Headquarters Office, Personnel Department, Chennai – 600 003, Date: 21.02.2024

No. P(G)532/VII/AEE/30%/LDCE/Special Drive/CCBT/2023 -24

DGM/Co-ordination & Secretary to GM for kind information of GM PS-I to AGM for kind information of AGM PCEE, PCSO, CELE, CEDE, CESE, CETE, CEGE, CEE/EEM, CEE/CN/MS CAO/CN/MS, CPD/RE/MS All Sr.DEEs/Dy.CEEs/DEEs/SEEs/XEEs-MAS, TPJ, MDU, PGT, TVC, SA,AJJ,TBM, AVD, ED, VLCY, PRS/MMC/MAS, HO, CN, ERS, WM/Elec/LW/PER. DRM/MAS, TPJ, MDU, PGT, TVC, SA DRM/P/MAS, TPJ, MDU, PGT, TVC, SA CWM/CW/PER, LW/PER, GOC, PTJ, Dy. CPO/CW, LW & Elec WS/PER, WPO/GOC, AP/CN & RE/MS, GM/P/CORE/ALD, The MD/CRIS/NDLS, The Managing Director, RITES, 27 ,Perakamba,New Delhi-110 001., The Director/RDSO, Manak Nagar, Lucknow-226011. The Managing Director, RITES Mount Chambers, 4th Floor 758, Anna Salai, Ch - 2, The Managing Director, IRCON,13, Pallika Bhavan, RK Puram, NDLS The Joint General Manager/F, RVNL, Mezzanine Floor, Tirumalai Railway Station, Mylapore, Chennai-600004

Sub: 30% LDCE for the Group-B post of AEE - Electrical Department in Pay Matrix Level-8 -through Centralized Computer Based Objective Type examination (CCBT) - Special Drive - Reg.

Ref: Railway Board's Letter No.E(GP)2022/2/4 dated 14.12.2023 circulated as PBCNo.247/2023 and other related letters circulated as PBC No. 203/2022, 213/2022, 236/2022, 241/2022, 242/2022 & 01/2024.

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I. Railway Board vide letter dated 14.12.2023 have decided that a Special Group "B" Selection drive shall be carried out to fill up the Gazetted vacancies prevailing on the Railways. Accordingly, it has been decided to fill up these vacancies by holding another round of 70% Selection and 30% LDCE through Centralized CBT for promotion to Group 'B' posts by NAIR vide Board's letter dated 14.12.2023 and circulated as PBC No.247/2023, subject to other conditions specified therein. Accordingly, it is proposed to notify 30% LDCE for the Group-B post of AEE in this Special Drive, in Pay Matrix Level-8 in Electrical Department through Centralised Computer Based Test to be conducted by NAIR/ Vadodara. Eligibility, Method of Selection, Syllabus (PBC circulated vide No. 236/2022) and Instructions regarding applying online is attached as Annexures "A", "B", "C" & "D" for guidance.

Applications are hereby invited for promotion from Group 'C' service to Group 'B' service in Electrical Department for the post of AEE through Limited Department Competitive Examination against 30% of the vacancies as per the schedule indicated below.



Registration of application online - Date of Opening	23.02.2024 at 15:00 hrs
Registration of application online - Date of Closing	14.03.2024 at 23.59 hrs
Last date for forwarding the online applications received by Personnel Officers concerned to Headquarters	26.03.2024 17:00 hrs

#### II. The Vacancies notified are as follows:

Post	UR	SC	ST	Total	PwBD
AEE	02	01	Nil	03	1*

<sup>\*</sup>The total vacancies include 1 vacancy earmarked for PwBD which is a horizontal reservation.

The PwBD vacancy is earmarked for PwBD (c) Category as per DoP&Ts Office Memorandum dated 17.05.2022 with functional classification as LD-OA/OL, Leprosy Cured, Acid Attack victims in terms of Railway Board's letter dated 14.11.2022 (PBC No.242/2022).

Category	Functional Classification	Physical Requirement
(C)	Clause (C): LD-OA/OL, Leprosy Cured, Acid Attack victims	S, ST, BN, W, SE, MF, C, RW, KC, CL, JU, H

#### III. How to apply: -

- Detailed instructions for filling up the online application is available in the web
  portal and also enclosed herewith as Annexure "D". Volunteers should apply
  for the post ONLINE by visiting the official website www.srhqpb.in
- 2. Volunteers are advised to carefully read the entire instructions and information available on the official websites of sr.railnet.gov.in, sr.indianrailways.gov.in, srhqpb.in and nair.indianrailways.gov.in before filling up the application online.
- 3. The applications received will be treated as "Invalid/Ineligible" on the following grounds:
  - (i) Unsigned application.
  - (ii) Application without affixing latest photograph.
  - (iii) Application without verification and certification by Supervisory /Controlling official.
- Applicant must note that, if any information furnished by him/her is false or misleading, the application/candidature is liable for rejection and action will be initiated under D&AR rules.

## IV. Instructions to the forwarding Cadre Controlling Officials:-

The respective cadre dealer / controlling Personnel Officers should verify the correctness of the particulars of each application with the Service Register and other available relevant records. After due verification, each online application has to be certified regarding the eligibility and forwarded online with remarks, if any.

In addition, an excel file containing all the relevant details of all applications should also be downloaded. The downloaded excel data file should also be verified and corrections, if any, has to be carried out duly indicating the same in the remarks column. The same has to be uploaded in the website and also forwarded in e-office to the undersigned as e-receipt on or before 17.00 hrs of 26.03.2024.

It may be strictly ensured that only the applications which are found eligible to be forwarded to Headquarters.

The relevant data in Excel sheet received without such certification will be summarily rejected and the responsibility will be fixed for such incorrect or incomplete certification.

The Genuineness of the community certificate of the reserved community employees may be verified and certified by the cadre controlling Personnel Officer duly enclosing the attested copies of the community certificate failing which the candidature will be summarily rejected.

The details of court cases, if any, against the seniority or substantive status of the employees who have submitted their application for the above selection may be advised separately to this Office by the controlling Officer drawing the attention of APO/Gaz/HQ/MAS on or before 26.03.2024.

If volunteers are undergoing penalty of reduction to lower grade etc. or under suspension or any departmental proceedings have been initiated for major penalty or any RPUP cases are pending, the particulars of such employees should also be advised with details to Dy.CPO/Gaz/HQ in a sealed cover.

It is observed from the applications received from volunteers in the past that the date of entry into Grade Rs.5000-8000 in V PC/Rs.9300-34800+GP Rs.4200 (Level-6) in VI PC/ Running Staff date of entry in GP Rs. 2400 with designation and above on regular basis, for assessing the non-fortuitous service has not been indicated in several cases due to which it becomes difficult to decide their eligibility or otherwise at this end. This aspect may specifically be scrutinized and specified before forwarding the application to this office by the forwarding Officer of the unit concerned.

When an employee is holding an ex-cadre post, details of his post in regular cadre with the grade and date of entry as a regular measure should be furnished. This may also be brought to the notice of all concerned.

It is the responsibility of the Personnel Officer of Division/Unit concerned to certify the correctness of the eligibility of candidates for admission to the examination as per the Service Register, Seniority List and other documents maintained by them and as per the conditions laid down in the notification.

- V. There will be no supplementary examination.
- VI. Syllabus-Copy of the syllabus for the selection is enclosed as "Annexure C".

## VII. General Instructions:

- 1. All those eligible volunteers should be in readiness to appear for the CCBT at short notice as per the schedule will be advised by NAIR/BRC/ Railway Board.
- 2. The volunteers who have responded to this notification are also equally responsible to attend the CCBT on the scheduled date and time. They shall be in touch with their Headquarters office at frequent intervals for any updates. For inquiries, they may contact the following Railway phone numbers.

Ch. OS/Gaz : 22710 APO/Gaz. : 22533

Since, this selection is being conducted through CCBT by NAIR, the candidates who are applying in response to the notification are required to check the following websites for latest updates:

- SR Railnet sr.railnet.gov.in (a)
- SR Internet sr.indianrailways.gov.in **(b)**
- SR HQ PB srhqpb.in (c)
- NAIR nair.indianrailways.gov.in (d)



In addition to the above, candidates are instructed to check their email provided in the application for any updates.

3. For any assistance with regard to the above – the under mentioned Helpline Number may be contacted during office hours:

Name	Designation	Helpline Number	
Shri Thirumalai Balaji	S&WI	9952008951	

#### VIII. The tentative selection calendar.

Particulars	Date	
To apply online– Date and time of Opening.	23.02.2024 at 15.00 hrs.	
To apply online – Date and time of Closing.	14.03.2024 at 23.59 hrs.	
Last date for receipt of online applications at Headquarters from respective units	26.03.2024 at 17.00 hrs.	
Publication of eligibility list	24.04.2024	
Pre Promotional Training	29.04.2024 to 15.05.2024	
Date of CCBT by NAIR/Vadodara	Will be intimated in due course	

## IX. Important instruction to the Controlling Officers / Personnel Officers:

The original updated SRs and APARs for the last five years (along with the acknowledgement of the employee for having received the copies of APAR for each year) may be kept ready by concerned Controlling Officer for immediate transmission to this office whenever called for.

- X. This Selection is subject to the provision contained in IREC, IREM & any other instruction issued by Railway Board from time to time.
- XI. Wide publicity of this notification should be given to all staff including those who are on Deputation, Ex-cadre, training, leave/sick, etc., so as to enable them to submit their application through proper channel in time and staff may contact their Headquarter Office at frequent intervals.

Please acknowledge the receipt of this letter with date without fail.

The last date for applying through online by employee is 14.03.2024 at 23.59 hrs.

Encl.: Annexure "A", "B", "C" & "D"

(M. SUNITHA) Assistant Personnel Officer/Gaz for General Manager

Copy to: PCPO, CPO/A, CPO/G, CPO/IR – for kind information please Dy.CPO/Co-ordination/HQ, APO/T, M&E, APO/Genl. GS/SRMU, NFIR, AISC & STREA, AIOBCREA, SROA, SRPOA

Eligibility for the selection for promotion from Group "C" to Group "B" service for the post of AEE against 30% LDCE – Electrical Department:

Non-Ministerial Group 'C' staff of the Electrical Department holding the post in Level -6 (Rs 35,400-1,12,400) and above in the pay matrix with five years of regular service in level 6 (Rs 35,400-1,12,400) and above in the pay matrix (including regular service rendered in the corresponding pre-revised scales) including initial training period as on 01.01.2023 are eligible.

In terms of Board's letter No. E(GP) 2005/2/87 dated 18.08.2015, the Running staff in Grade pay Rs. 2400 (Level-4) which is equated to the stationary post of Grade Pay Rs.4200 (Level 6) and above, are also eligible to be considered for promotion to Group B service in the Electrical Department under extant rules. However, Sr ALP (NF) (80 %) are not equated to stationary post of Grade Pay Rs. 4200 (Level 6) and are not eligible to apply for the selection.

Running Staff who have been trained in Electrical Traction are also eligible to apply for this selection.

As per extant policy in Southern Railway, employees trained in dual traction are eligible to opt for either of the Group "B" posts of AEE or AME in Electrical or Mechanical departments respectively. Option once exercised will be final for all future notifications. They can seek further promotion to Gazetted cadre in Electrical or Mechanical departments as per their option.

Running staff who have opted for ADME/AWM selection in Mechanical Department in the earlier selection shall not apply to appear for the AEE examination.

Only such categories of staff as are otherwise eligible to be considered for promotion to Group 'B' service in the Electrical Engineering Department as per extant rules are eligible to appear in the LDCE for promotion to Group 'B' service.

#### Note:

- Staff whose lien and seniority is maintained in the relevant cadres of Southern Railway are only eligible to apply.
- ii) Eligible staff working in the Construction/Project Organization on deputation, training & any Ex-cadre Organization and having lien & seniority in the relevant cadres of Southern Railway, who desire to volunteer for the above LDCE may submit their online application through proper channel i.e. through their respective Personnel Department Officer, where they hold lien.
- iii) Employees working in Level-6 on ad hoc basis are not eligible to apply. Employees who have been granted financial upgradation in Level-6 under MACPs are also not eligible to apply.
- (iv) For assessing the period of Non Fortuitous service, the following may be kept in view.
- (a) As per RBE 55/1997 dated 17.04.1997, regarding counting of service rendered in the old unit on "own request transfer", the service rendered in the absorbing unit alone will count for eligibility wherever a minimum length of service is specified as a condition for consideration for promotion including promotion to general selection posts.

(b) The above instructions were partially modified vide RBE 34/2006 dated 21.03.2006. In terms of RBE 34/2006, on counting of service rendered in the old unit on "own request transfer" for the purpose of qualifying service for promotion in new unit, the service rendered by them in the old unit may be reckoned for determining their eligibility wherever a minimum length of service is prescribed as a condition for promotion including promotion to general post in the new unit subject to the conditions that the service so allowed to be counted does not exceed the length of service of the immediate senior in the new unit and the benefit of counting of service will be applicable only in those cases where the staff join the new unit on request transfer in the same category of posts.

(c) In terms of RBE 40/2008 dated 13.03.2008, those instructions were made applicable for reckoning the minimum qualifying service of Group "C" employees, in case of own request transfer to a new unit in the same category of posts, for determining their eligibility for promotion to Group "B" posts also.

(d) Regarding counting of service rendered in the old unit before mutual transfer of the employee for the purpose of determining eligibility for promotion to Group 'B' post, Board has clarified that instructions contained in Para 310 of IREM Vol.I governing the seniority of Railway servant transferred on mutual transfer will prevail.

(e) As advised in RBE No.102/2019 dated 25.06.2019 the time spent by a Railway servant under training immediately before appointment to service is to be counted as service for the purpose of appearing in Departmental Examination including LDCE for promotion to Group "B".

(f) The volunteers who have completed 5 years of Non-fortuitous service in the current seniority unit of the cadre as on 01.01.2023 are only eligible to apply. The same may be verified and ensured by the Personnel Officer concerned while forwarding the applications.

Eligible volunteers should apply online in the link www.srhqpb.in and submit their application

As vacancies earmarked for 'SC', Pre Promotional Training (PPT) for employees belonging to SC community will be organized before CCBT. The Reserved community (SC) employees who are willing to appear for CCBT without undergoing PPT may do so by exercising their option in the online application form. Employees belonging to Reserved Community (SC) who have expressed their willingness to attend PPT and if they fail to attend the PPT on the specified dates, will have to appear for CCBT without such PPT being imparted.

# Method of Selection for promotion from Group "C" to Group "B" service for the post of AEE against 30% LDCE - Electrical Department:

- The selection will be on the basis of written exam (Objective type), viva-voce and record of service.
- 2. The examination for LDCE will be one stage only and will comprise of only 1 paper with the following distribution of marks:

-	le paper of 150 marks comprising 100% objective type multiple choice the following distribution of marks	Questions
(a)	Technical (Professional) subject	80 marks
(b)	General knowledge including optional Questions of 15 marks on Official language Policy & Rules	40 marks
(c)	Establishment and Financial Rules	30 marks
	Qualifying marks	90 marks

- 3. Duration of the CCBT examination will be 3 hours.
- 4. Question Paper will have 175 Questions out of which 150 questions are to be attempted.
- 5.One mark will be awarded for every correct answer. There shall be negative marking for incorrect answers and one third of mark will be deducted for every wrong answer.

#### 6. Medical Examination:

Those who qualify in the written examination will be subjected to Medical Examination as per Para 530 (a) of IRMM. Those qualified in the written examination and declared medically FIT for Group "B" service will only be called for Viva-Voce test as per Railway Board's letter No. E(GP)80/2/8 dated 31/10/1991

#### 7. Record of Service and Viva-voce:

	Max Marks	Qualifying Marks
1. Viva-voce	25	30 (including at least 15 marks in the
2. Record of Service	25	record of service part)

(Railway Board's letter No.E(GP)/2005/2/69 dated 05.01.2006)

In order to qualify, a candidate must secure the minimum prescribed qualifying marks in the written examination, in the viva-voce which include record of service separately and also in the aggregate. After the viva-voce test, the names of successful candidates will be arranged in the order of merit on the basis of aggregate marks obtained by each of the candidates.



# Syllabus for 30% LDCE for promotion to Group 'B' post of AEE in Electrical Department.

## A. Professional Subjects:

### Part I: General Electrical Engg.

- Electrical Circuits: Electrical Circuit Elements (Resistance, Inductance and capacitance), Voltage and Current Sources, Ohm's law, Kirchoff's Voltage and Current Laws, DC & AC circuit analysis, Magnetic circuits and analysis, Poly phase circuit analysis.
- 2. Electronic Devices & Analog Electronics: Energy Band Theory of Solids, Intrinsic and Extrinsic Semiconductors Doping, Doping Materials, Carrier Mobility, Conductivity, Semiconductor Diodes, Diode Rectifiers, Bipolar Junction Transistor, JFET, MOSFET, Transistor Biasing Circuits. CE, CB and CC modes of transistor. Using transistors as amplifiers and switches. Characteristics of an Operational Amplifier Applications of Op-Amp as an Inverting and Non-Inverting Amplifier, Integrator, Differentiator, Summing and Subtracting Amplifier and Logarithmic Amplifier. Differential Amplifier Calculation of common mode rejection ratio, Active & Passive Filters.
- 3. Digital Electronics: Number Systems, Basic Logic Gates & Boolean Algebra, Digital Logic Gate Characteristics, Minimization Techniques, Combinational Logic Circuits, Flip flops and Sequential Circuits.
- 4.Power Electronics: Power Semiconductor Devices (Diodes, BJT, MOSFET, SCR, GTO and IGBT) and their characteristics, selection of devices for different power electronics applications, Working of single phase and three phase rectifiers, H-bridge inverter, Three phase voltage source inverter, PWM converters, Harmonic analysis and power factor improvement, AC machine control, VVVF drives.
- Electrical Engg. Materials: Properties & applications of Electrical insulating materials,
   Magnetic materials, Conducting materials & Semiconducting materials.
- Electrical Machines: DC Machines, Induction Machines and Synchronous Machines.
   Losses in rotating machines. Single phase and three phase transformers. Losses and efficiency of transformers, Machine Drives.
- 7. Renewable Energy Sources: Climate change, Global warming, Various sources of Renewable energy- Resources and applications, Solar Cells, Rooftop solar and land based solar plants- Concepts of Basic Design, construction and maintenance, Off grid and Grid connected solar plants, Wind turbines, Net Zero carbon emission, ECBC Round the clock green energy, Energy Storage systems, Policies and regulations. Net and Gross metering, Business model, tendering.
- 8 Power System and Protection: Basic concepts of electrical power generation and various equipment. Concepts of transmission lines, Models and performance of transmission lines and cables, Series and shunt compensation, Electric field distribution



and insulators, Distribution systems, Per-unit quantities, Bus admittance matrix, Load flow methods, Power factor correction, Symmetrical components, Symmetrical and Asymmetrical fault analysis, Principles of various protection system, Circuit breakers, Latest research in the field of power system.

## Part II: Railways Electrical Engg

#### 1. General Services:

- a. Power Supply arrangement: Radial distribution system, Looped(Ring Main ) distribution systems. Layout & Equipment at Distribution sub-station. Operation & Maintenance of sub-station, Various testing at sub-station, overhead & underground distribution, protective devices & their coordination. Construction, erection & commissioning of new sub-station and distribution lines. Basic features of PVC and XLPE cables. Cable rating and derating, Cable laying. Concept of average demand, peak demand, load factor & electrical billing. Power factor improvement, Electrical & fire safety, Safety auditing of sub-station, concept of energy audit, Functions of Electrical Inspector to Government (EIG) in Railways. Power line crossing, Electricity Act-2003, CEA Regulations, SCADA and Substation automation. Earthing arrangement.
- b. Building Electrification: Types of various wiring methods, metering & safety measures. Wire, switchgears & fittings used for wiring, Energy efficient appliances, scale of fittings as per policy in various types of quarters, various types of Tariffs, commercial connection, concept of prepaid and postpaid metering, concept of smart meters. Safety coordination, Electrical accidents and prevention.
- c. Illumination & Lighting: Various parameters related to illumination, Different types of illumination sources, lighting methods, classification of lux levels at various types of stations, yard lighting & street lighting. Passenger amenities at Railway stations.
- d. Water supply: Types of water supply system, Pumping system, Classification of pumps, Comparison of various pumps, fluid theory, discharge calculations. Centrifugal pump, turbine pump, Submersible pumps, characteristic curve of pumps, efficiency. Cavitations & priming of pumps, necessity of multistage pumping, storage capacity and purification of water. Installation, maintenance & troubleshooting of pumps, Starter & drives of pumps, automation of pumps.
- e. Lift & Escalator: Working of Lift & Escalator, Installation of Lift and Escalator.
   Maintenance, various safety devices, control panels & Safety aspects.
- f. Air Conditioning & Refrigeration: Theory of air conditioning, refrigeration cycles. Various types of refrigerants, window/split/package AC unit. Central air conditioning plant, VRF system, air cooling systems, planning for capacity and drives for refrigeration plant, Maintenance and troubleshooting.

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g. Energy Conservation: Need of conservation of energy, Various measures being taken by railways to conserve energy in the field of Electrical General Services Necessity and implementation of Open Access in Indian Railways Energy conservation Act.

## 2. Traction distribution:

- a. OHE: Basic design concepts of TRD system of conventional and 2x25kV system. Types of overhead equipment. Sectioning principles of OHE. Various parts of OHE. Foot Patrolling, current collection, Tower wagons, seasonal & cyclic checks, maintenance Schedule, Preventive maintenance Tools, failure investigation of OHE, earthing and bonding. Railway Electrification and process of construction. Power Blocks & Procedure to obtain it.
- b. PSI: Schematics of 1x25kV and 2x25kV traction substation with names/ratings of various equipment, protection scheme for TSS. Fixed and dynamic PF correction, Feeding stations, SSP & SPs, 132 kV transmission lines, PSI equipment. Maintenance and failure investigation of PSI equipment.
- c. SCADA and Miscellaneous items: Operation and maintenance of remote control, traction power control organization, permit to work, emergency arrangements, coordination with operating and other departments. Liaison with supply authorities, maintenance and failure investigation of SCADA equipment.
- d. NDT techniques, Open Access, safety precautions for electrified sections, Latest development in TRD, MSG meetings. Instructions issued by Railway Board, RDSO's TI/MI, TCs, IRSOD & ACTM.
- 3. Train Lighting and AC Coaches: Systems of Train Lighting and Air conditioning on coaches, Self Generating Coaches, ICF TL/AC Coach Generation system. Circuits and protection in ICF TL/AC coaches, Emergency feed extension in coaches. Air Conditioning in coaches, Heat Load Calculation, Precooling and Pulldown Tests. Dynodrive test. 25 kVA coach inverter, Water raising apparatus. EOG and HOG systems in coaches- Hotel Load converter and Interlocking panel. Power and control circuits and protection systems in LHB TL/AC coaches, Power car, Pantry car, AC Double Decker, AC 3Tier Economy and LSLRD coach. HVAC Microcontroller and Electronic equipment in LHB coaches. LHB pantry car and its equipment. Push pull train operation. Maintenance schedules of ICF and LHB coaches, Pantry cars and Power cars. Manufacturing, POH and IOH activities of coaches. Commissioning tests and Special Repair. Circuits, working and maintenance of Passenger amenities items in ICF/LHB coaches. Coaching depot working, Primary & Secondary maintenance, Sick line attention, Pit occupation chart, Rake links and Coach requirement, Staff yardsticks and benchmarking. Duties of ACCM/ACCA. Pre-cooling of AC Coaches. Features of ICMS. Unit exchange spares. Fire causes and prevention measures in coaches. SMIs. Modification Sheets and Technical circulars issued by RDSO and instructions by Railway Board and RDSO. Reliability Action plan, recent developments in coaches

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- 4. Electric Locos: Organizational structure and duties of officers & staff. Conventional AC & 3 phase locomotives on IR. Equipment in locomotives, their functioning / operations, maintenance / overhauling and testing parameters & maintenance schedules. Reliability & safety action plans. Traction Power Circuit, Auxiliary Circuit. Control Circuits and Pneumatic Circuits. Different types of braking arrangements. Locomotive maintenance schedules & various tests to be carried out. Working of Electric Loco Shed & Electric Loco Workshop. Safety items and safety checks involved in safe locomotive operation. Relevant paras of ACTM, Accident Manual, G&SR, IR SOD and Instructions issued by Railway Board, RDSO and CLW. Latest developments in the field of electric locomotives.
- 5. **EMU** and **MEMU/Metros**: Concept of EMU/MEMU/Metro trains, various types of EMU/MEMU stock, Conventional & 3 phase EMUs & their salient features. Different types of brakes used in EMU/MEMU/Metros. Power circuits, auxiliary, control circuits. Mechanical components and its functions. Different electrical equipment and its functions. Inspection/Maintenance/Overhauling schedules of EMUs/MEMU/Metros. Safety precautions and fire prevention in EMU/MEMU/Metros. Train Control Management System(TCMS). Recent developments in EMU/MEMU/Metros.
- 6. **Electric Loco and EMU Operation:** Organizational structure and duties of officers & staff. Crew management Training, Monitoring & Counseling. Crew & loco links. HOER Rules. Loco utilization. SPAD (Signal Passing At Danger). Management of Crew lobby, running room, trips shed & TLC / Power controller office. Working of CMS & FOIS. Safe, punctual & efficient loco / EMU operation with online troubleshooting of locomotive / EMU failures. Relevant paras of ACTM, Accident Manual, G&SR and Instructions issued by Railway Board & RDSO. Latest developments in the field of electric locomotives / EMU operations.
- 7. **Store Matters:** Procedure related to procurement of stock items and non-stock items, distribution and accountal of stores. Receipt and custody of stores. Sale of surplus stores. Inventory management, ABC Analysis. Procurement through GeM, IREPS. Schedule of powers under stores matters.
- 8. **Tenders and Contracts:** Work proposals, Types of estimates & estimation stages, procedure of survey, Type of tenders, earnest money, Performance guarantee, security deposit, technical & financial eligibility criteria, Merits and demerits of EPC tender. IRPMS. Procedure and stages of e-tendering through IREPS, General Condition of Contract (GCC) for works and service contracts, various provisions in Schedule of Power (SOP) under works matters, Basic principles of Project management, quality control in electrical works.

## Syllabus for promotion to Group- B posts - 70% selection and 30% LDCE.

## Syllabus for Establishment Rules:

- Organization of the Personnel Department in Railways objectives functions and policies of Personnel Department.
- Recruitment and Training, Classification of Services, Recruitment in Different services, Railway Recruitment Boards & Railway Recruitment Cells Compassionate Ground Appointments, Initial & In Service Training, Refresher Courses, Central Training Institutes, Training Centers in Zones, Divisions & Workshops, Training Modules for different posts, Training under Apprentices Act, Online Training, APARs.
- General conditions of service in Railways, Seniority, Lien, Inter Railway & Inter
  Division transfers, Deputation, Promotion Policy & methods. Selection, Suitability,
  Trade Tests, Leave Rules, Pass Rules, Joining Time Reservation policy, HOER,
  Overtime, Payment of wages, current CPC Pay Rules, Advances in Railways.
- Manpower planning, Rightsizing & Benchmarking, creation, extension and surrender of posts, creation of posts against new assets, different types of posts including workcharged posts.
- 5. The Railway Servants (Discipline & Appeal) Rules, 1968 and related instructions.
- 6. The Railway Services (Conduct) Rules, 1966 and related instructions.
- 7. Retirement benefits, qualifying service, pension, family pension, commutation gratuity, new pension scheme.
- 8. Staff welfare, SBF, Railway institutes, Railway schools, Ex-gratia payment, Incentive Bouns Scheme, Staff Grievances Redressal Mechanisms.
- Industrial relations in Railways, recognized trade unions, industrial disputes. The Industrial Disputes Act, 1947. The Industrial Relations Code, 2020. The Trade Unions Act, 1926, PNM, PREM, JCM, Various Associations & Informal Meetings.
- 10. The Factories Act, 1948. The workmen's Compensation Act, 1923. Functions of Labour Enforcement Officers, Right to Information Act.
- The scope of Information Technology in Railway e office. HRMS, IPAS , LIMBS, ARPAN, CPGRAMS, ANUBHAV etc.

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## Syllabus for Financial Rules:

- Parliamentary Control over Railway Finance, Public Accountability, Cannons of Financial Propriety.
- Railway Budget Budgetary terms, Types of Budgets, Budget cycle, Demand of Grants, Budgetary and Financial Reviews.
- Rules of Allocation Classification of expenditure Control of expenditure -Responsibility Accounting - Performance Budgeting - Exchequer Control -Financial Results of Working lines.
- Works Programme Financial justification of Works Surveys Preparation of Estimates - Capital Budget - Control over Capital Expenditure - Reappropriation of Funds.
- Financial control over Stores Expenditure Purchase and Stores Keeping Procedure - Inventory Control and ABC Analysis.
- 6. Financial & Cost Control in Railway Workshops/Sheds/Units.
- Rules and procedure relating to Tenders and contracts for execution of works and Procurement of Stores, M&P Programme and RSP.
- Procedure for Possessing and finalizing Audit Objections and Draft Paras.
- Delegation of Powers.
- 10. Losses, Frauds and Embezzlements.
- 11. General Financial Rules
- 12. Government e-Market (GeM)
- 13. Classification of Railway Revenue (Earnings)
- Information Technology in general with specific reference to Railway's IT Applications
- 15. Taxation matters with special focus on GST & Income Tax
- Organization of CGA and C&AG
- 17. Any other topic felt necessary from time to time

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## INSTRUCTIONS FOR ONLINE APPLICATION

Link for applying online -www.srhqpb.in

#### Instructions to Candidates: -

- The willing employees will have to click on the link. The link will lead to the application format in which the candidate needs to fill up the required particulars.
- ii) The application format has to be filled up carefully and after the employee is satisfied that all the particulars have been correctly filled up, he/she should register. Once registered, the employee will not be able to make any change in the application.
- iii) After registration, a unique application number will be allotted to the employee and the employee should download and take a print of the filled in application from the portal in PDF format.
- iv) In the print out, latest photograph of the employee should be affixed in the space provided and his/her signature should be affixed in the space provided.
- v) In the above application, the photograph should be attested by the controlling supervisor / official and the application should be forwarded by the controlling supervisor/official affixing signature duly mentioning the name, designation along with the seal of the forwarding supervisor / official.
- vi) The application completed in all respect duly forwarded by the Controlling supervisor / official, community certificate (for SC only) & any other relevant documents, should be scanned as a single PDF and uploaded in the portal after obtaining Competent Authority's approval.
- vii) Employee can thereafter login either by using "IPAS number & date of birth" or "Application number & date of birth" for uploading above scanned copies by using the "Upload the application" option in the portal.
- viii) Employee can also download acknowledgement for the submission of his/her application. The employee may use the unique application number to check the status of his application/instructions later on.

ix) For any assistance with regard to the above, the under mentioned Helpline Number may be contacted during office hours:

Name	Designation	Helpline Number
Shri R. Thirumalai Balaji	S&WI	
	SCAMI	9952008951

Instructions to Personnel Department Officer:-

- (i) The access to the online application at the stage of scrutiny and further forwarding will be restricted to the officials granted user rights at the level of Dealer(s), Personnel Officer/Divisional Officer etc.
- (ii) The user rights and passwords already provided may be utilized.
- (iii) The respective cadre dealer / controlling Personnel Officer should verify the correctness of the particulars of each application with the Service Register and other available relevant records. After due verification, **each online** application has to be certified and forwarded online with remarks, if any. In addition an excel file containing all the relevant details of all application should also be downloaded. The downloaded excel data file also has to be verified and corrections, if any, has to be carried out duly indicating the same in the remarks column without fail. The same has to be uploaded in the website along with the covering letter, the same should be forwarded in e-office to the undersigned as e-receipt on or before 17.00 hrs of 26.03.2024.
- (iv) The Personnel Officer concerned should reject the ineligible application duly specifying the reason for rejections.
- (v) Divisions and units may set up suitable helpline and give wide publicity to the same along with details including mobile number of the person who can be contacted for any assistance.