



NORTHERN RAILWAY



No. 940-E/143/JE/Elect. TRD/25% PQ/UMB/P-3
Dt. : 05.08.2025

Divisional Office,
AmbalaCantt.

SSE/TRD/UMB,CDG,RPAR,MRND,SRE,PTA,BTL,CTPC/UMB,RC/UMB,DRS/UMB

Sub:- Selection for promotion to the post of Junior Engineer/**TRD** in Level-06 (GP 4200) against 25% Promote Quota in Elect. TRD of Ambala Division.
Ref: GM(P)/NR letter No. E-387/129/CBT/S-Cell/P dated 29.07.2025.

It has been decided to hold a selection for filling up **01 (UR-01, SC-Nil & ST-Nil)** vacancies for the post of Junior Engineer/TRD, Level-06 (GP 4200) against 25% Promote Quota in Elect. TRD of Ambala Division.

1. Eligibility and Service conditions of staff:-
The list of senior most eligible staff working as Sr. Technicians/Technician-I of TRD of UMB Division in Level-06/05in Pay Matrix of 7th CPC and who are in the zone of consideration in 1:3 ratio based on their seniority is enclosed as **Annexure-I**.
Any employees express their unconditional unwillingness to appear for the selection on Performa attached herewith and forward to this office on or before 25.08.2025 along with objection of any employee against the seniority.
- 1.1 A stand by list of employees for selection is enclosed as **Annexure-II**. It is advised to these employees that they will be included in the main list enabling them to appear for the written examination only in the case of any employees in the main list of Annexure-I submit unwilling.
Staff on sick/Leave should also be intimated to their sick/leave address and obtain their acknowledgement.
In terms of Railway Board's Ir. No. E(NG)I/2000/PM1/41, dated 20.08.2003, the positive act of selection to assess the professional ability of the candidate shall consist of written test only. The candidate has to obtain a minimum of 60% marks in professional ability, i.e. in written examination, for being considered for further selection process of perusal of service record. The post of Junior Engineer being classified as "Safety Category post" there is no relaxation in qualifying marks to employees belonging to the category of SC/ST and hence they are also required to secure 60% marks in the written examination.
- 1.2 **Syllabus:-** Syllabus for selection of the post JE/TRD in Level-06 against 25% promotional quota is enclosed as **Annexure-III**.
- 2 **Procedure for written examination:-**
 - 2.1 Procedure for written examination will be conducted by Railway Recruitment Cell (RRC), Northern Railway through an Examination Conducting Agency to be provided by Railway Recruitment Board (RRB).
 - 2.2 The written examination will be a Computer Based Test(CBT)/Tablet Based Test (TBT) where there will be no physical question paper. All the question will be appear on the computer/table and the employee will have to mark their responses/answers to the questions on computer tablet.
 - 2.3 RRC/NR will be issuing a formal admit card online (through the website <https://rrcnr.org>) to each and every eligible and willing employee for appearing in examination will be there in the admit card. As no physical communication will be made after issued of this vacancy notice, it will be the responsibility of the concerned employees to regularly visit RRC/NR's website as well as this Division's website for an update and to download the admit as and when made available by RRC. Further, no supplementary absentee examination shall be conducted on this ground.

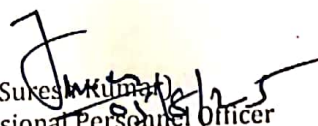
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05/8/25

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- 2.4 A link will also be made available on the above website(<https://rrcnr.org>) to the employees, explaining as to how the Question will be appearing and how to mark the responses/answer in the actual examination. Employees can practice through that link any number of times.
- 2.5 Both physical and biometric attendance will be marked at the examination venue.
- 2.6 100% questions will be objective type multiple choice questions.
- 2.7 There will not be any negative marking.
- 2.8 There shall be questions in Official Language Policy and Rules upto 10% of marks. However, it is not mandatory to attend the same.
- 2.9 There will be 110 questions of objective multiple choice type with four answer options and the candidate has to answer a maximum of 100 questions. In case the candidate answers more than 100 questions, first 100 attempted questions are to be taken for evaluation.
- 2.10 The written examination will be of 02 (two) hours duration.
- 2.11 There will be computerized evaluation.
- 3 **Notifying to staff:-**
- 3.1 The Senior Subordinate/Supervisor concerned, has to furnish a certificate that "the eligible candidates were duly notified of the holding of the written examination and asked to submit their application applications duly giving their willingness. They have also been informed about availability of any further information on RRC/NRR's website (<https://rrcnr.org>) regarding availability of admit card and link for demo test." Such certificates should be forwarded to Personnel Branch addressed to Sr.DPO/UMB. It will be the personal responsibility ...of the Senior Subordinate/Supervisor to complete the formality in this respect. It is further advised that any other communication received in respect of the selection should invariably be intimated to all the eligible employees. In case of non-receipt of any communication the same may be obtained from the Personnel department or from the Controlling Officer. Any laxity in this regard will be viewed seriously as it will adversely impact the above selection which is being conducted simultaneously for all Division/Units over Northern Railway. The unwillingness, if any, received from the employees is to be forwarded to Sr.DPO/UMB on or before 21.08.2025.
- 3.2 The Sr. Subordinate in charge will inform to staff of present working in case they have been transferred from the station. The Sr. Subordinate in Charge will inform to the staff of the station present working, which has been shown in the attached list.
- 3.3 The date, venue and time of examination will be uploaded on the website of Personnel Branch, UMB Division. The staff listed in Annexure-I must regularly check the website for updates regarding the same and it will be the responsibility of the candidate to regularly check the website.

Encl.:-

1. Annexure-I (Main List)
2. Annexure-II (Stand by List)
3. Annexure-III (Syllabus)
4. Annexure-IV (Performa for Willing/Unwilling)


 (Suresh Kumar)
 For Sr. Divisional Personnel Officer
 N. Rly Ambala Cantt.

Copy to :-

1. C/-Sr.DEE/TRD. It is requested to kindly arrange to make available D&AR/SPE/Vig. Clearance in favour of the employees listed in Annexure-I.
2. DS/NRMU, URMU/UMB Division
3. DS/AIOREA, AISC/ST REA/UMB Division
4. SSE/-TRD/Control/UMB: Please upload copy of this letter on the website of Personnel Branch, Ambala Division
5. OS/Confdl. Cell: For information & necessary action.
6. Concerned CS&WLI: For information to concerned employee please.

Annexure-I

S.No.	NAME	FATHER NAME	PF No.	Designation	Community	Station
1	MANGET RAM	MOHAN LAL	50312909555	Sr. Tech./TRD	SC	SIR
2	RAJENDER PARSHAD	MUNNI LAL	50312913340	Sr. Tech./RC	SC	UMB
3	BANSI LAL	UTTAM CHAND	50312327773	Sr.Tech./MOTOR MECHANIC	UR	UMB

STAND BY LIST

Annexure-II

1	MANJIT SINGH	UJAGAR SINGH	50312913662	Sr.Tech./TRD	SC	DUI
2	RAMESH CHANDER	SHIV HARSH	50312910867	Sr. Tech./TRD	UR	SIR
3	SHILP KUMAR	HARSH KUMAR	50312913637	Sr. Tech./TRD	UR	SRE

Note: Further, no PwBD candidate is available in the zone of consideration for above said selection.

For Sr. Divisional Personnel Officer
N. Rly Ambala Cantt.

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NORTHERN RAILWAY

Headquarters Office
Baroda House
New Delhi.

P.S.No. 16003/2025

NO: - 752-E/Elect /EIIA (317090)

Date: 15.07.2025

DRM:- DLI, UMB, FZR, MB, JAT & LKO.
CWM:- JUDW, AMV-LKO, CB-LKO & ASR

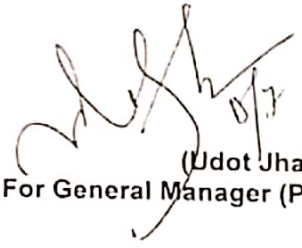
Sub: - Syllabus for selection for the post of JE/Elect./TRD (Level-6).
Ref: -(i) PCPO letter no. PCPO/sel./2025 dated 15.05.2025.
(ii) SEE/Plg/Elect. letter No. 186-Elect./G/Policy/EM/O, dated 23.06.2025

In reference to above subject, the syllabus for selection to the post of JE/Elect./TRD (Level-6), is enclosed herewith for your information and necessary action please.

The above P.S.No. is available on the website given as under:-
<https://nr.indianrailways.gov.in>

Hindi version will follow.
Please acknowledge the receipt.

DA/As above


(Udot Jha)
For General Manager (P)

Copy to:

1. All PHODs and All Officers of Personnel Deptt., HQ Office, Baroda House, New Delhi.
2. General Secy./NRMU, 12 Chelmsford Road, New Delhi.
3. General Secy./URMU, 166/2, P.K Road, New Delhi.
4. Genl. Secy./AIOBC Rly Emp. Asso 171/A3, Basant Lane, New Delhi.
5. Zonal Secy., All India SC/ST Rly Emp. Asso. North Zone Office, Baroda House New Delhi.
6. Genl. Secy., NRPOA, Room No. 301, HQ Office, Baroda House New Delhi.
7. Dy. CPO/IT, HQ Office, Baroda House, NDLS for uploading on the website.

Syllabus for the selection of Junior Engineer/TRD

1	Introduction to working of Railway organization and electrical department set up, functions of various streams	a. General introduction to Indian Railways – Brief History, salient features. b. Organizational structure - Railway administration/ Railway Board setup, Zonal/HQ setup, Divisional setup etc. c. Introduction to Electrical Department organizational structure, functions, role of electrical department in Railways d. Brief history and salient of electric traction on Indian Railway e. Various units of Railways, Major Workshops, Production units, RDSO etc. f. Duties of JE/ SSEs.
2	General description of fixed installation	a. Power supply arrangement at Traction sub-stations. b. Power supply for signaling. c. Remote Control and Communication arrangements. d. Communication facilities e. Traction Power Control. f. Overhead Equipment
3	Power supply for traction	a. Supply system. b. Liaison with power supply authorities. c. Tariff for traction. d. Monthly meter reading e. Scrutiny of bills. f. Power factor improvement g. Shut down of traction supply. h. Statical data regarding energy consumption. i. Open Access
4	Principles for Layout Plans and Sectioning Diagrams	a. Introduction & Definitions. b. Sectioning arrangement. c. Numbering of OHE masts. d. Numbering of equipment. e. Numbering of elementary sections
5	Overhead Equipment-I	a. Duties of JE (OHE). b. Foundations for OHE Structures. c. OHE Structures d. Cantilever Assembly e. Regulating Equipment f. Section Insulator g. Isolators, Droppers h. Neutral Section i. Conductors j. Tension length k. Overlap l. Jumpers m. contact wire height n. Stagger o. Encumbrance p. Span Length q. Implantation/Setting Distance r. Turnout and Crossover s. Clearances

		t. Bonding and Earthing u. Transmission lines
6	Overhead Equipment-II	a. Maintenance schedule for overhead equipment. b. Foot patrolling of OHE. c. Footplate inspection. d. Tower wagon operation, maintenance and safety while working e. Safety rules for OHE. f. Current collection test (OLIVER-G) g. Environment effect on OHE. h. Schedule of inspection. i. Investigation of OHE failure j. Documents to be kept for work on OHE.
7	Power Supply Installations - I	a. Duties of JE (PSI) b. Traction Power Transformers c. Circuit breaker, Interrupter and Isolator d. Auxiliary Transformer e. Current Transformer f. Potential Transformer g. Lighting Arrestor h. Capacitor Bank i. Bonding and Earthing j. Batteries and Battery chargers k. Numbering Scheme in PSI
8	Power Supply Installations - II	a. Protective system and Relay setting calculations. b. Maintenance Schedule for power supply installations. c. Energy conservation measures for Traction installations d. Safety during working at power supply installations e. Uses of Thermo- Vision Camera, Conditioning Monitoring PSI Equipment's. f. Investigation of PSI failure
9	2X25 kV ac Traction System	a. Introduction and description of 2X25kV ac Traction System.
10	High Rise OHE	a. Various parameters of High Rise OHE.
11	Remote Control and SCADA system	a. Introduction. b. Duties of JE (RC) c. Salient features of SACDA d. System Description e. Investigation of SCADA failure. f. Maintenance schedule.
12	Traction Power Control	a. Operation b. Duties of CTPC and TPC c. Power blocks and PTW d. Joint procedure order
13	Breakdown and Electrical accidents	a. Sub-station and switching station breakdown b. Breakdown of RC equipment c. OHE breakdown d. Electrical accidents e. Emergency stores and breakdown equipment
14	Railway Electrification	a. Introduction b. Survey Team & its work. c. Foot by foot survey. d. Abstract Estimate and Cost Benefit Analysis.

		e. Detailed estimate. f. Format of the project report g. Commissioning of Electrical Installations and EIG Sanction. h. Works programme, machinery & plant Programme and rolling stock programme.
15	Preparation for commissioning	a. Pre-commissioning inspections of new lines/ sections. b. Commissioning of transformers, Circuit breakers, interrupters, current transformer, potential transformer & Auxiliary transformers etc c. Detailed joint inspection of OHE d. Insulation tests e. Continuity tests
16	Safety precautions on electrified section	a. Station working rules- movements of tower car, caution order, safe working rules in 25 kV & 2x25 kV territory, G&SR relating to tower car. b. Protection of staff against traffic movements and protection of trains c. Induction effects of 25 kV ac 50 Hz Single Phase Traction. d. Working of Diesel locomotives and steam locomotive in electrified section. • Watering of carriage in electrified sections- basic precautions, watering section, sequence of interlocking & Operation, persons authorized to open switches, custody of keys, key register, Loss of keys. e. Loading & unloading of petroleum products: - f. Rules applicable to Permanent Way Staff. g. Rules for S&T installations h. Over Dimensioned Consignments (ODC) & JPOs i. Other Precautions: - • Movement of Rubber Tyred Vehicles on Railway Wagons. • Hording Boards. j. Competency Certificate: - • Competency certificate and courses for Staton Masters/pointsman to operate isolators k. Regulations for power line crossings of Railway track- Maintenance schedule & items to be attended. l. Induction effect on nearby LT lines and yard lighting. m. Safety precautions to be taken for PF shelters, fencing, FOBs while working in the vicinity of 25 kV. n. Operation & importance of locking of interlocked isolators. o. Importance of permit to work, earthing, bonding, temporary jumpering of rails in case of rail fracture/ rail changing. p. New technology & case studies
17	Electrical Accidents	a. General safety rules, importance of safety belts, helmets, ladders b. Electrical shock causes, Prevention & treatment etc. c. Preventive measures to avoid electrical accident. d. Measures to be taken in case of electrical accident. e. Case studies and discussion f. Fire causes and safety measures and various codes. g. First aid for injury, burns etc.

18	IE Rules and Energy Conservation	a. Brief on IE Rules, Energy Conservation Act, BEE, ECBC Code information on star rated products, etc. b. Global Warming & climate change, clean development mechanism and carbon credits, etc. c. Solar Energy Application d. Energy efficiency measures in Electrical department
19	Energy conservation	a. Monitoring of Energy Conservation b. Energy conservation measures for Traction Installation c. New developments - d.
20	Familiarization with other departments to understand their working and inter department coordination	a. Electrical Inspector General (EIG) sanction b. Overview of Codes, manuals and other publications of electrical department issued by Railway board, RDSO etc c. Renewable Energy Sources- Solar energy, wind energy etc d. Working of control office/ TPC/ TLC. e. P Way maintenance/ assets f. Sick lines, C&W depot/ activities g. Signalling & tele-communication/ RRI working
21	Disaster Management	a. Introduction to Disaster management, NDRF, SDRF etc. b. Organizational infrastructure to effectively combat disaster (medical accessories, relief train, essential materials) c. Accident & break down management, preventive steps. d. Analysis of breakdowns case studies and discussion
22	MATERIAL MANAGEMENT IN RAILWAYS:	a) Introduction to material management b) Organizational structure of material management organization of Indian Railways c) Functions of material management- Planning and inventory management (Stock items, PL no. & non stock items), procurement, receipt and inspection & handling of rejection etc d) Model SOP, IRS-condition of contract, Store Depot working, stock verification & audit, Scrap disposal e) Non stock procurement under works programme, RSP, M&P, E-procurement, IREPS, GEM procurement etc
23	CONTRACT MANAGEMENT & FINANCIAL MANAGEMENT:	a) Contract management - Tenders & Contracts - Vigilance b) Financial Management - Railway accounting and financial procedures - Primary units, various demands - Works programme, M&P and RS programme - Stages of budgeting (Revised and Budget estimates, Review, Final Modification) - Roles of JE & SSE in Tenders & Contracts
24	GENERAL & ESTABLISHMENT KNOWLEDGE:	a) D&AR Rules. Various definitions, the applicability, suspension and issue of minor penalty charge sheet, appeals

	b) Rules for engagement and discharge of casual labours / substitutes and knowledge of relevant sections, Industrial relations and roles of trade unions. c) Various types of leaves which can be granted to staff. d) Railway Service Conduct Rules. e) General knowledge about working in various other departments in Railways f) Knowledge about Pass, PTO, Travel on duty, increment, Promotion of artisans, Quarters, Staff welfare, Allowances, HOER etc. g) Basics of RTI and Disabilities Acts and our obligations & responsibilities. h) Establishment powers of JE & SSE in open line.
COMPUTER FUNDAMENTALS:	a) Basics of hardware and software, semiconductors, diodes and gates b) Operating systems basics c) Internet, E-mails, MS-office and useful apps
राजभाषा	a. राजभाषा- संवैधानिक प्रावधान, b. राजभाषा अधिनियम 1963 (यथा संशोधित 1976), c. संविधान की आठवीं अनुसूची में शामिल भाषाएँ, d. राजभाषा कार्यन्वयन समिति, e. राजभाषा प्रोत्साहन / पुरस्कार योजनाएँ, f. हिंदी प्रशिक्षण
General Knowledge, Reasoning, Aptitude. -	

Northern Railway

Proforma for willing/unwilling for Selection for promotion to the post of JE/Elect-TRD, Level-06 (GP 4200) against 25% promote quota.

Sub:-Selection for promotion to the post of Junior Engineer/Elect-TRD, Level-06 (GP4200) against 25% promote quota.

Ref:- 940-E/143/JE/Elect.TRD/25%PQ/UMB/P-3 dated 05.08.2025.

1. In reference to above subject it is stated that I Sh. S/o Sh. (willing/unwilling) to appear in the Selection for promotion to the post of Junior Engineer/Elect-TRD Level-06 (GP 4200) against 25% promote quota.
2. The employee who is willing and having any objection against the seniority list of Sr. Tech/Elect.-TRD/ in Level 06/GP 4200 (Yes/No).
3. Option once exercised will be treated as final.
4. If willing furnish the detail below

Detailsof Award/Punishment of last three years (Copy must be enclosed)	Year	2023	2024	2025
	Award			
	Punishment			

Sign.of Employee.....

Date

Name.....

Father's Name

Designation/Station

Pf. No.

IIRMS Id

Mob. No.

Forwarded to Sr. DPO/UMB for necessary action please

Signature of Sr. Subordinate In-Charge with office seal

Date:-