

SOUTHERN RAILWAY

No.M/P(S&T) 608/IX/JE LDCE20%/Signal

Divl. Railway Manager's Office,
Personnel Branch, Chennai Division.

Dt: As signed.

NOTIFICATION NO.01/2025Sub: Selection for the post of JE/Signal in Level 6 of VII PC against 20% LDCE
Quota through CCBT– S&T Dept. Chennai Division.

It is proposed to conduct a selection for the post of Junior Engineer/Signal in S&T department of Chennai division in Level-6 of VII PC Pay Matrix against 20% LDCE Quota by calling volunteers from the eligible employees through CCBT.

The break-up of vacancies is detailed below:

Category	Level in VII PC	Community Wise Breakup			Total Vacancy
		UR	SC	ST	
JE/Signal	Level-6	1	0	0	1

PwBD suitability not identified for the post of JE/Sig.

Hence, no vacancy is reserved for PwBD category.

The eligibility conditions and selection process are as under: -

1.	Application	Technician Gr.III and above in the Signal Wing of MAS Division, fulfilling the following eligibility criteria as on the date of issue of notification are advised to submit their application through online in the link given below:- https://www.pbmas.in/notifications/
2.	Eligible staff to apply	Technician.Gr.III and above in categories of Tech/Signal, Tech/Blacksmith and Tech/Cable jointer of Signal Wing of MAS division, with the following Educational Qualification & Service conditions as on date of issue of the notification are only eligible to apply.
3.	Educational Qualification	A) Technicians having the qualification of ITI/Act Apprenticeship in trades relevant for eventual absorption to the post of JE/Signal (RBE 145/2003) or 10+2 in Science stream with Physics and Mathematics or B) Technicians having the qualification of Degree or Diploma in the relevant branch of Engineering (RBE 127/2003) C) The relevant branches of Engineering for JE/Signal –Three years diploma in - (a) Electrical/Electronics/Information Technology/Communication Engineering/Computer Science & Engineering/Computer Science/Computer Engineering (OR) (b) a combination of any sub stream of basic streams of Electrical/ Electronics/Information Technology/Communication Engineering/ Computer Science & Engineering/Computer Science/Computer Engineering from a recognized university/ Institute. (RBE 07/2019).

4.	Age	Employees should not be more than 47 years of age as on the date of issue of notification (RBE 85/2010) . The upper age limit for SC/ST employees would be 52 years as on date of notification.
5.	Service Conditions	<p>Employees possessing three years of service as Technician Gr.III and above in the categories of Technician/Signal, Technician/Blacksmith and Technician/Cable jointer of Signal wing of S&T department of MAS Division as on date of notification only are eligible to apply.</p> <p>Training period before appointment to service is to be counted as service for purpose of appearing in the departmental exam only (RBE 102/2019). However, as per the clarification of PCPO/MAS letter No.P(R) 673/P/Training/Vol.VI dated 04.10.2021, XII Std (Science stream) is a non-technical higher qualification, as such, the three year training period will not count for the qualifying service of 3 years for JE Examination against LDCE Quota.</p>
6.	Staff joined on request transfer on bottom seniority in this Division	<p>Service rendered by them in the old unit will be reckoned for determining their eligibility in the new unit subject to -</p> <ul style="list-style-type: none"> • The condition, that the service so allowed to be counted does not exceed the length of service of their immediate senior in the new unit (RBE 34/2006) • He/She is otherwise eligible to be considered for the selection to Group 'C' posts as per the extant rules, and the category in which he/she was working in the old unit is an eligible category for the selection/post in the new unit also (RBE 99/2006)
7.	Cut-off date	The cut-off date for determining the eligibility of the employees will be as on date of issue of notification.
8.	Syllabus	The syllabus prescribed for selection to post of JE/Signal against 20% LDCE Quota (PBC 276/2024) is enclosed as Annexure –I .
9.	Pre-Promotional Training	As the vacancy is not reserved for the SC/ST employees, there will be no Pre-promotional training.
10.	Mode of Selection	The selection shall consist of Written examination and perusal of Record of Service. All the staff who have volunteered and fulfill the eligibility conditions prescribed thereon would be subjected for the written examination. The candidate should obtain a minimum of 60% marks in Professional ability for being considered for further selection process of perusal of Service Record. The post of JE/Signal being classified as safety category post, there is no relaxation in qualifying marks for employees belonging to the category of SC/ST and hence they are also required to secure 60% marks in the written examination.
11.	Written examination	<p>(i) The selection consists of written test as per Board's letter No.E(NG)/1/2018/PM1/4 dated 14.12.2018 (RBE 196/2018). The Question Paper will be 100% Objective type multiple choice questions.</p> <p>(ii) In terms of PBC.No.205/2016, 10% of the total marks will</p>

		<p>be set on Official Language Policy and Rules. But the questions on the same will not be of compulsory in nature and is purely optional.</p> <p>(iii) In terms of PCPO/MAS Letter No.P(R)608/P/Vol.XV(OL);Dt:28.06.2019 the Question Papers will be in trilingual (English/Hindi & Tamil language) for the selection.</p> <p>(iv) In terms of Railway board letter No.E(NG) 1/2018/PM 1/4 dated 14.11.2019 (RBE 194/2019) there will be <u>negative marking @ 1/3 mark for a wrong answer</u> for LDCE selection where panel is arranged in the order of merit from those qualified.</p> <p>(v) The written examination will be conducted in Centralized Computer Based Test mode.(PBC.02/2025)</p> <p>(vi) Electronic devices will not be allowed inside the examination hall and the <u>violators of the above guidelines will be taken up under DAR.</u></p> <p>(vii) In terms of Para 3 of RBE No: 122/2023 in case of the question(s)/answer(s) in the Questions paper are incorrect, the procedure as prescribed in the RB letter No. 2010/E/(RRB)25/27 dated: 09.06.11 is to be adopted only for those candidates who have attempted that/those incorrect question(s) or question(s) with wrong answer(s).</p>
12.	Supplementary written examination	There will be no supplementary examination.
13.	Medical Fitness	Fitness in AYE THREE medical classification is mandatory for the post of JE/Signal.
14.	Procedure for Drawal of Panel	The final panel will be drawn in the order of merit (PBC 14/2014) based on aggregate marks of 'Professional Ability' and 'Record of Service' (PBC 50/2006). However, a candidate must secure a minimum of 60% marks in the Professional ability and 60% marks in the aggregate for consideration of placement in the panel and the final empanelment is subject to availability of vacancies. As the panel will be drawn on the basis of merit, there will be no classification as "Outstanding".
15.	Training after empanelment	The empanelled employees should undergo training for prescribed period (RBE 42/2020).

16. How to Apply:

Employees should submit their applications "on-line" in the portal in the Chennai Division website through the link <https://www.pbmas.in/notifications/> and forward through proper channel.

Opening date for On-line registration:31.01.2025

Closing date for On-line registration:25.02.2025

Please note that the physical applications (in paper format) will not be accepted and will be rejected summarily.

The method of submitting the application:

1. Employee should fill in the details in the On-line portal in the prescribed proforma/format.
2. After completely filling the application, the application should be downloaded and forwarding signature of the supervisor should be obtained on the downloaded application.
3. After this the application should be scanned and uploaded in the website.
4. Employee should upload relevant document with the application at the time of submission.
5. Applications should be submitted in the prescribed format.
6. Applications without signature (or) with signature in capital letters, Incorrect/ applications without valid enclosures will be considered as invalid applications.

In case the application is not uploaded after obtaining the signature of the supervisor, it will be considered as ***“Unwillingness”*** of the employee and the name of the employee will not be considered further. It shall be the responsibility of the supervisor concerned to give Wide publicity about the notification including those who are working outside the division on temporary transfer/Deputation etc whose lien is in MAS Division, as well as those who are either on Leave or on Sick List.

17. Enclosure to the Application to be uploaded:

- (i) Attested photocopies of all educational certificates (X, XII, Diploma,ITI,Act Apprenticeship,Degree etc)
- (ii) Attested copy of community certificate of employees belonging to SC/ST community.
- (iii) Attested copies of Railway week awards received during the last three years.
- (iv) Details of Charge sheet/Penalties imposed if any.

18. General Instructions:

After scrutiny the list of eligible employees to appear in the selection will be notified in the website.Hence the employees must be keep a constant watch to get the updates.It shall be noted that on submitting application, the employee becomes equally responsible for ascertaining his eligibility and appearing in the Written examination, if eligible, etc.Hence, they have to watch the updates at frequent intervals, which will be posted in the website (www.pbmas.in) regarding the selection.This notification is also available in Chennai Division,Personnel Department website at railnet.

<i>Tentative Schedule</i>		
Sl. No	Details	Schedule
1.	Final date for submission of application	Latest by 25.02.2025
2.	Publication of eligibility list	Latest by 10.03.2025
3.	PPT	To be conducted between

		16.03.2025 to 30.04.2025
4.	Notification of Final number of vacancies taking into account unfilled vacancies in PQ if any	Latest by 20.05.2025
5.	Written Examination	21.05.2025 to 10.06.2025
6.	Finalization of Panel	Latest by 30.06.2025

Encl:Syllabus

(J.JARNA SINGER)
Asst.Personnel Officer/MAS (L/A)
/Sr.Divl.Personnel Officer/MAS

Copy To:PCPO/MAS, PCSTE/MAS
CSTE/Projects & CSTE/CN/MS (incl.RE)
PS to DRM
CVO/MAS.
Sr.DSTE/CoOrd/MAS
Sr.DSTE/II/MAS-- for information
All Supervisory officials –For nec. Information & notice board display.
JE/IT- For uploading in website.
Employees concerned through supervisory officials,
Ch.OS/Estt/S&T Branch,
DS/SRMU, DS/DREU,
DS/ AI-SC/ST-REA,
DS/ AI-OBC-REA.

} For Kind inf. please

JE/SIGNAL (PQ / LDCE)

SYLLABUS FOR THE EXAMINATION FOR SELECTION TO THE POST OF JE(SIG)

The question papers for the examination will consist of following Items:

1. General & Safety
2. Signalling & Interlocking
3. Electrical signalling (including Route Relay Interlocking)
4. Power Supply & lightning protection
5. Block signalling (including automatic block)
6. Signalling in General
7. Modern Railway Signaling
8. Stores & Accounts
9. Establishment Matters
10. Official language Policy and Rules

1. General & Safety:

1.1. General :

- a. Organization Structure of Railways and S&T Department.
- b. Organization Structure of S&T.
- c. G&SR:
 - (i) Absolute block working, Automatic block working, Signals in general, Location of various signals
 - (ii) Working of trains during total failure of communication
 - (iii) Knowledge of Hand signals
- d. Standard schedule of dimensions - 2004 with latest amendments
- e. Infringements - Maintenance of Infringements records.
- f. Must have adequate knowledge of all working rules, manuals and procedures including Block Working Manuals, Accident rules, Signal Engineering Manual, with particular reference to the field work of section signal engineers.
- g. Station working Rules.

1.2. Safety :

- a. Passenger Safety by duly following Safe working Rules
- b. Personal safety while working on the Railway Track, RE area, LC gates

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19/12

- c. Fire Safety-Automatic Fire Detection & Suppression System
- d. First aid and cleanliness.
- e. Protection of evidence at accident sites.
- f. Failure memo, disconnection / reconnection memos
- g. NI working
- h. Codal life of assets
- i. Safety Integrity Test.

2. Signalling & Interlocking :

- a. Principles of Interlocking as per SEM.
- b. Preparation of Signalling plans and Numbering MACLS, PI Layouts
- c. Preparation of Inter cabin slotting and related circuits.
- d. Signal control circuits for MACLS PI British type both route setting and non-route setting.
- e. Preparation and reading of TOCs.
- f. Basic knowledge of Selection circuits, Power signalling circuits, Route Holding, Back locking, Indication locking, approach locking, Lamp proving, Route Indicators, colour light signals, Impedance Bonds, Point Control, Detection Circuits, Automatic signalling etc., and its maintenance and testing, troubleshooting of failure of those equipment.

3. Electrical Signalling :

- a. Relays of various types used in Indian Railway
- b. DC track circuits & their components, initial adjustments, insulating of points & crossovers, etc. Preparation of track bonding diagrams for different layouts, (Series, parallel, series parallel). Periodical maintenance & breakdown attendance of field portion of Track Circuit, AFTC.
- c. Electric point machines, universal type and their working control and detection circuits, various checks to be carried out and measurements to be taken during maintenance. Periodical maintenance & breakdown attendance of field portion of Point.
- d. Colour light signalling, cutting in arrangement, Red lamp protection, LED signals. Periodical maintenance & breakdown attendance of field portion of Signals.
- e. Automatic-signalling & basic principles and circuits
- f. Signalling in RE.
- g. Electric Key transmitter and its wiring

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18/12


- h. Cables-various cables used in signalling, colour coding, parameters of cable, Insulation resistance value.
- i. Level crossing gates - Periodical maintenance & breakdown attendance of Interlocking arrangement of mechanical lifting barrier. Periodical maintenance & breakdown attendance of Sliding boom, Electrically Operated Lifting barrier, Road warning Signals, Hooter
- j. Measuring equipment-Multimeter, Voltmeter, Cable Meggering equipment, Hydrometer, Earth tester.

4. Power Supply & Lightning Protection :

- a. Various transformers, rectifiers, DC-DC converters used in signalling
- b. IPS-Components of various modules for wayside stations - Periodical maintenance of integrated power supply, chargers, Inverters, battery bank.
- c. Secondary cells (LMLA) initial charging, deciding of capacity of charger based on cells, Telecom application chargers used in signalling
- d. Solar Photo type cells and solar panels
- e. Generators.
- f. Lightning protection
- g. Earthing: Various types of earths used in signalling, measurements of earth value, maintenance free earth & ring earth
- h. Surge protection devices.
- i. Earth Leakage detector

5. Block Signalling :

- a. Push button type token less block instruments, PTJ type, Nomenclature of relays, working principles of various codes transmitted and received.
- b. Single line Daido type instruments, frequencies used in transmitting and receiving codes, general working
- c. SGE double line block instrument, lock and block circuit and LSS control circuit, "Dos & Don'ts"
- d. Automatic block signalling, circuits
- e. IBS working principles
- f. BPAC, Block panel, UFSBI, SSBPAC, In built block of EI.
- g. Working block telephones and their associated circuits.
- h. Installation, maintenance and testing and troubleshooting of failure of those equipment


 19/12

6. Signalling in General :

- a. Location of signals, various types of signals and their use
- b. Working of siding taking off from loop line, working of siding taking from mid block section
- c. Classification of LC Gates, rules for working of trolleys, duties of maintenance of signal supervisors
- d. Foot Plate inspection & Joint foot plate inspections
- e. Joint inspection of points & crossings, Track circuits
- f. Signal failure investigations, reports and up-keep of data
- g. Procedure in connection with opening of new works, CRS sanction.
- h. Parameters of signalling gears including TCs, points, signals, Axle counter, cable loop resistance etc.
- i. Simple Current, Voltage & Power Calculations


7. Modern Railway Signaling :

Functioning of modern signalling and their installation, maintenance and testing and troubleshooting of failure of those equipment.

- a. Electronic Interlocking - Various types used in S Rly & their salient features. Related Circuits.
- b. RDPMS, Data loggers, RTU
- c. BPAC & SSDAC, MSDAC, HASSDAC
- d. Kavach & LTE
- e. Automatic Fire Detection Alarm system
- f. Latest policy and circulars on modern railway signalling
- g. Standardised RDSO logics.
- h. SMMS

8. Stores & Accounts :

- a. Imprest stores
- b. Consumable Stores
- c. Dead Stock , T&P maintenance & DMTR
- d. Written off stores and custody
- e. Stock verification & theft of stores
- f. Preparation of various tender, work orders, non- stock indents etc.
- g. Accounts matters including material at site accounts, completion reports etc.


19/12

9. Establishment Matters :

- a. Workman compensation Act
- b. HOER
- c. DAR major penalties & Minor Penalties.
- d. Various types of leave rules, Pass Rules and other welfare measures.

10. Official Language Policy and Rules :

- a. A, B & C regions, various incentives issued for implementation of RajBhasha.
- b. Equivalent words in Raj Basha for certain words in English.
- c. Usage of RajBhasha in official correspondence.

**GIDDALURI
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Digitally signed by
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