

Dt: 10.02.2025

**NOTIFICATION No. 16 /2025**

Sub: Selection for the post of JE/Signal in Level 6 of VII PC against 40% Promotional Quota – S&T Dept. Chennai Division.

Ref: Integrated seniority list of Sr.Technicians & Technician.I of Signal wing as on 01.01.25 published vide this office letter No.M/P(S&T)608/IX/JE 40%PRQ-CCBT/Signal dt.30.01.25.

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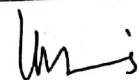
It is proposed to conduct a selection for the post of Junior Engineer/Signal in S&T department of Chennai division in Level-6 of VII PC Pay Matrix against 40% Promotional Quota. The break-up of vacancies as on 01.01.2025 is detailed below:

Category	UR	SC	ST	Total
JE/Signal	4	2	1	7

*PwBD suitability not identified for the post of JE/Sig.  
Hence, no vacancy is reserved.*

**The eligibility conditions and selection process are as under: -**

1.	<b>Eligibility</b>	The list of <b>Eligible</b> Sr.Tech/Signal & Tech.I of Signal wing in Level-6 of VII PC Pay Matrix of S&T dept as per the integrated seniority list published vide letter cited above - based on the willingness expressed by the employees - in the zone of consideration in 1:3 ratio are alerted to be in readiness for the written examination scheduled to be held shortly is enclosed as <b>Annexure-I</b> .
2.	<b>Date of examination</b>	The date, venue and time of written examination will be intimated in due course.
3.	<b>Medical Fitness</b>	Fitness in <b>AYE THREE</b> medical classification is mandatory for the post of JE/Signal.
4.	<b>Syllabus</b>	The syllabus prescribed for selection to the post of JE/Signal against 40% Promotional Quota ( <b>PBC 276/2024</b> ) is enclosed as <b>Annexure -II</b> .
5.	<b>Pre-Promotional Training</b>	Pre-promotional training will be organized by the Controlling Officer covering the syllabus for prescribed period for employees belonging to SC/ST communities (RBE 174/1997). After completion of Pre-promotional training a certificate to be issued by the Controlling Officer that all the eligible SC/ST employees have been imparted the Pre-Promotional training for a period of 3-4 weeks. If any <b>SC/ST</b> employee expresses unwillingness for PPT, a written declaration to that effect may be obtained and forwarded to this office for record.
6.	<b>Mode of Selection</b>	The selection shall consist of Written examination and perusal of Record of Service. Seniority is also a component of the selection. A candidate should obtain a minimum of 60% marks in Professional ability (i.e) in the written examination for being considered for further selection process of perusal of Service Record. The post of JE/Signal being classified as <b>safety</b> 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.



7.	Procedure of 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 be set on <b>Official Language Policy and Rules</b>. 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 &amp; 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) <u>there will be no negative marking for a wrong answer in selections against departmental quota where the panel is arranged in the order of seniority from those qualified.</u></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>
8.	Supplementary written examination	<p>In terms of IREM Para 223(1) (i) (a) to(c), Supplementary written examination will be conducted only for those employees who are not able to attend the main examination due to following circumstances.</p> <p>(i) Those who could not be relieved due to administrative reasons (or)</p> <p>(ii) Sickness(RMC) of the employee (or)</p> <p>(iii) Any other reason which is beyond the control of the employee</p>
9.	Procedure for Drawal of Panel	<p>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 the availability of vacancies.</p> <p>The names of the selected candidates will be arranged in the order of seniority but those securing a total of 80% or more marks in the aggregate will be classified as 'OUTSTANDING' and placed in the panel appropriately in the order of their seniority allowing them to supersede not more than 50% of total field of eligibility.</p>
10.	Training after empanelment	<p>The empanelled employees should undergo training for prescribed period (RBE 42/2020).</p>

*Wm*



## 11. Notifying the staff

- 11.1 Wide publicity should be given amongst staff mentioned in Annexure-I. The copy of notification should be displayed on notice board and the Supervisor concerned should ensure the same.
- 11.2 If any complaint is received from the employees for not being notified of the said notification, supervisory staff concerned will be held responsible.

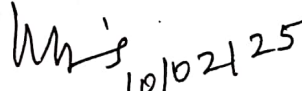
## 12. General Instructions:

The employees must keep a constant watch to get the updates. The employees are equally responsible for ascertaining their eligibility for appearing in the written examination and updates w.r.t. the subject-selection. Hence, they have to watch the updates at frequent intervals, which will be posted in the website ([www.pbmas.in](http://www.pbmas.in)) regarding the selection. This notification is also available in Chennai Division, Personnel Department website at railnet.

<b>Tentative Schedule</b>		
<b>Sl. No</b>	<b>Details</b>	<b>Schedule</b>
1.	PPT	To be conducted between 25.02.2025 to 15.03.2025
2.	Written Examination & Supplementary examination	15.03.2025 to 07.04.2025
3.	Finalization of Panel	Latest by 21.04.2025

This has the approval of competent authority.

Encl:Syllabus

  
(K.KAMARAJ)  
Consultant (Personnel)/MAS  
/Sr.Divl.Personnel Officer/MAS

Copy to: PCPO/MAS, PCSTE/MAS - for kind information please.

Copy to: CSTE/Projects & CSTE/CN/MS (incl.RE) – for kind information please.  
PS to DRM for kind information of DRM/MAS  
CVO/MAS – for kind information please.

Copy to: Sr.DSTE/Coord/MAS, Sr.DSTE/II/MAS

Copy to: All Supervisory officials –For necessary 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.

**ANNEXURE-I**

**THE LIST OF ELIGIBLE STAFF ARE ALERTED FOR SELECTION FOR THE POST OF JUNIOR ENGINEER/SIGNAL 40% PROMOTIONAL QUOTA THROUGH CCBT-2025-26**

S. NO	HRMS ID	NAME (S/Shri/Smt)	COM	DESIGN/STATION
1	GKSTDx	K UDAYA KUMAR	GEN	Sr.Tech/Signal/VLCY
2	AFNNUI	R.SAMMANTHAN	GEN	Sr.Tech/Signal/MSB
3	PWDBKN	M MURUGAN	GEN	Sr.Tech/Signal/BBQ
4	UPZTFF	K RASHEETH	GEN	Sr.Tech/Signal/MLMR
5	ZWCCUN	P R VENKATARAGHAVAN	GEN	Sr.Tech/Signal/VLK
6	WLLWSM	SARAVANA KUMAR.B	GEN	Sr.Tech/Signal/BBQ
7	OFAIPL	M UMAPATHY	OBC	Sr.Tech/Signal/SRM/PER
8	BGBWAP	MURALIKRISHNAN K L	GEN	Sr.Tech/Signal/Proj/MSc
9	CSWSDP	T RAVIKUMAR	SC	Sr.Tech/Signal/CJ
10	YLQOID	K RAJENDHER	SC	Sr.Tech/Signal/TVT
11	EIJRDL	D.ARULRAJAN.	OBC	Sr.Tech/Signal/TMV
12	FGGATR	S GOKULNATH	GEN	Sr.Tech/Signal/KPD.E
13	IKBBFD	G LOGANATHAN	ST	Sr.Tech/Signal/BBQ
14	RBOGYH	Y CHANDRAMONAN	ST	Sr.Tech/Signal/MSc
15	HPPKPC	L.SUGUMAR	ST	Sr.Tech/Signal/PV
16	ZJALOC	M RANJITHKUMAR	SC	Sr.Tech/Signal/Project/MSc
17	RRJYGL	MAHENDRAKUMAR	SC	Sr.Tech/Signal/ELR
18	XSRMQD	HEMAM BARADHER N	SC	Sr.Tech/Signal/MSc
19	DZEUHA	G. MURUGANANTHAN	SC	Sr.Tech/Signal/KPD.W
20	FRRBYA	C.VIVEK	SC	Tech.I/Signal/KPD.W
21	HWNECN	N.MAGESH	SC	Tech.I/Signal/TRL



PBC No. 276/2024

**दक्षिण रेलवे Southern Railway**  
**प्रधान मुख्य कार्मिक अधिकारी कार्यालय**  
**Office of the Principal Chief Personnel Officer**  
**प्रधान कार्यालय, कार्मिक विभाग, चेन्नै-600003**  
**Headquarters, Personnel Department, Chennai-600003**

सं/No: P(S)608/IX/JE/Sig. &amp; JETele(Both PRQ&amp;LDCE)

दिनांक/Dated: 23. 12.2024

All PHODs/ DRMs/ CWMs/ CEWE/ CAO/ CPM/ PDA/ Dy.CPOs/ Sr.DPOs/Secy to GM,  
 Chairman/RRB/MAS,TVC, Addl.Registrar/RCT/MAS, Secretary/RRT/MAS,  
 Principal /TC/PTJ Principal MDZTI/TPJ, SRCETC/TBM, ZETTC/AVD,  
 DPOs/SPOs/WPOs/APOs of HQ/Divisions /Workshops/Units.

**विषय/Sub: Syllabus for the post of Junior Engineer/Signal(PRQ-40% & LDCE 20%)  
 and Junior Engineer/ Telecom (PRQ-30% & LDCE -20%) in Level- 6 –  
 S&T Dept- reg.**

**संदर्भ/Ref.: Rly. Bd's letter No.E(NG)I/2022/PM1/36/dated 08.02.2024.**

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The Syllabus for the post of Junior Engineer/Signal (both PRQ-40% &LDCE-20%)  
 Junior Engineer/Telecom (**both PRQ-30% & LDCE-20%**) in Level- 6 for **Signal &  
 Telecom Department** duly approved by the Competent authority is enclosed  
 for information, guidance and necessary action.

संलग्नक/Encl.10 pages

Digitally Signed by

Anjanikumar C

Date: 23-12-2024 17:04:05

Reason: Approved

सहायक कर्मचारी संबंधी अधिकारी/Asst. Personnel Officer / IR &amp; Trg.

कृते प्रमुकाधि/for Principal Chief Personnel Officer

प्रतिलिपि/Copy to: The General Secretary/DREU  
 The General Secretary/SRMU  
 The General Secretary/AISCTREA  
 The General Secretary/AIOBCREA  
 The General Secretary/NFIR  
 The Genera  
 IT Section/PB/HQ - to upload in the SR website.



## 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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- 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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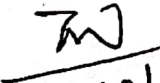
- h. Cables-various cables used in signalling, colour coding, parameters of cable, Insulation resistance value.
- i. Level crossing gates - Periodical maintenance & breakdown attendance of Interlocking arrangement of mechanical lifting barrier. Periodical maintenance & breakdown attendance of Sliding 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

  
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## 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

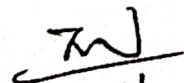
## 7. Modern Railway Signaling :

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.

  
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## 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.

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GIDDALURI  
NAGENDRA  
PRASAD

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