

Headquarters office, Personnel Department, Chennai—600003,

No.P(G)532/IX/ASTE Selection/CBT (30%)2023-24 Date:22/02 /2023.

Secretary to GM for kind information of GM, PCSTE, SDGM & CVO, CAO/CN/MS, CAO/CN/ERS, CSTE/Projects/MMC/MAS, CSE, CCE, CSTE/Planning, CSTE/S/CN/MS, CSTE/N/CN/MS, CWM/S&T/WS/PTJ, CPD/RE/MS, DRM/P/MAS, MDU, TVC, TPJ, PGT, SA, Sr.EDPM/MAS, DGM/G, Dy.CSTE/CN/MS, TBM, ERS, MDU Sr.DSTE/MAS, MDU, TVC, TPJ, PGT, SA, Dy.CSTE/Project/MS, TPJ, PTJ, WPO/S&t/WS/PTJ, SPO/RE/MS, ASTE/PRS/MAS, Secy to PCSTE, Principal/TC/PTJ

- Sub:- Selection for the Group "B" post of ASTE against 30% (LDCE) for S&T Department in Pay Matrix Level-8 through CBT Reg.
- Ref: Railway Board's letter No.E(GP)2022/2/4 dated 28.06.2022 (PBC No.162/2022) and other related circulars circulated as PBC No.203/2022, 213/2022, 236/2022 and 241/2022.

As advised by Railway Board vide references cited above, it has been decided to conduct LDCE and applications are hereby invited for promotion from Group 'C' service to Group 'B' service in Signal & Tele-Communication Department for the post of ASTE through Limited Department Competitive Examination against 30% of the vacancies as per the schedule indicated below.

To apply online	Date and time of Opening	23.02.2023 at 16.00 hrs.	
	Date and time of closing	13.03.2023 at 23.59 hrs.	
Last date for forwarding the online applications received by Personnel Officers concerned to Headquarters.		19.03.2023 at 17.00 hrs	

I) The number of vacancies to be filled up are as under:

Post	UR	SC	ST	Total	PwBD	]
ASTE – 30%	01	Nil	01	02	Nil	1

#### II) Eligibility Criteria:

Non-ministerial Group "C" employees of S&T department who are working in Pay Matrix level-6 and above with 5 years of Non-fortuitous service in the grade (including Non-fortuitous service rendered in corresponding Pe-revised grade) as on 01.01.2023 is eligible to apply for the post of ASTE.

#### Note:

i) 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 adhoc 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.

(v). Eligible volunteers should apply online in the link **www.srhqpb.in** and submit their application.

(vi) As vacancy is earmarked for 'ST', Pre Promotional Training (PPT) for employees belonging to ST community only will be organized before CBT. The Reserved community (ST) employees who are willing to appear for CBT without undergoing PPT may do so by exercising their option in the online application form. Employees belonging to Reserved Community (ST) 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 CBT without such PPT being imparted.

#### III. How to apply: -

- 1. Detailed instructions for filling up the online application is available in the web portal and also enclosed herewith as **Annexure "B"**.
- 2. Volunteers should apply for the post **ONLINE** by visiting the official website **www.srhqpb.in**

3. 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.

# 4. 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.

5. 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, Seniority Lists 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 19.03.2023**.

#### 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 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 19.03.2023 through e-office.

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 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) Method of Selection:

1. CBT – In terms of Railway Boards Lt. No. $E(GP)_{2022/2/4}$  dated 28.06.2022, Board has decided to introduced Centralized Computer Based Objective Type examination.

2. The examination for LDCE will be one stage only and will comprise of only 1 paper with the following distribution of marks:

Singl	e paper of 150 marks comprising 100% objective type m	ultiple choice	
Ques	tions with the following distribution of marks		
(a)	(a) Technical (Professional) subject		
(b) General knowledge including optional Questions of 15 marks		40 marks	
	on Official language Policy & Rules		
(c)	Establishment and Financial Rules	30 marks	
	Qualifying marks	90 marks	

3. Duration of the CBT 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. Record of Service and Viva-voce:

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

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

7. 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.

8. There will be no supplementary examination.

VI. Syllabus-Copy of the syllabus for the selection is enclosed as "Annexure A".

#### VII. General Instructions:

1. All those eligible volunteers should be in readiness to appear for the CBT at short notice as per the schedule advised by NAIR/BRC/ Railway Board. The CBT is scheduled to be held on 14.05.2023 (tentatively).

2. The volunteers who have responded to this notification are also equally responsible to attend the CBT 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.

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

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

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

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 P.Ananda Prakash	S&WI	9790903071

#### VIII. The tentative selection calendar.

Particulars	Date
To apply online– Date and time of Opening.	23.02.2023 at 16.00hrs
To apply online– Date and time of Closing.	13.03.2023 at 23.59hrs
Last date for receipt of online applications at Headquarters from respective units	19.03.2023 at 17.00hrs
Publication of eligibility list	05.04.2023
Pre Promotional Training	10.04.2023
Final Alert notice	10.05.2023
Date of CBT by NAIR/Vadodara	14.05.2023 (tentative)

# 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 13.03.2023 at 23.59 hrs.

Encl.: Annexure "A"& "B"

(M.Sunitha) APO/Gaz. for General Manager

Copy to : PCPO, CPO/Admn., CPO/G, CPO/IR Dy.CPO/Gaz., R&W, IR &Trg., Co-ord, SPO/EMS, APOs/Welfare, Gaz, T,M&E, Genl. Dy. Chief Enquiry Officer/HQrs, Dy. CPLO/HQrs GS/SRMU, NFIR, SROA, SRPOA, AISCSTREA, AIOBCREA

# Syllabus for 30% LDCE for Promotion to Group 'B' post of ASTE in Signalling & Telecommunication Department

### Part – A - General

# I. Current Affairs and General Knowledge

 This section would contain questions of general interest and importance, which is acquired by general observation or reading without specific text book study. Subjects of national importance as well as achievements of Railways are also to be covered. The standard of General Knowledge shall not be more rigorous than Matriculate level.

## II. General Mathematics

- Arithmetic and Statistical operations, Graphs, Fractions, Percentage, Sampling & Averages
- Geometry Areas & Volumes up to Higher Secondary /12<sup>th</sup> Standard level
- Algebra, Simultaneous Equations etc up to Higher Secondary /12<sup>th</sup> Standard level

## III. Physics & Basic Electricity

- Units & Measurements
- Mechanics Newton's Law of motion, Velocity & Acceleration, Work, Energy, Power
- Mechanical properties of solids and fluids
- Heat & work, expansion of solids, liquids & gases
- Ohm's law, Coulomb's law, Faraday's Law, Voltage, Current & Resistance, Kirchhoff's Laws, Wet & Dry Batteries, Power Factor
- Fleming's Law, Lenz's Law, Simple Motors & Dynamos, Generators, Principle of working of Transformer, Relay, Fuse, Circuit Breaker
- Semi conductor devices P-N diode, Transistors, FETs, Applications
- Power supply, AC & DC, Rectifiers

# IV. Digital Electronics & Information Technology

- Principles of Digital Electronics Boolean Algebra, Digital Devices and their applications
- Information Technology Generations, PC specifications, Operating systems Windows, Linux and Application Software.

# Part – B - Professional Subjects

# I. Signalling :

- Basics of Signalling
- Principles of Interlocking, Signal Interlocking Plan, Route holding principles, Table of Control
- Colour Light Signal concepts

- Signalling Elements Relays, Cables, LED Signals, Point Machines, Track Circuits (DC, AC & AFTC), Axle Counters (SSDAC & MSDAC), Block instruments, Integrated Power Supply, Interlocked Level Crossing Gates and Data Loggers
- Automatic Signalling
- Intermediate Block Signalling, BPAC, UFSBI
- RE Modifications
- Relay Interlocking concepts Metal to Carbon, Metal to Metal, Panel Interlocking and Route Relay Interlocking
- Electronic Interlocking Principles, Configuration, Interface logic, Application logic, VDU logic, FAT, SAT, Technical System Approval
- Earthing, Lightning and Surge protection arrangements
- Train Protection Systems TPWS, Kavach
- Centralised Traffic Control (CTC), Train Management System (TMS)
- Execution of S&T Infrastructure works Planning, Execution, CRS sanction, Documentation, Testing and Commissioning

#### II. Telecommunications

- Outdoor and Indoor Telecom cable system, jointing procedures, and maintenance and fault localisation methods, laying practices and precautions at work site
- Control Communication, OFC based, VoIP based, Emergency Control Communication, Voice Logger, COA
- Telephone Instruments, Signalling principles of Telephone Exchanges, Automatic, ISDN, and VoIP Telephone Exchanges
- PCM-TDM Principles, PD multiplexers, SDH principles and SDH equipments
- Modulation techniques and radio propagation
- VHF, UHF, Tetra, GSM-R, LTE-R
- OFC Communication systems, OFC Splicing, Measurements and laying practices
- Data Communication and IP networks, IP-MPLS, Data networks of IR, PRS, UTS, FOIS, TMS, NMS, Wi-Fi at stations, Firewalls/UTM, Cyber security and Wireless security
- Public address system, Passenger information systems and VSS

# III. Codes & Manuals

- General Rules
- Railways (Opening for Public Carriage of Passengers) Rules
- Indian Railways Schedule of dimensions
- Indian Railway Signal Engineering Manual
- Indian Railway Telecom Manual
- Accident Manual
- Block working Manual
- Extracts of Operating manual for Indian Railways, Indian Railways manual of AC Traction Maintenance and Operation and Indian Railways Permanent Way Manual relevant for Signal & Telecom Engineers

## IV Workshop Practices

- Raw material processing
- Workshop Machines and their utilisation
- Overhauling procedure and practices
- Inspection and testing of components
- Testing procedures of Block Instruments, Relays, Point Machines, IPS, EoLB, Track Feed Battery Chargers, EKTs, Control Panels and Mechanical Items.
- RDSO approval procedure and Renewal
- Production Management Plan
- Quality control and Safety Practices
- Calibration of instruments and machines
- ISO/IMS Certification for workshops
- Scrap disposal
- Workshop suspense
- Costing of products
- Incentive schemes

# Part - C – Official Language

Official Language Policy, Act, Rules, Incentive Schemes etc

# Syllabus for Establishment Rules:

- 1 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.
- 3. 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.
- 4. 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.
- 9. 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.
- 11. The scope of Information Technology in Railway e office. HRMS, IPAS , LIMBS, ARPAN, CPGRAMS, ANUBHAV etc.

#### Syllabus for Financial Rules:

- 1. Parliamentary Control over Railway Finance, Public Accountability, Cannons of Financial Propriety.
- 2. Railway Budget Budgetary terms, Types of Budgets, Budget cycle, Demand of Grants, Budgetary and Financial Reviews.
- 3. 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.
- 5. Financial control over Stores Expenditure Purchase and Stores Keeping Procedure - Inventory Control and ABC Analysis.
- 6. Financial & Cost Control in Railway Workshops/Sheds/Units.
- 7. Rules and procedure relating to Tenders and contracts for execution of works and Procurement of Stores, M&P Programme and RSP.
- 8. Procedure for Possessing and finalizing Audit Objections and Draft Paras.
- 9. Delegation of Powers.
- 10. Losses, Frauds and Embezzlements.
- 11. General Financial Rules
- 12. Government e-Market (GeM)
- 13. Classification of Railway Revenue (Earnings)
- 14. Information Technology in general with specific reference to Railway's IT Applications
- 15. Taxation matters with special focus on GST & Income Tax
- 16. Organization of CGA and C&AG
- 17. Any other topic felt necessary from time to time

#### **INSTRUCTIONS FOR ONLINE APPLICATION**

Link for applying online -www.sr.hopb.in

#### Instructions to Candidates: -

(i) 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 ST only) & any other relevant documents, should be scanned as a single PDF and uploaded in the portal after obtaining Competent Authority 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 required with regard to the above **Shri P.Ananda Prakash**, **S&WI** may be contacted in the mobile number **9790903071** during office hours.

#### 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, <u>each online</u> 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 19.03.2023.

(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.