हिंदी में और ग क्षेत्र के कार्यालयों में केवल हिंदी या अंग्रेजी में बनवा ली जाएं।

(5) रबड़ की मोहरें तैयार करते समय सभी भाषाओं के अक्षर समान आकार के होने चाहिए।

(6) क और ख क्षेत्रों में स्थित कार्यालयों में नाम पट्ट , रबड़ की मोहरें, पत्र शीषर , लोगो (प्रतीक ) आदि द्विभाषी रुप में बनवाए जाएं।

(7) ग क्षेत्रों में स्थित कार्यालयों में नाम पट्ट , रबड़ की मोहरें, पत्र शीषर , लोगो (प्रतीक ) आदि द्विभाषी रुप में बनवाए जाएं।

(का.जा .स.559/68-रा.भा.(क-1) दिनांक. 17.10.1968 क्रम सं.27)
(का.जा .स.1/14013/18/85-रा.भा.(क-1) दिनांक.14.1.1985 क्रम सं.31)
(का.जा .स.1/14034/1/87-रा.भा.(क-1) दिनांक. 30.12.1987 अनुपूरक संकलन क्रम सं.188)
(का.जा .स.12024/2/92-रा.भा.(ख-2) दिनांक. 21.7.1992)

2.8 नाम पट्टः रबड़ कीसारोआदापर द्वेंजरीरु मैंह लहिनेकैविधि
देवनागरी के नाम पट्टों, मोहरों आदि पर पूरा नाम तो एक रीति से लिखा जा सकता है, परंतु संक्षिप्त नाम लिखने के लिए अनेक पद्धतियाँ प्रचलित हैं। उदाहरण के लिए, यदि किसी व्यक्ति का नाम दीनानाथ शर्मा है, तो देवनागरी लिपि में उसका संक्षिप्त नाम नीचे दिए हुए विकल्प में से किसी एक के अनुसार लिखा जा सकता है:-

1. देवनागरी वर्णमाला के अनुसार, मात्राओं का प्रयोग करते हुए, आद्यआक्षर लिखकर जैसे दी. ना. शर्मा।
2. देवनागरी वर्णमाला के अनुसार, बिना मात्राओं के प्रयोग के आद्य अक्षर लिख कर जैसे द. न. शर्मा।
3. नाम के आद्य अक्षर रोमन वर्णमाला के अनुसार देवनागरी लिपि में लिखकर जैसे डी. एन. शर्मा।
यह प्रत्येक की अपनी रुचि पर निर्भर करता है कि वह अपना नाम किस प्रकार लिखे। यदि कोई व्यक्ति अपना नाम किसी एक रीति से लिखना चाहता है तो उसे दूसरी रीति से नाम लिखने कोई नहीं किया जा सकता।

(का.जा .सं.1/14013/3/76 रा.भा.(क-1) दिनांक 10.6.1976 क्रम सं.29)

2.9 कर्त्तव्य सरकार द्वारा साध्यता और अनुदान पश्चात संस्थाओं के पत्र संदर्भ, आम नक्शे साधी

यह उचित होगा कि केंद्रीय सरकार द्वारा स्थापित और अनुदान पाने वाली संस्थाओं, जिनके कार्यालय हिंदी भाषी क्षेत्र में स्थित हैं, उदाहरणार्थ, संगीत नाटक अकादमी, साहित्य अकादमी, नेशनल स्कूल ऑफ ड्रामा आदि के हिंदी भाषी क्षेत्र में स्थित कार्यालयों में नाम पट्ट अंग्रेजी और हिंदी दोनों भाषाओं में हो तथा वे अपने आम नोटिस दोनों ही भाषाओं में जारी करें। ऐसा करने से उन क्षेत्रों में रहने वाली जनता को सुविधा होगी।

2 और ख क्षेत्रों में स्थित संस्थाओं में नामपट्ट, रबड़ की मोहर, पत्र शीर्ष लोगों, प्रतीक आदि द्विभाषी रूप में तैयार कराए जाएं।

ग क्षेत्र में स्थित संस्थाओं में नाम-पट्ट, रबड़ की मोहर, पत्र शीर्ष, लोगो प्रतीक आदि द्विभाषी रूप में तैयार कराए जाएं।

(का.जा .सं.11020/12/72 रा.भा.दिनांक 7.6.1972,क्रम सं. 34)

(का.जा .सं.12024/2/92 रा.भा.(ख-2) दिनांक 21.7.1972)

2.10 समस्तेन्द्रोंका पृष्ठभूमि हिंदी और अंग्रेजी दोनों कार्ययोगी

विभिन्न मंत्रालयों द्वारा आयोजित सभी सम्मेलनों और बैठकों में विशेषकर दिल्ली में सभी साइन बोर्डी आदि पर दोनों भाषाओं का प्रयोग होना चाहिए।

(का.जा .सं.6/52/69 रा.भा.दिनांक 29.12.1969,क्रम सं.33)

2.11 आहिंदी भाषी क्षेत्रों में स्थित कर्त्तव्य कार्यालय के पत्र संदर्भ, आदर्श और अंकों के माध्यम से

अहिंदी भाषी क्षेत्रों में स्थित केंद्रीय कार्यालयों में जनता की सूचना के लिए लगाए जाने वाले नामों भाषा के पट्टों, नाम-पट्टों, तथा उनके द्वारा जनता की सूचना के लिए लगाए जाने
वाले नोटिस बोर्ड़ आदि मेक्सिट्रीय भाषा, हिंदी तथा अंग्रेजी का प्रयोग किया जाए, जिसका क्रम भी इसी रूप में हो और सभी भाषाओं की लिपियों के अक्षरों का आकार बराबर हो। कार्यालयों के आंतरिक प्रयोग के लिए नाम-पत्ता, सूचना पत्ता, पत्र शीष्य आदि हिंदी और अंग्रेजी में तैयार किए जाएं। तथ्याचरण में यथास्थिति रखी जाए।

(का.जा .सं.1714013/5/76 रा.भा.(क्रम -1) दिनांक 18.6.1977,क्रम सं. 35)
(का.जा .सं.1/44013/2/86 रा.भा.(क्र.1) दिनांक 26.2.1986,क्रम सं. 37)

2.11.1 अहिंदी भाषी क्षेत्रों में स्थित कार्यालयों में नाम-पत्ता आदि के प्रयोग का प्रश्न-विचार

अहिंदी भाषी क्षेत्रों में स्थित कार्यालयों में बोर्ड़, नाम-पत्ता आदि में पदनाम, कार्यालय नाम आदि क्षेत्रीय भाषा में लिखने के लिए मानव सांस्कृतिक विकास मंत्रालय (शिक्षा विभाग) के वैज्ञानिक तथा तकनीकी शब्दावली आयोग द्वारा प्रकाशित समावेशक प्रशासन शब्दावली में दिए गए पदनामों और कार्यालय नामों का प्रयोग किया जाए ताकि एक-साथी बनी रहे।

यदि किसी कार्यालय के पदनाम या नाम के लिए संबंत सरकार द्वारा क्षेत्रीय भाषा में नाम रखा गया है तो क्षेत्रीय भाषा में नाम या पदनाम लिखते समय उसी नाम/पदनाम, का प्रयोग किया जा सकता है। यदि विभाग द्वारा उपक्रम, बैंक आदि चाहे तो संबंत सरकार द्वारा के अनुसार उसे बदल सकता है।

(का.जा .सं.11034/13/87- अ.वि.एक.दिनांक 4.1.1988)

2.12 शरीयक्षेत्र केंद्रों के निर्दिष्ट प्रयोग-पत्र

सभी सरकारी समारोहों के निमंत्रण पत्र हिंदी और अंग्रेजी दोनों भाषाओं में जारी किए जाएं। कार्य के एक और अंग्रेजी होनी चाहिए और दूसरी और हिंदी आवश्यकता के अनुसार इनमें हिंदी और अंग्रेजी के अनिश्चित प्रादेशिक भाषाओं का भी प्रयोग किया जा सकता है। विभागीय निमंत्रण -पत्र किस प्रकार छापे जाएं, यह बात संयोजक पर छोड़ दी गई है।

(का.जा .सं.12/9/60 रा.भा.दिनांक 21.5.1960,क्रम सं. 37)
(का.जा .सं.5/56/70 रा.भा.दिनांक 19.5.1970,क्रम सं. 38)
(का.जा .सं.11015/80/72 रा.भा.दिनांक 10.6.1974,क्रम सं. 39)
2.13 फाइल कवरॉयल विषय-हितिेम

मंत्रालयों /विभागों और हिंदी भाषी क्षेत्रों में स्थित उनके संबंध व अधीनस्थ कर्मालयों में निम्नलिखित प्रकार की सभी फाइलों के फाइल कवरों पर विषय हिंदी और अंग्रेजी दोनों भाषाओं में लिखे जाएं:-

1. जिन फाइलों में टिप्पण तथा पत्र हिंदी में हो।
2. उन अनुभागों में 80 प्रतिशत या उससे अधिक कर्मचारी हिंदी जानते हैं।
3. हिंदी जानने वाले या हिंदी सीखे हुए कर्मचारियों द्वारा निपटाइ जाने वाली फाइलों पर।

अन्य मामलों में भी जहां तक हो सके स्वेच्छानुसार उस स्पष्टता से इसी प्रकार की पद्धति अपनाई जाए। अहिंदी भाषी क्षेत्रों में स्थित संबंध और अधीनस्थ कार्यालयों में हिंदी जानने वाले या हिंदी सीखे हुए कर्मचारियों की उपलब्धता के आधार पर यह पद्धति अपनाई जाए।

(का.जा .सं.11015/2/73 राज.भाषा.दिनांक 9.1.1974,क्रम सं. 20)

2.14 सड़क का कौशलपूर्व नज

मंत्रालयों /विभागों और हिंदी भाषी क्षेत्रों में स्थित संबंध और अधीनस्थ कार्यालयों में स्टाफ कारों की प्लेट्टों पर कार्यालयों के नाम अंग्रेजी और हिंदी दोनों भाषाओं में लिखवाए जाएं। हिंदी में नाम ऊपर हो और अंग्रेजी में उसके नीचे।

(का.जा .सं.11015/49/72 राज.भाषा.दिनांक 7.9.1972,क्रम सं. 21)

2.15 अत्यस्थित निवृत्ति समस्या क्षेत्रों में भाषाई उपचार सूचना

अत्यस्थित निवृत्ति समस्या में हिंदी को उचित स्थान दिया जाए और इस संबंध में छपने वाले साहित्य, पत्रिकाएं, बैनर, बैजों आदि में हिंदी का प्रयोग किया जाए।

(का.जा .सं.14032/7/79 राज.भाषा.दिनांक 27.7.1979,क्रम सं. 22)

2.16 प्रदर्शनघरों में हिंदी का उपयोग

हिंदी भाषी क्षेत्रों में या उन क्षेत्रों में जहां की अधिकांश जनता हिंदी समझती है, प्रदर्शनियों में प्रचार माध्यम के रूप में हिंदी का अधिकारी प्रयोग किया जाए। इन क्षेत्रों में प्रदर्शनियों में पुराचार सामग्री भी यथासंभव हिंदी में उपलब्ध कराई जाए। ट्रेड फेयर ऐथारिटी ऑफ इंडिया द्वारा आयोजित प्रदर्शनियों में भाग लेने वाली सरकारी तथा सर्वजनिक क्षेत्र के संस्थानों द्वारा प्रदर्शनियों आदि में हिंदी का उपयुक्त प्रयोग किया जाए और अपने मंड़पों में वस्तुओं के लिए परिचय आदि देने में हिंदी का समृद्ध प्रयोग किया जाए।

(का.जा .सं.1/14011/1/75 राज.भाषा.(क्र -1) दिनांक 3.5.1973,क्रम सं. 50)
2.17 वदिते वत्साकेदीम वसंतवी मेहदीकृत्रषो
जब भी अधिकारी तथा भारतीय विद्यालय की यात्रा पर जाएं तो अपने साथियों और समकक्ष सहयोगियों के साथ बातचीत में हिंदी का प्रयोग करें तो इससे देश का गौरव बढ़ागा।

2.18 मद्रस्सुन्न फाख्स मॅड आदिकीहिंदीआग्रेंदेववाजी(डिलंग साप मा) छपई
मद्रस्सुल, फाख्स, कॉड आदिकीहिंदीअंग्रेजी (डिलंग साप मा) दब्बीषीछपवात जाएं फाख्स मॅ आदिकीहिंदीशीशक पहलेदाइ जायं और अंग्रेजी शीषक बाब मा हिंदीअक्षरोंकेट्रजप अंग्रेजीसे छप्हेन हाओ।
सभीमतिर्खया / विकस अपनेनियित्तर्फ़धरी परसोंतथाअनय काश्मरयोंकोआवश्यक अनुदेश जासीकरेंविच्वेकई भौसमगर्मीकेल अंग्रेजीमें छपनेकेलए सब्केश न करें।

शहरी विकास मंत्रालय की ओर से प्रकाशन निदेशालय को अनुदेश हैं कि कोड/मेन्जुअल आदि छपाई के लिए तभी स्वीकार किए जाएं जब वे दुविभाषी रुप में हों।

(का.जा .सं.1/12012/5/76 रा.भा.(ख) दिनांक 31.8.1976,क्रम सं. 44)
(का.जा .सं.14034/8/88 रा.भा.(क-1) दिनांक 31.5.1988, अनुपूरक क्रम सं. 193)
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(का.जा .सं12012/5/88 रा.भा. (ख-1) दिनांक 20.7.1988, अनुपूरक क्रम सं. 194)

2.19 फामोक्स्ट्विश्वीउपलब्ध करवा

यह सुनिश्चित किया जाएगा कोई भी फामी न तो एक भाषा में छपे, न ही एक भाषा में जारी किया जाए। यदि किसी विशेष स्थिति में कोई फाम हिंदी से तथा अंग्रेजी दोनों भाषाओ में अलग-अलग छपे तो उस फाम के हिंदी और अंग्रेजी स्पूंतरण सभी जगह उपलब्ध रहने चाहिए और इस बात का ध्यान रखा जाना चाहिएकि जनता का कोई व्यक्ति इनमें से जिस भाषा का फाम मांगे वह फाम उस भाषा में उसे मिल सके।

अनुदेश जारी किया जाए कि बाहर से खरीदे जाने वाले फामी भी दुबाराभाषी ही हों।

(का.जा .सं12012/5/88 रा.भा. (ख-1) दिनांक 20.7.1988, अनुपूरक क्रम सं. 194)

2.20 (क)मनश्बर हर फाम और जनता अववाड़ास्टेज मेलेन जनवरेडेसी परका केअनसि फामोकल्लोसकि भाषाओंंमेंमुँएन

1. जहां अनावश्यक रूप से फामी का आकार बढ़ाए बिना संभव हो वहां ऐसे फामी को हिंदी, अंग्रेजी और प्रादेशिक भाषा (यदि वह हिंदी के अलावा हो) मेंछपा जाए। ऐसे मामलों में होने वाले अतिरिक्त व्यय को महत्त्व न दिया जाए।

2. यदि ऐसे फामी का कोई खंड सरकारी कार्यालय में भरा जाने वाला हो या उसकी लेखा परीक्षा कार्यालय में आवश्यकता हो तो ऐसे खंडों को प्रादेशिक भाषाओं में अनूदित करना आवश्यक नहीं है और उन्हें केवल हिंदी/अंग्रेजी में छपा जाना चाहिए।

3. लंबे फामी, जैसे आयकर और सीमा शुल्क के फामी, हिंदी, अंग्रेजी और प्रादेशिक भाषाओं में अलग-अलग रूप से छपे जाने चाहिए। इन फामी के लिए भी उपयुक्त (2) में उल्लिखित विकल्प लागू होगा।

(कज़ासं12012/11/78 रा.भा (ख-1) दिनांक 8.9.1978, क्रम सं45)

2.21 समस्तेनोंबढ़कॉकेर्फ्स्कीक्षस्पूची कक्षस्पूनेकोटिपिणोंकाकामवृि हिंदीअथवेनन्दव्वियनो में

मंगातों/विभागों तथा हिंदी भाषी क्षेत्रों में स्थित केंद्रीय सरकार के संबंध तथा अधीनस्थ कार्यालयों और उनके नियंत्रण में या स्वामित्व में काम करने वाली कंपनियों तथा निगमों की अंतर विभागीय बैठकों व सम्मेलनों की कार्यसूची, कार्यसूची की दिप्पणियों और कार्यवृत्त को हिंदी और अंग्रेजी दोनों भाषाओं में जारी किया जाए। जो विषय बहुत बाद में कार्यसूची में शामिल किए जानेवाला व्यक्ति है, उनके लिए अपवाद हो सकता है।

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(का.जा .सं.14.3.69 राखा. दिनांक 13.8.1970, क्रम सं. 46)
(का.जा .सं.11018/9/74 राखा.दिनांक 12.3.1974, क्रम सं. 47)
(का.जा .सं.11018/9/74 राखा.दिनांक 12.3.1974, क्रम सं. 48)

2.21 (क) क कब्रसंस्थ मेरूमयुक्त मतांशयां विभिन्न और कच्चाकाप उपकरणों आदि की बांटने वाली संगठन के मुक्त केवल हिंदी में ही हो सकता है।

केवल के क्षेत्र मे परिचालित होने वाले कार्यसूची / कार्यवृत्त आदि एवं उससे संबंधित पत्राचार केवल हिंदी में परिचालित किए जा सकते है।
(का.जा .सं.1/14034/6/88 राखा. (क-1) दिनांक 20.6.1988, अनुपूरक संकलन क्रम सं. 192)
(का.जा .सं.1/20012/3/92 राखा. (क-1) दिनांक 30.7.1992)

2.22 विभिन्न पर हिंदीकाब्यों
केंद्रीय सरकार के अधिकारी/कर्मचारी अपनी सेवा अथवा कार्यालय नाम के बिल्ले अंग्रेजी के साथ-साथ हिंदी मे भी लगाए। टोपी और कंधे पर लगाए जाने वाले प्रतीक चिह्न और सेवा संबंधी बिल्ले जो संगठन और सेवा के प्रतीक होते हैं, केवल देवनागरी में तैयार किए जा सकते हैं। वर्तमान पर काफी जाने वाले नाम भी दोनों भाषाओं में काढ़े जाएं। यह आदेश केंद्रीय सरकार के सभी राज्यों में काम कर रहे वर्तमान देवनागरी के अधिकारियों/कार्यालयों पर लागू होते हैं।
(का.जा .सं.1/14011/5/77 राखा. (क-1) दिनांक 15.7.1977, क्रम सं. 53)
(का.जा .सं.1/14011/5/77 राखा. (क-1) दिनांक 29.12.1977, क्रम सं. 54)
(कल्ज्यौसी/14011/5/77 राखा (क-1) दिनांक 22.7.1978, क्रम सं 55)

2.23 कसरपंचिकावेशवादियों/रजस्ट्रीकनयों
क़ व ख क्षेत्रों मे स्थित केंद्रीय सरकार के कार्यालयों मे रखे जाने वाले रजस्ट्रां / सेवा पुस्तकां मे प्रविष्टियां हिंदी मे की जाएं। ग क्षेत्र मे स्थित कार्यालयों मे ऐसी प्रविष्टियां यथासंभव हिंदी मे की जाएं।
(का.जा .सं. 12024/2/92 राखा. (ख-2) दिनांक 21.7.1992)
2.24 पत्रिन बुकावं में प्रविष्टियां
क़ और ख़ क्षेत्रों में स्थित कार्यालयों द्वारा पियन बुक़ में प्रविष्टियां हिंदी में की जाएं।
(का.जा. सं. 11015/14/74 रा.भा. (क-2) दिनांक 30.10.1974, क्रम सं. 58)

2.25 सरकारी उदयमों द्वारा किए जनेवक्रांस पर विलिए हिंदी में देखा
सरकार के विभिन्न उद्यमों द्वारा तैयार किए गए माल पर विश्लेषण अंग्रेजी के साथ-साथ हिंदी में भी दिए जाएं।
(काज़सै 4011/1/76 रा.भा. (क-2) दिनांक 27.2.1976, क्रम सं. 107)

2.26 सरकारी कंपनियों निगमों आदि के आवश्यक सूचक बैठकों से संबंधित अपेक्षित हिंदी में प्रकाशित कर्करण
सरकारी कंपनियों / निगमों आदि की शेयर होल्डरों की वार्षिक बैठकों में अध्यक्षों आदि द्वारा प्रस्तुत की जाने वाली रिपोर्ट हिंदी में भी प्रकाशित की जाएं और जहां बैठक की कार्यवाही तथा वार्षिक रिपोर्ट का सारांश समाचार पत्रों में प्रकाशित किया जाता है वहां उनके हिंदी पाठ को हिंदी समाचार पत्रों में प्रकाशित कराया जाए।
(काज़सै 1015/8/73 रा.भा.दिनांक 8.8.1974, क्रम सं. 12)

2.27 अपेक्षितता कार्यालयों हिंदी के प्रकाशित करनेके लिए दिशितकित जरूर
1. क़ और ख़ क्षेत्रों में स्थित केंद्रीय सरकार के सभी कार्यालयों में, जो राजभाषा नियम 10 (4) के अनुसार अपेक्षित किए गए हैं, हिंदी में प्रविष्टियां प्राप्त सभी कर्मचारी 1.4.1988 से निम्नलिखित पत्रों आदि का प्रारूप केवल हिंदी में प्रस्तुत करें :-

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1. के तथा ख क्षेत्र के राज्य या संघ राज्य क्षेत्र के प्रशासन और इन क्षेत्रों में स्थित केंद्रीय सरकार के कार्यालयों, उपक्रमों, आदि और गैर-सरकारी व्यक्तियों को जाने वालेसभी पत्रदि।
2. हिंदी में प्राप्त सभी पत्र आदि के उत्तर।
3. किसी कर्मचारी द्वारा हिंदी में दिए गए या हस्ताक्षर किए गए आवेदन, अपील या अभ्यावेदन का उत्तर।
4. संबंधित पत्रावलियों पर टिप्पणियाँ।

2. ये आदेश राजभाषा नियम 1976 के नियम 2 (ख) में केंद्रीय सरकार के कार्यालय की परिभाषा के अनुसार केंद्रीय सरकार के सभी मंत्रालय /विभाग/संबंध या अधीनस्थ कार्यालय और केंद्रीय सरकार के स्वामित्व में या नियंत्रण के अधीन सभी निगम कंपनी या राष्ट्रीयकृत बैंक आदि पर लागू होंगे।
3. केंद्रीय सरकार के मंत्रालय /विभाग/कार्यालय /उपक्रम /बैंक आदि अपने विभाग/कार्यालय आदि के काम और परिस्थिति को देखते हुए यदि उपर पैरा 1 में दिए गए प्रयोजनों के अलावा अपने विभाग/कार्यालय आदि में हिंदी में प्रवीणता प्राप्त कर्मचारियों द्वारा किसी प्रयोजन के लिए हिंदी में काम करने का निदेश देना चाहे तो वे इस बारे में आदेश नियम 8(4) के अधीन स्वयं जारी करेंगे।
4. सभी मंत्रालय /विभाग/कार्यालय /उपक्रम /राष्ट्रीयकृत बैंक आदि उपयुक्त आदेश को कार्यनिवेश करने के लिए अपने कार्यालयों आदि में हिंदी में प्रवीणता प्राप्त कर्मचारियों /अधिकारियों और उनके ऊपर काम देखने वाले अधिकारियों के लिए कार्यशालाओं का आयोजन करें, जिससे इन कर्मचारियों /अधिकारियों को हिंदी में प्रारूप प्रस्तुत करने और उनका अनुमोदन करने का आवश्यक अभ्यास हो जाए।

(का.जा .सं.1/14013/9/87 रा.भा. (क-1) दिनांक 23.11.1987)

(कज्जासी/14013/9/87 रा.भा(क-1) दिनांक 5.9.1988, अनपुरूक क्रम सं 186)

2.28 प्रशिक्षण संस्थानों में डिप्लोमा प्रदान करने के लिए केंद्रीय सरकार के प्रशिक्षण संस्थानों में निम्न प्रकार से पढ़ाने की व्यवस्था की जाए-
1. केंद्रीय सरकार के सभी प्रशिक्षण संस्थानों में चाहे वे किसी भी क्षेत्र में स्थित हों, प्रशिक्षण सामग्री दोनों भाषाओं में तैयार कराई जाए और प्रशिक्षण अनुसार हिंदी या अंग्रेजी में उन्हें उपलब्ध कराई जाए।
2. यदि प्रशिक्षण के दौरान या अंत में परीक्षा की जाती हो तो ऐसी परीक्षा में प्रशन पत्र दोनों भाषाओं में तैयार कराएं जाएं तथा प्रशिक्षण परीक्षाओं को इस बात की छूट दी जाए कि वे प्रशनों का उत्तर हिंदी या अंग्रेजी में दे सकते हैं।
3. यदि किसी प्रशिक्षण पाठ्यक्रम में केवल अंक या खंड के स्थल पर प्रशिक्षणार्थी आते हैं तो वहां सामान्यतया हिंदी में प्रशिक्षण दिया जाए। परंतु यदि पर्याप्त मात्रा में प्रशिक्षणार्थी अंग्रेजी में प्रशिक्षण लेना चाहें तो उनके लिए अंग्रेजी में भी प्रशिक्षण देने की योजना ठहरे।
4. जिन प्रशिक्षण पाठ्यक्रमों के लिए ग क्षेत्र से या सभी क्षेत्रों से प्रशिक्षणार्थी आते हैं वहां अंग्रेजी में प्रशिक्षण दिया जा सकता है। परंतु यदि पर्याप्त संख्या में प्रशिक्षणार्थी हिंदी में प्रशिक्षण लेना चाहें, तो उनके लिए प्रशिक्षण देने की योजना ठहरे।
5. जहां पर्याप्त संख्या में हिंदी में प्रशिक्षण पाने के इच्छुक प्रशिक्षणार्थी न हो वहां भी, जहां तक संभव हो सके, ऐसे व्यक्तियों को भाषण के लिए बुलाया जाए, जो हिंदी व अंग्रेजी दोनों भाषाओं का ज्ञान रखते हैं, ताकि प्रशिक्षणार्थी अपने सुविधानुसार हिंदी या अंग्रेजी में प्रशन पूछ सकें।
6. प्रशिक्षण संस्थानों के प्रशिक्षकों को हिंदी और अंग्रेजी दोनों भाषाओं का कार्यसाधक ज्ञान होना चाहिए। जिन प्रशिक्षकों को हिंदी का कार्यसाधक ज्ञान प्राप्त न हो उन्हें हिंदी भाषा का प्रशिक्षण दिलाया जाए। राजभाषा विभाग के अधीन केंद्रीय हिंदी प्रशिक्षण संस्थान में इसके लिए अत्यधिक गहन पाठ्यक्रम चलाने की योजना है।
7. यदि किसी प्रशिक्षण संस्थान में जिसमें उपर्युक्तानुसार हिंदी में प्रशिक्षण दिया जाना चाहिए, हिंदी में प्रशिक्षण देने के लिए योग्य प्रशिक्षक उपलब्ध न हो वहां पर प्रशिक्षण अंग्रेजी व हिंदी की मिलिटरी भाषा में भी दी जा सकता है।

ये निर्देश केंद्रीय सरकार के स्वामित्व या नियंत्रणाधीन उपक्रमों व बैंकों आदि पर भी लागू होंगे।

ये निर्देश 1 जनवरी, 1989 के बाद आरंभ किए जाने वाले प्रशिक्षण कोसों पर लागू होंगे। प्रशिक्षण संस्थाएं इस दौरान इन निर्देशों के अनुपालन के लिए आवश्यक तैयारी कर ले, जैसे प्रशिक्षण सामग्री का हिंदी में अनुवाद और प्रशिक्षकों को हिंदी का कार्यसाधक ज्ञान दिलाना, इत्यादि।

(का.जा .सं.13034/50/87 रा.भा. (ग) दिनांक 6.11.1987)
2.29 हिंदी-कास्कूस्थाद्वारा प्रस्तुत कार्यवाहिकीसंस्थानों और कार्यवाहिकीसंस्थानों में अधिवक्ता करना

ऐसे कर्मचारियों का अंकड़े इकट्ठे किए जाएं जिन्हें हिंदी का कार्यसाधक जाने प्राप्त हो और ऐसे कार्यालयों को, जहां के 80 प्रतिशत या अधिक कर्मचारियों को (समूह घ छोड़कर) हिंदी का कार्यसाधक जाने हो गया है राजपत्र में राजभाषा नियम 10 (4) के अंतर्गत अधिसूचित किया जाए। अधिसूचना की प्रतिलिपि राजभाषा विभाग को भेजी जाए।

(का.जा .सं.14012/8/88 रा.भा. (ग) दिनांक 7.9.1988, अनुपूरक क्रम सं. 196)

2.30 सरकारीप्रकाशनोंआदितिविद्विशिष्टपु मंप्रकाशन

राजभाषा अधिनियम, 1963 की धारा 4 के अनुसार में गठित संसदीय राजभाषा समिति के प्रतिवेदन खंड-४ में उपर्युक्त विषय में निम्नलिखित संस्करण की गई हैं-

भारत सरकार के मंत्रालयों /विभागों/कार्यालयों /संगठनों आदि द्वारा केवल अंग्रेजी में ही नहीं बल्कि द्विभाषी रूप में भी प्रकाशन निकाले जाएं। हिंदी प्रकाशनों की मुद्रित संख्या अंग्रेजी प्रकाशनों की तुलना में कम न हो और द्विभाषिक प्रकाशनों में हिंदी के पृष्ठों की संख्या अंग्रेजी के पृष्ठों की संख्या से कम न हो और हिंदी में नए मौलिक प्रकाशन निकाले जाएं।

2. राजभाषा विभाग के 28.1.1992 के संकल्प संख्या 12019/10/91-रा.भा. (भा.) के अनुसार समिति की उक्त संस्कृत स्वीकार कर ली गई है।

3. इस संबंध में उल्लेखनीय है कि राजभाषा नियम, 1976 के नियम 11 में दिए गए प्रावधान के अनुसार प्रक्रिया संबंधी सभी साहित्य हिंदी और अंग्रेजी में द्विभाषी (डिग्लाट) रूप में यथास्थिक उद्विधा, साइक्लोस्टाइल और प्रकाशित किया जाना अपेक्षित है। इसके अतिरिक्त राजभाषा अधिनियम 1963 (यथासंस्थिति 1967) की धारा 3 (3) में प्रावधान के अनुसार सभी प्रशासनिक या अन्य प्रतिवेदन अन्विति रूप से हिंदी और अंग्रेजी दोनों भाषाओं में ही निकाले जाएं।

4. इस परिप्रेक्ष्य में कृपया संसदीय राजभाषा समिति की संस्कृति पर फिर फिर निर्णय का पूरा तरह अनुपालन सुनिश्चित किया जाए और आवश्यक जांचं बिंदु भी लिखित कर दिए जाएं ताकि राजभाषा अधिनियम की धारा 3 (3) में उल्लिखित प्रकाशन डिग्लाट फार्म में ही छपे।
और अन्य कोई भी प्रकाशन न तो केवल अंग्रेजी में प्रकाशित किया जाए और न ही उसके हिंदी रूप की मुद्रण संख्या अंग्रेजी रूप की मुद्रण संख्या से कम हो।

2.31 क क्षेत्रीय मेंस्यंगति कर्मचारी सरकार के कार्यालयों/अधिकृतियों कर्मचारित्यौ, सेवाओं से सबसे अधिक अनुभूति कस्तुरिक विराशंकर

क क्षेत्र में सभी अधिकारियों/कर्मचारियों के विरुद्ध की जाने वाली अनुशासनात्मक कर्नवाई हिंदी में की जाए। अपवादकर्म यदि जांच अधिकारी को हिंदी का कार्याधिकार जान न तो यदि संबंधित अधिकारी/कर्मचारी भीमांग करे तो यह कर्नवाई अंग्रेजी में की जा सकती है।

(क.जा .सं.1/14013/15/87 रा.भा. (क-1) दिनांक 30.10.1987, अनुपूरक क्रम सं. 184)

2.32 राजभाषा (सच सचकाकी पसंदोंकेलिपिप पर्य) निम्न 1976 के

निम्न 10 (4) के अंतर्गत मतंन्या� כלי अधिकृतियों के तृतीय कर्मचारित्यौकर्मचारित्यौ संभवतः राजभाषा नियम 10 (4) के अंतर्गत सभी मंत्रालयों/विभागों को अधिसूचित करने की कर्नवाई गूढ मंत्रालय, राजभाषा विभाग दवारा की जाएगी। मंत्रालयों/विभागों के अधीनस्थ संबंध कर्मालयों, उपक्रम, निगम, बैंक आदि के कर्मालयों को अधिसूचित करने की कर्नवाई उनके संबंधित मंत्रालय विभाग दवारा ही की जाएगी। ऐसा करते समय राजभाषा विभाग की पूर्वानुमति की आवश्यकता नहीं है। केवल अधिसूचना की एक प्रति राजभाषा विभाग को सूचनाथ श्रेष्ठ देना ही पर्याप्त है। यदि मंत्रालय/विभाग अपने किसी अधिसूचित अधीनस्थ संबंधकर्मालय, उपक्रम, निगम, बैंक आदि के कर्मालय की अधिसूचना को रद्द करे तो इसके लिए उन्हें राजभाषा विभाग की पूर्व सहमति अवश्य ले लेनी चाहिए।

(क.जा .सं.12014/1/87 रा.भा. (ख-2) दिनांक 11.3.1988, अनुपूरक क्रम सं. 901)

2.33 देवनागरीटक्षण व आशुभुपिनिमेंशक्षितक तक्षण अधिकृतियों की समष्टि उपयोगें

dेवनागरी टेक्षण व आशुभुपिते में प्रशिक्षित कर्मचारियों की सेवाओं का हिंदी के काम में समर्थित उपयोग किया जाए। जहां उनकी संध्या के अनुपूर्व टाइपराइटर उपलब्ध नहीं है तो तुरंत देवनागरी टाइपराइटर खरीदे जाएं। यदि किसी अन्य कारण से प्रशिक्षित कर्मचारियों की सेवाओं का हिंदी के काम में उपयोग नहीं हो पा रहा है तो उन कारणों को तुरंत दूर किया जाए।
हिंदी टक्कर/आशुलिपि के लिए वर्तमान में शेष रहे सभी प्रशिक्षणार्थी कर्मचारियों को समयबद्ध योजना के अनुसार यथाशीर्ष प्रशिक्षित करा लिया जाए, इसके लिए प्रतिवर्ष प्रशिक्षण के लक्ष्य में 20 प्रतिशत वृद्ध सुनिश्चित की जाए।
(का.जा .स.13015/1/90 रा.भा. (घ) दिनांक 17.7.1990)

2.34 वेज्जुलिक तथापतमक कैफ़िसशिक्षियों समस्तनामादिशिकिहे न तहु समस्तनामाआदिशिकिहे न तहु पत्र आदिपुसहु करनेकोशहुदादियाँजां और वेज्जुलिक पत्रको उनकांशात

सभी प्रकार की संगोष्ठियाँ, परिचर्चाओं, सम्मेलनों आदि में न केवल राजभाषा हिंदी में शोध-पत्र आदि पढने की छूट दी जाए बल्कि वैज्ञानिकों / तकनीशियनों और अन्य कार्मिकों को हिंदी में पेपर पढने के लिए प्रेरित और प्रोत्साहित किया जाए। जिन संगोष्ठियों आदि में हिंदी में भी शोध पत्र पढ़े जाएं उनमें हिंदी-अंग्रेजी दुभाषित की व्यवस्था की जाए और हिंदी के शोध पत्रों की एक प्रति उसे पहले दे दी जाए ताकि वह साथ के साथ शोध पत्र का अंग्रेजी संगोष्ठी में भाग लेने वालों को उपलब्ध करवा सकें। केवल हिंदी में संगोष्ठियां भी आयोजित करने का प्रयत्न किया जाए।

साथ-साथ यह भी प्रावधान है कि हिंदी में वैज्ञानिक और तकनीकी विषयों पर पेपर छापने के लिए या तो आगे निकलने वाली पत्रिकाओं में ही उन्हें छापने के प्रबंध किए जाएं या उनके लिए अलग वैज्ञानिक पत्रिका निकाली जाएं और उन पत्रिकाओं की एक प्रति राजभाषा विभाग को भी भेजी जाए।
ऐसे वैज्ञानिकों, इंजीनियरों और तकनीशियनों आदि का पता लगाया जाए, जो हिंदी में शोध पत्र तैयार करें, विभिन्न संगठियों और सम्मेलनों आदि में उन्हें पढ़ और परिचयाओं में भाग लें। प्रौद्योगिकी के क्षेत्र में दिन-प्रतिदिन हो रहे नए-नए अनुसंधानों और विभिन्न क्षेत्रों में हुई प्रगति का लाभ जनता तक पहुँचने के लिए उनकी अधिकतम और नवीनतम जानकारी हिंदी माध्यम में उपलब्ध कराने के प्रयास भी किए जाएं और उन प्रयासों की जानकारी समय-समय पर इस विभागको भी देने की व्यवस्था की जाए।

हिंदी में लिखे गए शोध पत्रों को अंग्रेजी में लिखे गए शोध पत्रों के समान ही वेबसे दिया जाए और शोध स्तर की वैज्ञानिक और तकनीकी पत्रिकाओं में, जो कि फिलहाल अंग्रेजी में छपती हैं, हिंदी खंड बना कर हिंदी में लिखे शोध पत्रों का प्रकाशन सुरू किया जाए। लेखों के उच्च स्तर को बनाए रखने के लिए विभाग संस्थान में वैज्ञानिकों की एक नामिता बना ली जाए। उन्हीं में से इंटरनेट का चयन भी कर लिया जाए। प्रोलंगेटि के लिए मूल्यांकन करते समय हिंदी में लिखे शोध पत्रों का भी समृद्धि ध्यान रखा जाए।


(का.जा .सं.20034/23/92 रा.भा. (अ.वि.) दिनांक 31.3.1992)

2.35 हिंदीटेलीफोनेडजेक्टरीफार्मेंट

यह वांछनीय है कि दिल्ली में स्थित केंद्रीय सरकार क मंत्रालयों / विभागों / कार्यालयों द्वारा हिंदी टेलीफोन डाइरेक्टरी का अधिक से अधिक प्रयोग किया जाए।

(का.जा .सं.6/57/70 रा.भा. दिनांक 7.10.1970)

(का.जा .सं.1/38/70 रा.भा. दिनांक 22.7.1971)

2.36 राजभाषाअपलब्धियम, 1963 (यथाशंक्ति 1967) केंद्रभाषानोका अनुपस्थित समुच्चय करना। टेलीफोन निर्देशनकोहिंदी और अंग्रेजीदानो भावोंमैपक्षकित करनेकीअनिवार्यता
दूरसंचार विभाग द्वारा प्रकाशित की जाने वाली टेलीफोन निर्देशिकाओं के हिंदी संस्करण भी अनिवार्य रूप से साथ ही प्रकाशित किए जाएं। विभिन्न नगरों के दूर-संचार कार्यालय के और खेत्रों में टेलीफोन निर्देशिकाओं के हिंदी संस्करण अंग्रेजी संस्करण से पहले जारी करें। एक कूपन जैसा कि अब लगाया गया है, वैसा ही अलग रंग के कागज में, हिंदी और अंग्रेजी दोनों भाषाओं में तैयार करके निर्देशिका के दोनों रूपों में लगाया जाए, जिससे यह पूरा जाए कि उपभोक्ता अगली टेलीफोन डायरेक्टरी हिंदी में अथवा अंग्रेजी में प्राप्त करना चाहेगा। क और खेत्रों में प्रारंभ से ही दोनों संस्करण समान संख्या में अथवा हिंदी : अंग्रेजी 40:60 के अनुपात में प्रकाशित किये जाएं ग क्षेत्र में प्रारंभ में हिंदी : अंग्रेजी 30:70 के अनुपात में प्रकाशित किए जाएं (और बाद में आवश्यकता के अनुसार ग क्षेत्र में भी दोनों संस्करणों की संख्याएँ समान की जा सकती है।)


2.37 हिंदीमेंप्रस्थान पत्रोंके संबंधि में हिंदीअधिकी हिंदीअनुभुग कोल
भेजोजन

बहुत से अधिकारियों / कार्यालय द्वारा हिंदी में प्राप्त सभी पत्रों को बिना उनके विषय आदि देखे सीधे हिंदी अधिकारी / हिंदी अनुभुग को आवश्यक कार्यालाई के लिए भेज दिया जाता है। सामान्यतः पहले ऐसे पत्रों को उनके विषय से संबंधित अधिकारियों भेजा जाना चाहिए, बाद में यदि उनके अंग्रेजी या हिंदी में अनुवाद की आवश्यकता हो तो हिंदी अधिकारी की सहायता ही जा सकती है। यह भी देखा गया है कि कई कार्यालयों में हिंदी में प्राप्त प्रत्येक पत्र को उसके अंग्रेजी अनुवाद के लिए हिंदी अधिकारी को भेज दिया जाता है। नियमनसूचर हिंदी में प्राप्त ऐसे पत्रों को ही अनुवाद के लिए भेज भेजा जाना चाहिए जो तकनीकी या विधिक प्रक्रियाके हों। प्रयास यह किया जाना चाहिए कि साधारणतया हिंदी पत्रों का अंग्रेजी अनुवाद न मांगा जाए और उनके उत्तर भी सीधे हिंदी में ही तैयार किए और भेजे जाएं। पत्रों का हिंदी अनुवाद उसी स्थिति में मांगा जाना उचित समझा जा सकता है जबकि उन पर आवश्यक कार्यालाई करने वालों को हिंदी का कार्यसाधक जान भी न हो।

(का.जा .सं.20014/2/80 रा.भा. (ख-2) 14.4.1981)

2.38 राजभाषामेंटि उपदेश और नयीमोकेर्ज्ञकी जबकीए गए नदियों की
अवहेलनकरनेरे कार्यालाई

केंद्रीय सरकार के प्रत्येक कार्यालय के प्रशासनिक प्रधान का यह उत्तरदायित्व है कि वह सुनिश्चित करे कि राजभाषा अधिनियम और राजभाषा नियमों के अधीन जारी किए गए
निदेशों का सम्पूर्ण अनुपालन हो। यदि कोई कर्मचारी या अधिकारी जान बुझाकर राजभाषा के बारे में लागू प्रावधानों की अवहेलना करता है तो प्रकरण में संबंधित नियमों एवं आदेशों के उल्लंघन होने के आधार पर कार्रवाई की जा सकती है।

(का.जा .सं.14012/6/92 राभा. (ग.) दिनांक 19.5.1992)
1. मानक हिंदी वर्णमाला तथा अंक

भारतीय संघ तथा कुछ राज्यों की राजभाषा स्वीकृत हो जाने के फलस्वरूप हिंदी का मानक रूप लिखित करना बहुत आवश्यक था, ताकि वर्णमाला में सर्वांकर एकरूपता रहे और टापराइटर आदि आधुनिक यंत्रों के उपयोग में लिपि की अनेक रुपता बाधक न हो।

मानक हिंदी वर्णमाला

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मानान्त

अनुसूची (अं)

विसर्जन : (अः)

अनुसार विचित्र वि. ह

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देवनागरी अंक

भारतीय अंकों का अंतर राष्ट्रीय रूप

1 2 3 4 5

6 7 8 9 0
संविधान के अनुसार संघ के राज कीय प्रयोजनों के लिए प्रयुक्त त होने वाले अंकों का रूप भारतीय अंकों का अंतराष्ट्रीय रूप होगा, परंतु राष्ट्रपति संघ के किसी भी राजकीय प्रयोजन के लिए भारतीय अंकों के अंतराष्ट्रीय रूप के साथ साथ देवनागरी रूप का प्रयोग भी प्राधिकत कर सकते हैं।

परिवर्धित देवनागरी वर्णमाला

केंद्रीय निदेशालय ने उपयुक्त त मानक हिंदी वर्णमाला अके साथ ही परिवर्धित देवनागरी वर्णमाला भी विकसित की है, ताकि उसके माध्यम से सभी भारतीय भाषाओं का लिपि यंत्रण देवनागरी में हो सके।

2 हिंदी वर्तनी का मानक निरीक्षण

किसी भी भाषा के लिखने विद्युत इंजन में सहायक या बाधक मानने वाले दो प्रमुख तत्व हैं उसका व्याकरण और लिपि। लिपि का एक पक्ष है- सामान्य या अन्य विशेष त स्वयं के पूरक प्रत दीक्षित-वर्णों की समूह, उनका परस्पर संपन्न तथा स्थान लागू एवं उसका प्रयोग न लागू।

लिपि का दूसरा पक्ष है, वर्तनी। एक ही स्वर का प्रकट करने के लिए विविध वर्णों का भारतीय वर्तनी को जटिल बना देता है और यह लिपि की एक सामान्य या अन्य विशेष प्रतिक है। यद्यपि देवनागरी लिपि में यह दोष नयूनतम है, फिर भी उसकी कुछ अपनी विशेषता के लिए भारत सरकार के शिक्षा मंत्रालय ने सन् 1961 में एक समिति समेत लिपि की थी। समिति जिसने अप्रैल 1962 में अपनी अन्तिम सिफारिश प्रकाशित की, जिन्होंने भारत सरकार से स्वीकृत किया। इन ही 1967 में हिंदी वर्तनी का मानकीकरण शीर्षक पुस्तिका में व्याख्या या तथा उदाहरण सहित प्रकाशित किया गया था।

वर्तनी संबंधी अद्यन्तन निम्न इस प्रकार हैं- 1.

1) संयुक्त वर्ण

(क) खड़ी पाई वाले व्यापक

खड़ी पाई वाले व्यापकों के संयुक्त रूप खड़ी पाई को हटाकर ही बनाया जाना चाहिए ,यथा

<table>
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<th>व्याख्या</th>
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<td>क्रप्थ चा, छ्रज्जा</td>
<td>श्लोक</td>
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</tbody>
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(ख) अन्य व्रिज्ञन

(अ) को और फ के संयुक्त ताक्षर संयुक्त, पक्का, दफ्तर आदि की तरह बना जा ए जाए। (आ) (इ, छ, 
,ट,ठ ,ड, द, और ह के संयुक्त ताक्षर हल्द चिह हला लगाकर ही बनाए जा ए, यथा वाइस, लटू, बुड़ा, वि दया, चि हन, बहमा आदि।

(इ) संयुक्त र के लिए प्रथम चिह यथा रहेंगा, यथा - पक्का, धर्म, राष।

(ई) श का प्रथम रूप हीमान्य होगा। इसे श के रूप में भी लिखा जाएगा।

(उ) + र के संयुक्त रूप के लिए उ लिखा जाएगा।

(उ) हल्द चिह हल्द यथा रहेंगे बनने वाले संयुक्ताक्षर के द्वितीय व्रिज्ञन के साथ इ की मात्रा का प्रयोग संयुक्त व्रिज्ञन के तत्त्वाकल पूर्व ही किया जा अगा न कि पूरे युग्म से पूर्व यथा (क्रूर्त, दर्त, धर्म, चिन, नहीं)

(ऊ) संयुक्त में संयुक्त काशु द्वारा शैली में भी लिखे जा सकेंगे, उद्धरणार्थ - संयुक्त , चिह, विदया, चौचल, विद्यान, चून्द्र, अंक, द्वितीय, बुझ्द आदि।

2. विभिन्नता चिह्न

(क) हिंदी के विभिन्नता चिह्न ह सभी प्रकार के संज्ञा शबदों में प्रतिपादित संपूर्ण लिखे जाएं, जैसे राम ने, राम को, राम से आदि तथा सूत्री ने, श्री ने, श्री को, श्री से आदि। सर वानाम शबदों में ये चिह्न ह प्रतिपादित के साथ मिलाकर लिखे जाएं जैसे उसने उसके , उससे, उसपर आदि।

() सर्वनामों के साथ यदि दो विभिन्नता चिह्न होते उनमें से पहला मिलाकर और दूसरा पृथक लिखा जाए , जैसे उसके लिए इसमें से।

(०) सर्वनाम और विभिन्नता के दो ही तक आदि का नियम हो सत्वभिन्नता को पृथक लिखा जाए , जैसे आप ही के लिए , मुझ तक को।

3. क्रियापद

संयुक्त तक रियाओं में सभी अंगभूत क्रियाएं पृथक - पृथक
लिखी जाएं जैसे - पढ़ा करता है, आ सकता कहिम, द्वितीय, बुद्धिमान, विद्वेष आदि है, जाया करता है, खाया करता है, जा सकता है, कर सकता है, किया करता था, पढ़ा करता था, खेला करेगा, धूसरा रहेगा, बढ़ते चले जा रहे हैं आदि।

(4) हाइफन

हाइफन का विधा न स्पष्ट देता के लिए किया गया है

(क) द्वांद समास में पदों के बीच हाइफन रखा जाए, जैसे - राम लक्ष्मण, शिव - पावर्ती - संवाद देख - रेख, खाना - पीना, खेलना कूदना आदि।

(ख) सा, जैसा आदि से पूर्व हाइफन रखा जाए, जैसे- तुम-सा, राम-जैसा, चाकू-से तीखे।

(ग) तत्पर्यु समस मैंस में हाइफन कापर्यो केवल वहींकिया जाए, जहां सकेत भर्म होने कीसबंध बनाहो अनयथानहो जसै भेव्हतव।

समांतत्तत्पर्यु समस मैंस में हाइफन लगाने कीआवश्यकतानहीं है जसै रेवर्ज्य, राजकुमसू, गर्भोज्व, गर्भवस्सी आत्सहत्याआदि

इसीतर यदिजै-नख (बिचिनख का) समसत पद मैंस में हाइफन न लगायाज्य तोउस्वसअनख पढे जनेसेकर्थे काछरथ नकिल सकताहै अनति (नम्रतकाअभव), अनति (थकें) अ-परस (जसि कसिजेन छहा है) अपसर (एक घरस्त रगे), भूततव (पश्वेततव), भद्रतव (भद्र हजेकाभव)
आदि समसत पदोकीभीयहीसत्तिहै येसभी यथृत्व वर्तनीो अथ दमोदष्टयोसेभबन्ति-
भविन् शबदो हैं

(घ) कठलि सधंयोसेबचनेकोलाए भीह्यन का पर्याण कियोजासकताहै जसैदवविक्ष्ठ, दवि अरथक आदि

5. अवयव

तक, संथ आदिवयव सदापठृक लिखियाँ जसैआपकेसथ, यहाँतक। इस नय्नम कोकछु और उदास्रण दकेर सप्ष्ट करनावास्वयम हैहविदी मेँआह, ओह, अहः ऐ, हीतः से भविन्, जब, तब, यहां वहां कहां सदा कयः श्री जी तक, भर, मतरु, संथ, कळिकितिं नगर, लकेनि, चहः यः अथवः तथः यथः और आदिअनक पर्क्षक के भवोकाबौध करनेवले अवयव हैकछु अवयवों
केआगेवधिकतचिन्द्रित्व भीआतेहैं जसैअब सं‌  
यहांसे वहांसे, सदासेादिनथिम केअनसुर अवध्य सदापथ्रक लखिजनेचाहिए, जसै से आप ही के‌लिए, मझु तक को आपके सत, गज भर कपड़ा  
दशे भर, रस भर, दक्ष भर, वह इतनाभर देमझुे  
जनेतादोकम भीनहीनना पचास रफूए मतर्  
आदिसमस्नाथक श्रीऔर जीअवध्य भीपथ्रक  
लखीजनजस्से श्रीश्रीजम, कनहयानजी जी  
महामाजीआदि  
समसत पदामेपत्रिमतर्, यथा आदिअवध्य  
पथ्रक नहीलखीजखण्ड जसै पर्तदिच्चि, पर्तशित,  
मनवमतर्, नमस्तितमतर्, यथासमय, यथाश्चिति.  
यह सरकुवदिच्चि नथिम हैकसिमस हजेपर  
समसत पद एक मनाज्ञताहै अतेः उसे सेव्यसह  
रफू मैन लखिकर एक सत लखनाहीसबंत है  

6. शरवुबुक- य, व
(क) जहांशस्तुमील्लक य, व कापर्या वर्कलियः
सेह्तेहै वहांन कम्याजक्य अर्थस- कमि-कयिे
नई-नयी ह्युश-हवुआदिमेपहले (सवरस्मक) रपुँ
काहीपर्या ने कम्याजक्य. यह नयिग्म कयियः
वशिष्ण, अवय आदिसिभीरपुँ और सत्रियियोँ
लग्नानाजक्य, जते दखिय गए, रम केलेअए,
पसुत्क लपि हुँ, नई दलितीआदिः

(ख) जहांयः शस्तुमील्लक वय्यशराणकि परविरत्सन
न हाकेर शब्द का हीमव तत्व होवहांवकैलंकि
शस्तुमील्लक सवरस्मक परविरत्सन कीआवश्यकता
नहींहै जते सत्वी वय्यभेद, दशस्तिवः. यहां
सत्वी, अवय्यभेद, दबळवः नहींलखियाजक्यगः

7. अनसुव्या तथा अनसुकितार्यहिः (गदिनिः)
अनसुव्या और अनसुकितार्यहिः दनें
सर्चलति रहबों
(क) सत्यकृत्व वय्जन केरपु मेजहाँ पद्ममकक्ष के विवध सवर्गी शब्द चा वर्णामृत्ते कई वर्ष होतोएकर्पुताऔर मदुर्ण/लकेन की सवुधिके अनसुक्वा काहीपर्यगे करना चाहिए जस्से गाया चकंल, ठठा सध्या सफंबक आदिमेंधगमक्ष के उसीवर्ग कावरस्त्र आगेआताहै अतःपद्ममकक्ष केस्थभ पर अनसुक्वा कापर्यगे हगो(गढळा चकंल, ठणथा सनध्या समफंबक कानही यदिपढगमक्ष के बंद कसीअनव वर्ष काकीवरस्त्र आए अथवा वहीपढगमक्ष दबुखाएतोपढगमक्ष अनसुक्वा केरपु मैपरविरिति नहींहग़े जस्से वख्मस्य, अनय, अनस, समस्लेन, समसतिचलिस्य, उनसुख आदिअतेवंभमय, अय, अलं, समस्लेन, समसति चसिन, उमसु आदिरु गर्हय नहीहै

ख) चदरपदिकेबितिपर्यंअरथ मेहराम की गावखुश रहतीहै जस्से हस्सों, अथानाशदानाआदि
मैं अतएव ऐसे भर्म कोदर करनेके लिए चदरबदिकु धारण कराये गये अवश्य कथित नजाक्तता न हो। कष्टुजहाँ (वशिष्टकर शिशुशेखरकेशर जड़िवालीमन जे के सथ) चदरबदिकृत्तर्थ घोे नष्टपूर्व आदर्शवहाँ कठिनिया हो और चदरबदिकृत्तर्थन पर बदिदु (अनसुक्ता चहित) कारण मो अन्तिपक्षीक भर्म उतपन्न करे वहां चदरबदिकृत्तर्थन पर बदिदुके पर्याक्त ये दीजासकती है जैसे न है मैं मैं कवति आदर्शवहाँ में चंद सात्विसने चदरबदिकृत्तर्थ सथ अवश्य पर्याक्त कथित नजाक्त। इसीपक्ष छठी वधच्छौकीपक्षवश चकित औं मेंजहाँ चदरबदिकृत्तर्थच्छौक सखिना अभिषेक हो वहां उसकायथ सथ सर्वत्र पर्याक्त कथित नजाक्त, जैसे कहाँ हसन्ना आश्न, सवर्णावदि

8. वदिशीविवनथियाँ

(क) अरबीफसीया अर्गर्जीमलूक वेशबद जोहदिकेके न बन चुके है और जलिकीविदिशी
धक्नियोक़काहदिदीधक्नियोक़मेयु: बाँट होचकाहे
हदिदीयु मैहीब्बीकश कणि जासकतहै जसेकरे
कलम, कलिद दंग आदि(कलम, कलिद दंग नहीं) पर जहांउनकाशदुध वदिशीयु मेयुम्मे अभीष्ट होअथवाउचघुषणगत भत्ते बतभावश्रण्ण हो वहांउनकेहदिदीमेयुचलति रपफ़ोमेयथसाथन
नकुलेगाए जसेजसे खननारा रजराज, फनहुँफन. सागर रस मेयह कहाजासकता है
कविरबीकशसीएवंअबांजोजीकीमखुर्तम्पख
धक्नियो(क़ ग़ ख़ ज़ और फ) हदिदीमेआई है
जसमेमेदो(क़ और ग) ताहदिदीउचघुण (क, ग) मेयुविषति होगई है एक (ख) लगभग हदिदी
ख मेयुपनेकीपकरमियामेहैऔर दो(ज़ फ)
धीरेडीसेपनाअसततिव खोनेकबनण रखनेकेलए
सघर्षबत है

(ख) अंग्रेजी के ज्ञि शब्दो में अर्थविशुद्ध हो धवनि का प्रयोग होता है, उनके शुद्र
रूप का हिंदी में प्रयोग अभीष्ट होने पर आ की मात्र के ऊपर अर्थचंद्र का प्रयोग किया
जाए. जहां तक अंग्रेजी और अन्य विदेशी भाषाओं में नए शब्द ग्रहण करने और उनके देवनागरी लिप्यंतरण का संबंध है, अगस्त-सितंबर, 1962 में वैज्ञानिक तथा तकनीकी शब्दावली आयोग द्वारा वैज्ञानिक शब्दावली पर आयोजित भाषाविदों की संगठनी में अंतरराष्ट्रीय शब्दावली के देवनागरी लिप्यंतरण के संबंध में सिफारिश उल्लेखनीय है. उसमें यह कहा गया कि अंग्रेजी शब्दों का देवनागरी लिप्यंतरण इतना क्लिष्ट नहीं होना चाहिए कि उसके लिए वर्तमान देवनागरी वर्णों में अनेक नए संकेत-चिह्न लगाने पड़े. अंग्रेजी शब्दों का देवनागरी लिप्यंतरण मानक अंग्रेजी उच्चारण के अधिक से अधिक निकट होना चाहिए. उसमें भारतीय शिक्षित समाज में प्रचलित उच्चारण संबंधी थोड़े-बहुत परिवर्तन किए जा सकते हैं. अन्य भाषाओं के शब्दों के संबंध में भी यही लागू होना चाहिए.

(ग) हिंदीमें कुछ शब्द ऐसे हैं जिनके दोनों संस्करण बर्बर चल रहें हैं विद्विस्माद में नोबलपुरोकी एक-सीमान्यताहै फलहस्त इनकी एकपुता आवश्यक नहीं समझी गई है कुछ उद्देश्य है गर्दन/गर्दन, गरमगरसी बरफ/वरफ, बल्किकहु/बल्किकहु, सरदीसरदी कुम/कियुसी, भरतीभरती फुसत/फुसत, बरदशह/बरदशह, वशसं/वासं, आखीआखी, बरतन/बरतन, दबेस/दबुस, दक्कुन/दक्कुन, बिर/बिरिसीआदि

9. हल्घहिज
ससंक्तमस्युक ततस्म शब्दोकीवरतनीमें सामान्यः ससंक्त रघु हीरखाज्, परतुजिनि शब्दोकेपर्यस्त मोहदीमेहल्चहिष्ठ लपुस्त हो चक्काहै उनमेफ़रि सेलगमेकायतब्र न किया जाय, जसे महान, वदिव्न आदिकिने मे

10. सब्न-परबितुन

ससंक्तमस्युक ततस्म शब्दोकीवरतनीको जयोकातयोणगृहण कथिजाय. अतंबरहमाको बरमहा चहिष्ठ कोचनिष्ठ, उक्तण कोउरणि मे बदलनाउचति नहींहोगा इसीपकः गरुळी, दश्स्थवय, पर्दरश्लिष्टि अतयुधिकि, अन्धकिरिआदि अशदुध पर्यः गरुळय नहींहैं इनकेकरमश्ल गहुः, दस्सथवय, पर्दरश्निः अतयुधिकि, अन्धकिरिः हीलखिनाच्यश्च. जबि ततस्म शब्दोमेतश्च वयजनोकेशयः रोसथशिलिमांक दक्तिवृमस्युक वयजन लपुस्त होगयाहैसेन लखिनेकीछद है
11. वसिर्ग  
ससंक्त्त केलिनि शब्दोबौवसिर्ग कापर्यांणे 
हसोहैवेयदतितस्म रघु मेंसयकु त हाटो 
वसिर्ग कापर्यांणे अवश्य कियावान, जसै 
दुष नभुकरुमियेदिदिस शब्द केतदभव रघु मे 
वसिर्ग कालणे होघुकाहोतोउस रघु मेंविर्ग 
केबसिष्किकम चर जाशगा जसैदेख-सेख के 
सथी 

12. ऐ, ची कापर्यांणे  
हसोहैमाए, औ कापर्यांणे दोप्रकाश की 
धवनधोंकोवयक्त करनेकलिण हसोहै पहले 
प्रकाश कीधवनचिहांहै और आदिमेहेतथादसूरे 
प्रकाश कीगवथांकवांआदिमेवन दनोही 
प्रकाश कीधनचिहोंकोवयक्त करनेकलिण इनही
चत्तिसौंकापर्यंग कथिभाष. गवयः कविकाव्यादिति
सशत्धेनांकीआवश्यकतानहींहै

13. पराक्रमकि परस्पर
पराक्रमकि परस्पर कर कोकर्यिसेमलिकर
लिखिभाष, जिसे मलिकर, खामीकर, रोखीकर
आदि
14. अनुयं नबिम

(क) शक्तिबेंकाकापर्यंगे पर्चलति रहेंगे
(ख) फबुस्ट्रं स्वर्ण कोलेक्टर श्रेय वर्षि मचि हि
वहीगहुन कर लए जंजेअंगर्जेिेमे
पर्चलति हैं यथा (-, ; ? ! : ) (वसिर्रा के
मचि कोहीकेिेन काकहिि मि लथिजि)
(ग) पर्स्वि वर्षि केलिे खड़ीप्रें (ि) का
पर्प्पिे कलिजिा.

15. मनक वर्तनििेिेकेिे नावदकर

हदिििएक वकिििशिि भजाहैिंधं कीरििििा
घणिि होजनेिेबाब यह शनिशनेिखििि
भजतिि रघुि गरहुन कर रहीहै अनि क्षतरशि
भजाओंकेसफरिि मेँआकर, उििेिेिु कछ
गरहुन करकेिे अहदिििििियोिदकििििकुित
हतेिेिेंिेिेकायथििििंिं एि सर्वसमिि अखििि
भजतिि रघु वकिििि होिेिऐििििआििि.
यदयपाििह सहीहैकविविवितान्त्त्र भ्यूखडं मेंोर बहबसीसमा केिथि वय्वहसी कसीभी विकिसशंिे भसाकेउच्छाणगत गठन में अनकेर्मुिालिनासक्खाकि है उसेिव्यकरण के कराे नयिमोमेजकड़नहीजासकटाउसके पर्यंकरष्मैंिोकसिसिईसेशबदु, जसिकेदोया अधीि संमानिर रयु पर्यालि होघकेह़एक वशिषिे रयु िैप्रस्यकृि करैकेलिए बधय स्नी कयिजासकत्ता ईसेषबदरपुिोकेबसेमेकसिसी वशिषज्जि दव्यानशिय देसेकेिबि भीउनकी गर्यस्यतःभगर्यस्यताकेबियि मैमतििदि बनाही रहताहैफिर भीप्रथमतोकम सकोम लश्कन, टक्रंि और मदुिण केिक्सेिर मेतोहदिसििजािे एकसुिादि और मनकीकरण कीतक्तिि आवश्यकता हैिी किाईसंकेिना आज केितरधि जरीन कीअनिक्षथिनहीिहै
भाषाविद्यक कठोर निषिद्ध बनादेसेंदनकी
सवीकृततातोसदेसस्पद होहीजाहीसस्थ हीभा
केसक्षात्क वक्व नेभवराध आनेकाथेदासाड़र
रहताःफलतः भाषात्संशी,जीवतं और समाभस्पु
नहींह पासी हदिवरणामाकामककीकरण मोर
हदिवरतनीकीएकपुतावस्थयक निषिद्धात्ति करते
समय इन सब तथ्योकोथ्याध मेरखाणयाहैं और
इसीमी जहाँतक बन पढ़हैदादतातारूस निशिद्धपनाई
गई है

3. हदिवरसंबूख शब्दोंकीएकपुता
हेदी प्रदेश में संख्यावाचक शब्दों के उप चारण और लेखन में प्रय: एकपुताका अभाव
dिखाई देताहै।शिक्षा मंत्रालय द्वारा प्रकाशित ए बेसिक ग्रामर ओफ मॉडर्न हेदी में भी
इस एकपुता का अभाव था। अत निर्देशालय ने 5-6 फरवरी 1980 को आयोजित
भाषाविज्ञानियों की बैठक में इस पर गंभीरता से विचार किया गया।तदनुसार एक सी तक
सभी संख्यावाचक शब्दों पर विचार करने के बाद इनका जो मानक रूप स्वीकृत हुआ ,वह
निम्नामुन्सार है:—
एक सेसीतक संख्यावाचक शब्दोंकाल्पनक रूप

<p>| एक | गखाह | इकक्सी | इकत्सी |</p>
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सरकारी कामकाज में मूलरूप से हिंदी का प्रयोग करने पर
नकद पुरस्कार और प्रोत्साहन

सधं कीर्तिभाषानीतिक अनुसुन हदिनी में पर्विशतप्राप्त तथाहदिनीकाक्ष्यसत्क जग्न
रखनेवाले अधिकारियों करमचारियों के साथी अपने सरकारी कामकाज में हदिनीकार अधिक से अधिक
प्रश्नों करना अनविक्षण है तथाहदिनी अधिकारियों
तथाकरमचारियों को हदिनी में अपना अधिक से अधिक
अधिक सरकारी कामकाज करनेके लिए पर्विशतप्राप्त
सक्रष्ट रखनेवाले अधिकारियों (गहू मतरूख) तथाका मतरूख द्वारा अनके योजनां लगूकी गई है
जलिकावर्धिण इस पर्वत है
1. मदु रखे सेहदिनी सरकारी सेवक काम करनेके लिए पुस्कर -
इस पुस्कर योजनामें बिगार लकेकलिए क
tथाख कक्तेरामीसथिति कर्द्याथे सरकारी
कार्यशंयोमेंकाज करनेवेकरमचारियों के
वर्ष कैदाँम अपने सरकारी काम में हिदिम में कम सेकम 20000 शब्द तथाग कहते हैं में स्थाति क्षेत्री सरकारी काम स्थायी मेंकार रण करने देखेकरस्थायियोकेलिए वर्ष कैदाँम अपने सरकारी काम में हिदिम सेकम 10000 शब्द लिखिनाजरपुर है। पुसक्त्रोकानिय विनायक समतिदिव्यसाकियाजजताहेजसिमेहिदिम मेंलखियेगए शब्दोकीसखंया ताईहाईन वेंसिं/डर्फल्सिं कीगुणवत्तापर विश्व कशिज़ता है। अधीनस्थ कामस्थायिकेकरस्थायियोते लिए सक्तांतर रघु सेठिय जबेलथेसुसक्रा-

(1) पर्थम पुसक्रा (दे): पर्थतके 1600/- रघुए.

(2) दक्त्तिन्य पुसक्रा (तनी): पर्थतके 800/- रघुए.

(3) तद्नूव पुसक्रा (पंि): पर्थतके 600/- रघुए।
2. सद्दे गोटरकों तथा हरिता ट्युपलों को हिदीमें बताना।
अगर्स्के, अल्बार्हिदी में रचनाकर्ता ट्युपल्टमात्रण 80 रुपए
tथा 120 रुपए पश्चिम की दर सेवकों द्वारा
तत्त्वात्मक जनरल्प्रथम नहीं। कहिं उर्म यह हैकि
ट्युपल्ट तथापत्ता ग्राफर पश्चिमित्र कम सेकम
हिदीमें पांश पत्र ट्युप करें तथाप्त डक्टर्शेन
अवश्य लें।
3. राजभाषामर्द/ परस्वसिद्धि -
यह उन वरिष्ठ अधिकारियों का दायित्व है
जोस्क्यं अपनादर्शिक से अधिक कम हिदीमें नहीं
करते, बलकि अपने अधिकर्ष काश करनेवाले
अधिकारियों कर्मचारियों को हिदीमेंकम करने
केलिए पर्याप्तति करते हैं यह पद परमाणु
रत्ने मतरीजीद्यार्थियाज्ञाताहै।
2. नम्र बहूरु मस्तकों के बीच रौंक योजना।
रबे तकनीकीविश्वासपर हदितीमेंमैंकि लखन कोपत्तोस्ष्टिक करनेके लिए यह परसक्ष योजना लगूंगई है। नकद परसक्ष को लिए परसक्ष के कामखूँखान समतिदिव्याकोलियाँजताहै। सतत्री पुस्तकोंकोपरस्तविर्ष नमूनेलखित परसक्ष दण जत्ये

(1) परथम परसक्ष (एक) - 15,000/- रघुये

(2) दक्तिथ परसक्ष (एक) - 7,000/- रघुये

(3) तच्छी परसक्ष (एक) - 3,300/- रघुये

5. परसेरदं एवंंयेयोनपरस्तत्तिकी परस्तियाँ और अभिधितकोपरत्तोस्ष्टिने करनेकोेंदक्षेत्र सर्वे मतसंग्रह कीहदितीमौखकासंग्रह/उपनयुः और किव् पुस्तक लखन पर करमश्यंपरसेरदं और मतसंग्रहण गयुत्त परसक्ष योजनाँलंग्यूः।
महोदयव्यवस्थाकेर्मालेखन इन दोनों उच्च अन्तर्गत नमोदकाओंके अन्तर्गत नमोदकाओं परस्पर एवं परस्पर हस्तिनित्रय पर्याय करनेकी व्यवस्थाकी गरीबी है।

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<td>15,000/- रू 7,000/- रू 3,300/- रू</td>
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<td>15,000/- रू 7,000/- रू 3,300/- रू</td>
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6. वषकालित नकद पुरसकः योजना-

हिंदीमें परशस्नीय काल करनेवाले 134 अधिकारियों कर्मचारीयोंको पृथ्वीक विशेष माननी भवन सीजीद्वारा अखौल रहे हिंदीसप्तत केंद्रसर पर 1,500/-रु की नकद राशनिकाप्रमाण-पत्र प्रदान किए जाते हैं।

7. राजभाषा अकूतक पुरसकः योजना—

हिंदीकेप्रायो-पुर्सार में लक्खनीय काल करनेवालेनिदिशक/विषिक कोसा महीक रुप से 9000/-+आचार्य कशिशेवस चल वजेयती 6000/-+रहे मतरीजी आभासध्वस्त तथा 4000/-+रहे मतरी राजघाटर्फी के कर्मशं प्रथम, द्वितीय तथा तत्त्वी पुरसकः प्रदान किए जाते हैं। उक्त पुरसकः सेंके अत्यंत प्रथम पुरसकः प्रपक्ष करने विषिक ०६ कर्मचारियों को ५००-१५००/-रुपए, द्वितीय पुरसकः प्रपक्ष करनेवाले विषिक ०५ कर्मचारियों को १२००-१२००/-
रघुए तथातत्त्वी परससक्ष प्रपन्त करनेकेले 05 कर्मचारियोंको 800-800/— रघुए केरकसक्ष परदन कप्त जातेह।

8. रगे मतत्रीहिदीनबिधं परतथिङ्गरत।

रगे कर्मचारियोंके सवालन और परष्ठधन सबंधीतिविषयींपर नविन्थं लखेन केलए परलोककीति करनेकेलुददशेय सपमतिकिया रगे मंत्रीहिदीनबिधं परतथिङ्गरतिकार्यायोगन कप्त जातेह।

रघेवेबोह कश्यतम मेपरजन नविनेंका मलूम मंत्रौं करनेकेपशङ्क परसक्ष लखेकोंके मणनी मतरीहीदीद्वारले सपमत्त केलसर पर परसक्ष परदन कप्तिजातेह। इस योजनाके अतरंगत रजपरस्ति तथा आरजपरस्ति श्रमिकोंमे परस्त्यके केलए अलग-अलग परसक्ष नविनिक्षति हैं
<table>
<thead>
<tr>
<th>संख्या</th>
<th>पत्रस्म परिस्क्रिया (दो)</th>
<th>रुपये</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>पर्षाल विधान सभा</td>
<td>6,000/-</td>
</tr>
<tr>
<td>2</td>
<td>द्वितीय परिस्क्रिया (दो)</td>
<td>4,000/-</td>
</tr>
</tbody>
</table>

9. अखिल राष्ट्रीय विश्वविद्यालय एवं इंटेलिजेंस विभाग:

यह पत्रस्मित पत्रस्मित विश्वविद्यालय एवं इंटेलिजेंस विभाग द्वारा आयोजित कीज़ी है। इस योजनाके अवसरके 3000-3000/- रुपये केपर्षाल विधान सभा, 2500-2500/- रुपये केद्वितीय परिस्क्रिया और 2000-2000/- रुपये केद्वितीय परिस्क्रिया तथा 1500-1500/- रुपये केवाखं-पखं संवाक्षरवाल परिस्क्रिया दशोंके पर्वधान है।

10. अखिल राष्ट्रीय विश्वविद्यालय एवं इंटेलिजेंस विभाग:

यह पत्रस्मित पत्रस्मित विश्वविद्यालय एवं इंटेलिजेंस विभाग द्वारा आयोजित कीज़ी है। इस योजनाके अवसरके 3000-3000/- रुपये केपर्षाल विधान सभा, 2500-2500/- रुपये केद्वितीय परिस्क्रिया और
2000-2000/- रुपए केतनेकी पयसक्ष तथा 1500-1500/- रुपए केपां-पां संबंधनापरसक्ष देनेके पर्यवेक्षण है।

11. अधिकारियोंकोहद्धीमेअधकिष्ठक डक्ट्रेशन देनेके लिए पर्युपस्थल करनेहतुय हरसक्ष योजना-

अधिकारियोंकोहद्धीमेअधकिष्ठक डक्ट्रेशन देनेके लिए पर्युपस्थल करनेहतुय हरसक्ष योजना के अंतर्गत पर्यस्तक्ष का ग्रामस्थ सेक हद्धीभाषी और एक अहद्धीभाषीले अधकिष्ठको2000-2000/- रुपए केनकद पयसक्ष देने जाते है। हद्धी डक्ट्रेशन काय कीनयनुतम सभीनरिहाति है अर्थात् केवल वेअधकिष्ठक डक्ट्रेशन पयसक्ष केपां- पां हस्तेहैजोक तथाख कष्टटे मैवरू मैकम से कम 20,000 शब्द हद्धीडक्ट्रेशन देने हिन्दी भाषीअधकिष्ठकोकेलेए शब्द सबो 10,000 शब्द पर्यस्तक्ष है।
12. रचना: व्यक्तिगत लिखित परस्पर बातचीत

रचनेवालों ने अखलि सहर पर रचना व्यवस्था योजनावर्ष 2000-2001 सेप्टेम्बर की है। इस योजनाकेंद्रीय अलग-अलग पर्यायक कैलेंडर वर्ष में पाँच अग्रेस यस्ते के वर्ष में लिखे गए सर्वेक्षण यस्ते के वर्ष में केवल कोई योग्य व्यक्तिगतिक व्यक्तिगत योजनावर्ष 2000-2001 के नकद परस्पर बातचीत जाने परंपरा 4,000/- रुपये में तथा 2,000/- रुपये में उपर जाने चाहिए। इसमें रचनेवालों को भी भिंडिया लेखिका है। यस्ते वर्ष में अद्भुत सफल में टक्कर जीतने चाहिए। कम से कम 3000 शब्दों में जीत जीतने चाहिए। शीर्षक, उपशीर्षक एवं एल्फेंट्रेक्ट का नाम, पदनाम, आयुपत्र काश्यक काम का तथा मात्रश्रेष्ठ भीलिखित जीतने चाहिए। नबिंद दो अन्तर्मेंट परस्पर बातचीत चाहिए।
13. इंदिरागंधी राजभाषा पयोजना

राजभाषा मंत्री स्वाधीन दक्षिणसंस्थान सरकार के सकेत/सकेतविद्यालय नियोजित है। हिंदी में मैत्रीक पुस्तकेंद्रियों के इंदिरागंधी राजभाषा पयोजना है। इस योजना के अंतःस्थान पर्यावरण 40,000/- रु. द्वितीय 30,000/-, ततान्तर पर्यावरण 20,000/-पुरुषे तथा संक्षिप्त ना पुर स्कार 10,000/-स्कौंपे प्रदान किए जाने का प्रावधान है।

वही पुस्तकें स्वीकार्य होती है जो मौलिक रचना हो। मैनुअल, शब्दावलियाँ, संस्मरण, कविताएं, कहानियां, नाटक, उपन्यास आदि स्वीकार्य नहीं है। पुस्तक किसी शैक्षिक या प्रशिक्षण संस्थान के पाठ्यक्रम में शालिम न हो। प्रत्येक प्रविष्टि के साथ पुस्तक की चार-चार प्रतियाँ अवश्य भेजे जाएं। प्रविष्टियों प्रत्येक वर्ष के 1 जुलाई तक राजभाषा विभाग, गृह मंत्रालय, खान मार्केट, नई दिल्ली-3 पहुंच जानी चाहिए।
### समूह के आधारिक पाठ्यक्रम के लिए राजभाषा प्रश्नावली

<table>
<thead>
<tr>
<th>हां/नहीं/केवल दोपहियों</th>
<th>1. अनुछेद 343 (1) के अनुसार संघ की राजभाषा हिंदी और लिपि देखनागरी है।</th>
<th>हां/नहीं</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. संघ के राजकीय प्रयोजनों के लिए प्रयोग होने वाले अंकों का रूप भारतीय अंकों का अंतरों स्ट्रीय रूप होगा।</td>
<td>हां/नहीं</td>
<td></td>
</tr>
<tr>
<td>3. संघ के राजकीय प्रयोजनों के लिए हिंदी भाषा का उत्तरोत्तर प्रयोग करने की सिफारिश गृह मंत्रालय /राजभाषा आयोग करता है।</td>
<td>हां/नहीं</td>
<td></td>
</tr>
<tr>
<td>4. राजभाषा अधिनियम 1963 की धारा 26 जनवरी, 1967 से लागू हुई है।</td>
<td>हां/नहीं</td>
<td></td>
</tr>
<tr>
<td>5. केंद्रीय सरकार के सभी कार्यालयों द्वारा सभी विज्ञापन हिंदी और अंग्रेजी दोनों भाषाओं में साथ -साथ जारी करना अनिवार्य है।</td>
<td>हां/नहीं</td>
<td></td>
</tr>
<tr>
<td>6. कोई कर्मचारी किसी फाइल पर टिप्पणी या मसौदा हिंदी अथवा अंग्रेजी में लिख सकता है।</td>
<td>हां/नहीं</td>
<td></td>
</tr>
<tr>
<td>7. कर्मचारी टिप्पणी हिंदी अथवा अंग्रेजी में लिखे तो उससे अपेक्षा की जाएगी कि वह उसका अनुवाद दूसरी भाषा में प्रस्तुत करे।</td>
<td>हां/नहीं</td>
<td></td>
</tr>
<tr>
<td>8. राजभाषा नियम 1976 के नियम 6 के अनुसार मैन्युअल, संहिताएं और प्रक्रिया संबंधी अनुसार साहित्य , लेखन सामग्री आदि द्विभाषी रूप में मुद्रित या प्रकाशित किए जाएं।</td>
<td>हां/नहीं</td>
<td></td>
</tr>
<tr>
<td>9. हिंदी, हिंदी टाइपिंग और हिंदी आशुलिपि की परीक्षा पास करने पर कर्मचारी को दी जाने वाली वेतन बृद्धि कितनी अवधि तक देय होगी।</td>
<td>एक/दो/ तीन वर्ष</td>
<td></td>
</tr>
<tr>
<td>10. हिंदी टाइपिंग की परीक्षा करने पर अराजपत्रत कर्मचारियों को वैयक्तिक वेतन देय होगा।</td>
<td>हां/नहीं</td>
<td></td>
</tr>
<tr>
<td>11. जो कर्मचारी हिंदी, हिंदी टाइपिंग या हिंदी आशुलिपि की परीक्षा अंकाएं साथ अभ्यास</td>
<td>हां/नहीं</td>
<td></td>
</tr>
</tbody>
</table>
1. भारतीय अंकों के अंतर्राष्ट्रीय रूप का उपयोग सभी सरकारी प्रयोजनों के लिए किया जा सकता है।
2. अनुच्छेद 351 के अनुसार हिंदी संघ की राजभाषा है।
3. धारा 3(3) के अंतर्गत आक्षेप चार्ट आते हैं।
4. सरकारी विज्ञापन केवल अंग्रेजी में जारी किए जा सकते हैं।
5. धारा 3(3) के अंतर्गत अने वाले दस्तावेजों को द्विभाषी रूप में जारी करने के लिए कार्यालय का प्रशासनिक प्रधान व्यक्तिगत रूप से जिम्मेदार होता है।
6. केंद्रीय सरकार के उपक्रमों पर संघ की राजभाषा नीति लागू होती है।
7. अंडमान तथा निकोबार द्वीप समूह ख क्षेत्र के अंतर्गत आता है।
8. हिंदी में हस्ताक्षरित अंग्रेजी में दिए गए आवेदन , अपील तथा अभ्यावेदन के उल्लम्ब हिंदी में दिए जाने चाहिए।
9. क्षेत्र में स्थित केंद्रीय सरकार के कार्यालयों के बीच हिंदी में प्रतार्क लिखी जाना चाहिए।
10. हिंदी में हस्ताक्षरित अंग्रेजी पत्री के उल्लम्ब हिंदी में नहीं दिए जा सकते हैं।
11. हिंदी का कार्यालय जान रखने वाला कर्मचारी हिंदी पत्र का अंग्रेजी अनुवाद नहीं मांग सकता है।
12. हिंदी में प्रश्नात्त प्राप्त कर्मचारियों को विनिर्दिष्ट प्रयोजनों के लिए हिंदी का प्रयोग करने के लिए अधिकार जा सकता है ।
13. हिंदीतम्भाषी क्षेत्रों में स्थित केंद्रीय सरकार के कार्यालयों में रचना की मोहने तीन भाषाओं में बनवाई जानी चाहिए ।
14. केवल केवल अंग्रेजी में बनवाए जा सकते हैं।
15. केंद्रीय सरकार के अधिमुखित कार्यालयों में टिप्पण तथा आलेखन में केवल हिंदी का प्रयोग किया जाना अथवा अन्य भाषा है।
16. सभी वर्ग में केंद्रीय सरकारी कर्मचारियों के लिए हिंदी का प्रशिक्षण अनिवार्य है।
17. के क्षेत्र में स्थित केंद्रीय सरकार के कार्यालयों से के क्षेत्र में स्थित केंद्रीय सरकार राज्य सरकार के कार्यालयों को अंग्रेजी में पत्र भेजे जा सकते हैं।
18. परिपत्र सामान्य आदेश की परिभाषा के अन्तर्गत आता है।
19. के तथा ख क्षेत्र के प्रेसारों के लिए केवल हिंदी में पत्र/पत्रिकाओं जारी किए जा सकते हैं।
20. मंडल राजभाषा कार्यालय समिति की प्रत्येक महीने बैठक होती है।
21. संघ की राजभाषा नीति के समन्वय का कार्य गृह मंत्रालय का राजभाषा विभाग करता है।
22. हिंदी के प्रगामी प्रयोग के संबंध में राजभाषा विभाग प्रतिवर्तन वार्षिक कार्यक्रम जारी करता है।
23. हिंदीतरभाषी राज्यों में स्थित केंद्रीय सरकार के कार्यालयों को हिंदी में पत्र नहीं भेजे जा सकते।
24. जिन कार्यालयों के 80% या अधिक कर्मचारियों को हिंदी का कार्यसाधक ज्ञान है, उन्हें अधिमुखित किया जा सकता है।
25. सभी जनप्रतिष्ठित कार्यालयों का दुविभाषी रूप में कार्य करने योग्य बनाया जाना अनिवार्य है।
26. विभागीय परीक्षाओं के सभी प्रश्न-पत्रों का दुविभाषी रूप में बनवाया जाना अनिवार्य नहीं है।
27. संघ की राजभाषा नीति के कार्यालय के लिए जांच बिंदु स्थापित करना रेलवे बोर्ड का दायित्व है।
28. नाम बैज केवल अंग्रेजी में बनवाए जाए सकते हैं।
29. संसदीय राजभाषा समिति की दूसरी उप समिति रेल कार्यालयों का निरीक्षण करती है।

नविवर्तित विकल्प दांड़ेकोणों का महत्व पद्धति शहद भरकर प्रेसोडिष्ट-денकर प्रवृत्ति

1. रेल मंत्रालय तथा इसके संबंध कार्यालयों में हिंदी के पुनरीक्षण का कार्य ------------------ उप समिति करती है।
2. राजभाषा नीति के अनुसार के लिए राजभाषा नियम ,1976 के अनुसार देश भर में -------- तथा -- के क्षेत्र बनाए गए हैं।
3. दिल्ली और आगरा --------- के क्षेत्र में स्थित हैं।
4. मुंबई तथा सूरत ---------- के क्षेत्र में स्थित हैं।
5. कानपुर तथा सूरत ---------- के क्षेत्र में स्थित हैं।
6. अंडमान निकोबार द्वीप समूह संघ राज्य ------------ क्षेत्र में स्थित हैं।
7. वार्षिक कार्यक्रम के कार्यालयन में सहायता देने के लिए तथा तत्संबंधी समीक्षा करने के लिए राजभाषा विभाग के क्षेत्रीय कार्यालय कार्यालय - दिल्ली,----------,----------,----------,

-------- तथा भोपाल में खोले गए हैं।
8. आलोचना वर्ष के वार्षिक कार्यक्रम के अनुसार के क्षेत्र में स्थित केंद्रीय सरकार के मंत्रालय /विभागों /कार्यालयों आदि में कार्यरत अधिकारी, कर्मचारी हिंदी में -------- % टिपणी लिखे।
9. आलोचना वर्ष के वार्षिक कार्यक्रम के अनुसार ख क्षेत्र में स्थित केंद्रीय सरकार के मंत्रालय /विभागों /कार्यालयों आदि में कार्यरत अधिकारी, कर्मचारी हिंदी में % टिपणी लिखे।
10. आलोचना वर्ष के वार्षिक कार्यक्रम के अनुसार ग क्षेत्र में स्थित केंद्रीय सरकार के मंत्रालय /विभागों /कार्यालयों आदि में कार्यरत अधिकारी, कर्मचारी हिंदी में % टिपणी लिखे।
11. क क्षेत्र में स्थित केंद्रीय सरकार के कार्यालयों से ख क्षेत्र में स्थित केंद्रीय सरकार के कार्यालयों को भेजे जाने वाले पत्राचार का प्रतिशत -------- है।
12. क क्षेत्र में स्थित केंद्रीय सरकार के कार्यालयों से ग क्षेत्र में स्थित केंद्रीय सरकार के कार्यालयों को भेजे जाने वाले पत्राचार का प्रतिशत -------- है।
13. राजभाषा नियम 1976 का अधिकार क्षेत्र ------------ राज्य के सिवाए संपूर्ण भारत पर है।
14. कर्मचारी द्वारा आवेदन या अपील अंग्रेजी में लिखी गई हो, किंतु उस पर हिंदी में हस्ताक्षर किए गए हो तब उसका उल्लंघन में दिया जा ना।
15. राजभाषा नियम 1976 के नियम 8 (2) के अनुसार हिंदी का कार्यसाधक जान रखने वाला कर्मचारी हिंदी में किसी दस्तावेज की अंगेजी में मांग तभी कर सकता है, जब वह दस्तावेज --------

या ---------- प्रकृति का हो।
16. राजभाषा नियमों तथा अधिनियमों के उपर वंशों का समूहित रूप से अनुपालन मुनिशिप्त करने के लिए कार्यालय का ---------- उल्लंघन होता है।
17. क्षेत्रीय राजभाषा कार्यालय समिति के अध्यक्ष ---------- और उपाध्यक्ष ---------- होते हैं।
18. क्षेत्रीय राजभाषा कार्यालय समिति के सदस्य सचिव ---------- होते हैं।
19. रेल राजभाषा सलाहकार समिति के अध्यक्ष ---------- होते हैं।
20. मंडल राजभाषा कार्यालय समिति के अध्यक्ष -------------------------- होते हैं।
21. अंग्रेजी आशुलिपक को निर्धारित मात्रा में हिंदी में कार्य करने पर --------रुपये का प्रोत्साह न भता देय है।
22. अधिकारियों को हिंदी में अधिकारिक डिक्शन देने के लिए प्रोत्साहित करने हेतु पुरस्कार योजना के तहत एक हिंदी भाषी तथा एक अहिंदी भाषी रेल अधिकारी को दिए जाने वाले पुरस्कार की राशि रुपये ------------------ है।
23. हिंदी में प्रशंसन ीयकार्य करने के लिए रेलवे बोर्ड की व्यवस्थित नकद पुरस्कार योजना में पुरस्कार की राशि रुपये ------------------ है।
24. संसदीय राजभाषा समिति में कुल -------- सदस्य होते हैं।
25. रेल मंत्री हिंदी निबंध प्रतियोगिता में निबंध ---------------------------विषय पर लिखा जाता है।
26. मंडलों पर हिंदी कार्य का प्रशासनिक नियंत्रण देखने वाले अधिकारी को ---------------- पदनाम से जाना जाता है।
27. संविधान की अभिमी अनुमूल्य में कुल -------- भाषाएं हैं।
28. राजभाषा विभाग, गृहमंत्रालय द्वारा जारी वार्षिक कार्यक्रम की अवधि ---------------- होती है।
संक्षेप टिपणियां लिखिए -

1. क) रेल सप्ताह । ख) धारा 3(3)
2. हिंदी सप्ताह कब और कैसी मनाया जाता है?
3. भारतीय रेल पर राजभाषा संगठन के स्वरूप का उल्लेख कीजिए।
4. क, ख तथा ग क्षेत्रों के लिए निर्देशित जांच बिंदुओं का उल्लेख कीजिए।
5. राजभाषा नियमों के अनुपालन की जिम्मेदारी किसकी होती है?
6. कर्मचारी से क्या अभिमित्र होता है?
7. अधिसूचित कार्यालय से क्या अभिमित्र है?
8. हिंदी का कार्यसाधक ज्ञान से क्या अभिमित्र है?
9. हिंदी में प्रवीणता से क्या अभिमित्र है?
10. नियम 8 (4) से आप क्या समझते हैं?
11. अराजपतित हिंदी पदों के नाम लिखिए?
12. सामाजिक आदेश की परिभाषा दीजिए तथा इसके अंतर्गत आने वाले किन्हीं 6 दस्तावेजों के नाम बताइए?
13. मूल पत्राचार से क्या अभिमित्र है? संक्षेप में बताइए।
14. अनुच्छेद 350 के अनुसार किसी व्यक्ति के निवारण के लिए संघ या राज्य का पदाधिकारी, संघ या राज्य में प्रस्तुत होने वाली भाषा में अभिमार्ग दे सकता है।
15. संसदीय राजभाषा समिति से आप क्या समझते हैं?

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