

Sub: - Selection for promotion to the post of Junior Engineer/DSL Elect in Pay Level-6 of 7thCPC against 25% PQ in Mechanical department of FZR Division.

3. It has been decided to hold a selection for filling up 04 vacancies for the post of Junior Engineer/DSL Elect in Pay Level-6 of 7thCPC against 25% PQ in Mechanical department of FZR Division. Bifurcation of vacancies is as under:

UR	SC	ST	Total	PwBD (in terms of Railway Board's letter no. E(NG)II/2017/RC-2/1 Policy dt. 27.02.2019)
03	01	00	04	---Nil---

4. Eligibility and Service conditions:

- The list of senior most eligible staff working as Sr. Tech/DSL Elect. of Mechanical department of Ferozepur division in Pay Level- 6 consideration in 1:3 ratio based on their seniority, is enclosed as Annexure-I.
- A stand-by list of next senior employees is also enclosed as Annexure-II. Employees of this stand-by list will be included in the main list enabling them to appear for the written examination only in case of an employee/employees in the main list (Annexure-I) has/have expressed its unconditional unwillingness to appear for the selection and forwarded to this office on or before along with objection of any employee against the seniority, if any.

3. Syllabus: A syllabus for the above selection is attached as Annexure-IV. This is a common syllabus for the post as approved by the concerned PHOD and is applicable for all Divisions/Units over Northern Railway.

4. Procedure for written examination:

- The 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).
- The written examination will be a Computer Based Test (CBT)/ Tablet Based Test (TBT) where there will be no physical question paper. All the questions will appear on the computer/ tablet and the employee will have to mark their responses/answers to the questions on computer/tablet.
- RRC/NR will be issuing a formal admit card online (through the website <https://rrnr.org>) to each and every eligible and willing employee for appearing in the CBT/TBT. Examination Venue and time of reporting for the written examination will be there in the admit card. As no physical communication will be made after issue 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 card as and when made available by RRC. Further, no supplementary/absentee examination shall be conducted on this ground.
- A link will also be made available on the above website (<https://rrnr.org>) to the employees, explaining as to how the question will be appearing and how to mark the responses/ answers in the actual examination. Employees can practice through that link any number of times.
- Both physical and biometric attendance will be marked at the examination venue.
- 100% questions will be objective type multiple choice questions.
- There will not be any negative marking.
- There shall be questions in Official Language Policy and Rules up to 10% of marks. However, it is not mandatory to attend the same.
- 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, the first 100 attempted questions are to be taken for evaluation.
- The written examination will be of 02 (two) hours duration.
- There will be computerized evaluation.

5. Notifying to the employees:

The Senior Subordinate/ Supervisor concerned has to furnish a certificate that "the eligible employees have been duly notified of the holding of the written examination and asked to submit their applications duly giving their willingness. They have also been informed about availability of any further information on RRC/NR's website (<https://rrnr.org>) regarding availability of admit card and link for demo test." Such certificates should be forwarded to the Personnel Branch addressed to Sr. DPO/FZR. 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 to 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 Divisions/Units over Northern Railway. The unwillingness, if any, received from the employees is to be forwarded to the Personnel branch addressed to Sr. DPO/FZR on or before 12.08.2025.

6. Tentative schedule for holding the selection:

Activity number	Details of activity	Tentative date
PART- A		
1.	Issue of notification along with main and stand-by eligibility list	04.08.2025
2.	Submission of certificate by Mechanical department along with list of unwilling employees as per Annexure-I & Annexure-II	12.08.2025
3.	Conducting pre-examination training	Required

Websites to be visited regularly for any update:

RRC/NR's website: <https://rrcnr.org>

Firozpur Division/Unit's website:

Note: 1. If any of the above instructions were modified/alerted at a later date by the Railway Board or Headquarters, the administration reserves the right to amend the above notified instructions to the extent to give the effect of the same.

2. As per GM/P/LNDL Letter No 807-E/Surrender of Post/MPP-2017/II, dated: - 19.06.2025, all the promotion of FZR Division and JAT division jurisdiction should be done by FZR division. Hence this selection to be conducted for FZR & JAT division both and after empanelment employees may be posted anywhere at FZR & JAT division as per administrative requirement.



For Sr.Divisional Personnel Officer
N.Rly/Firozpur

Copy forwarded for information and necessary action to:

6. Sr. DME/DSL/LDH of FZR & J&K Divin., All SSE/G/DSL/DMU/Shed of FZR Division and J&K Division & WLIs/Firozpur Division: To hand over a copy of this notification to the employees appearing in Annexure-I & II under written acknowledgment
7. Ch.OS/OS, Confidential cell, Firozpur Division
8. Divl. Secy./NRMU/URMU, SCSTREA & OBCREA of FZR Division
9. Control Office, Firozpur Division
10. RRC/NR's website (<https://rrcnr.org>)

Annexure-I (Senior most employee of Sr.Tech/DSL Elect level-6)										
S.No.	HRMS employee-id	IPAS ID	Name s/Sh.	Father Name S/Sh.	SC/ ST	STN	DOB	DOA	DOP as Sr.tech	Remarks
1	GZEPRX	50300072176	Manjit Singh	Kesar Singh	Genl	LDH	20.11.69	01.11.03	27.02.15	
2	ECBPXO	50300070693	Manohar Singh	Ram Parkash	SC	JUC	01.04.66	01.11.03	18.05.15	
3	TYYYRW	50300070987	Ravinder Kumar	Malkiat Singh	sc	LDH	17.10.66	01.11.03	06.07.15	
4	BMQXKT	50300071035	Gurdev Singh	Harbhajan Singh	SC	LDH	31.08.66	11.04.05	01.09.16	
5	AKYQZN	50300072147	Amrik Singh	Jagir Singh	UR	LDH	12.02.67	01.11.13	01.09.16	
6	LNPMQN	50300070692	Mukhtiar Singh	Bawa Singh	UR	LDH	29.08.65	26.05.09	05.12.17	
7	QKLLUS	50300072303	Rajeev Kumar	Maya Ram	UR	JUC	23.12.68	26.05.09	05.12.17	
8	KEJXHU	50300070823	Nachatar Singh	Malkiat Singh	UR	LDH	10.10.66	15.10.10	05.12.17	
9	SBTDUB	50300070821	Ishwer Chander	Jatinder Singh	UR	LDH	27.02.67	07.07.87	05.12.17	
10	NGEWKJ	50300071850	Jai Parkash	Sada Ram	SC	LDH	02.05.68	04.09.93	04.07.18	
11	TXEEAF	50300072222	Surjeet Singh	Gudder Singh	SC	LDH	15.04.76	03.04.97	04.07.18	
12	HEWTQJ	50300072257	Vickey Sondhi	Gian Chand	SC	JUC	20.04.78	01.12.97	06.08.20	

Annexure-II (As per seniority next Senior most employee of Sr.Tech/DSL Elect level-6)										
S.No.	HRMS employee-id	IPAS ID	Name s/Sh.	Father Name S/Sh.	SC/ ST	STN	DOB	DOA	DOP as Sr.tech	Remarks
1	PNHUMG	50300070820	Sarbjit Singh	Bakhtawar Singh	UR	PTK	19.07.67	09.07.87	05.12.17	
2	KXRPXH	50300070953	Pradeep Kumar	Rajinder Kumar	UR	LDH	20.03.66	31.05.88	08.01.18	
3	DCXNDN	50300071012	Amar Singh	Jagir Singh	OBC	LDH	03.04.66	04.06.88	06.03.18	
4	XCIPNK	50300071053	Sarbjit Singh	Rattan Singh	UR	LDH	11.12.66	23.08.88	04.07.18	
5	ZYNYRYF	50300071201	Sunil Kumar	Khem Raj	UR	LDH	21.10.65	26.07.89	04.07.18	
6	MXIQXS	50300071211	Barinder Kumar	Rattan Chand	UR	LDH	19.03.68	03.08.89	04.07.18	
7	UXPMWX	50300071363	Inderjit	Roop Lal	UR	PTK	18.12.66	29.01.90	04.07.18	
8	BJOLKN	50300071426	Rakesh Kapila	Manohar Lal Kapila	UR	JUC	06.12.66	15.06.90	06.05.20	
9	ETNNZU	50300071427	Maninder Sharma	Vasu Dev	UR	JUC	16.09.67	19.06.90	06.05.20	
10	DACRWK	50300072303	Ravi Kumar	Satnam Ram	SC	JUC	14.04.79	23.12.98	06.08.20	
11	ULYZUQ	50300072340	Chandresh Kumar	Ram Khilawan	SC	LDH	12.11.76	28.10.99	06.08.20	
12	KLHJPL	50300072407	Bodh Raj	Dev Raj	SC	PTK	14.04.72	06.02.99		

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NORTHERN RAILWAY
(Personnel Department)

P.S. No. 16018/2025

Headquarters Office,
Baroda House,
New Delhi.

DATE: 16/07/2025

NO. 752-E/Mech Policy/EIIC

Divisional Railway Manager/NR: DLI, FZR, MB, UMB, LKO & JAT
Chief Workshop Manager/NR: AMV-LKO, CB-LKO, JUDW, ASR & RCNK-SNP,
CWM/Signal Shop, GZB.
CAO/C: K. Gate DLI & Satyam Complex, Trikuta Ngr/JAT.
MD/NRCH.

Chief Manager (Ptg. & Sty) Punjabi Bagh, Delhi
Dy.CMM: SSB, AMV-LKO & JUDW.
Dy.CE/TMC/Line, State Entry Road, New Delhi.
Dy.CE/Bridge, CB-LKO, JUC & TKJ.

Sub: Syllabus of written examination for the post of Junior Engineer/Dsl/Elect.

Ref: (i) PCPO/NR's letter no. PCPO/Sel./2025 dated 15/05/2025.

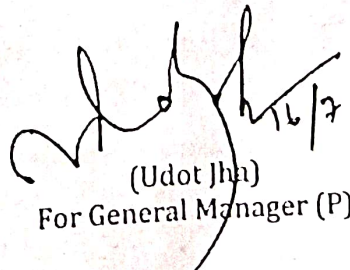
(ii) Dy.CME/HQ's letter no. Confdl.Mech/Group C Selection/266 dated 14/07/2025.

In reference to above subject, the syllabus of written examination for the post of Junior Engineer/Dsl/Elect in Level-06, is enclosed herewith for your information and necessary action please.

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

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. Genl. Secy./NRMU, 12 Chelmsford Road, New Delhi.
3. Genl. Secy./URMU, 166/2, P.K.Road, New Delhi.
4. Genl. Secy./AIOBC Rly Emp. Asso. 171/A3, Basant Lane, New Delhi.
5. Genl. 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, HQs Office, Baroda House, NDLS for uploading on the website.
8. Dy.CPO/R&P, HQs Office, Baroda House, NDLS being policy matter.



Northern Railway

Amman (IV)

HQ Office,
Mechanical Branch

Syllabus for TQ/PQ examination for selection to the post of Junior Engineer DSL/Elect

Part 1: General Knowledge

- 1.1 Important National & International Events, Authors, Places & Personalities etc
- 1.2 Sports
- 1.3 "Who's Who"
- 1.4 Facts about Indian Railways & its Organization, Important events in Indian Railways
- 1.5 Current Affairs

Part-2: English

- 2.1 Antonyms and Synonyms
- 2.2 Idioms & Phrases
- 2.3 Tenses, Modals, Determiners, Prepositions
- 2.4 Active and Passive Voice
- 2.5 Direct and Indirect Speech
- 2.6 Unseen Passages

Part-3: Mathematics

3.1 Algebra

- 3.1.1 Real Numbers
- 3.1.2 Polynomials
- 3.1.3 Pair of Linear Equations in Two Variables
- 3.1.4 Quadratic Equations

3.2 Arithmetic

- 3.2.1. Problems based on age, time, work, money, Profit and Loss, and Interest

3.3 Geometry

- 3.3.1 Lines
- 3.3.2 Triangles: Pythagoras' Theorem, Midpoint Theorem, Area, Congruence of Triangles, Angle Sum Property, Exterior Angle Property; Similar Figures, Similarity of Triangles
- 3.3.3 Properties and area of Parallelogram
- 3.3.4 Circles: Area and Perimeter of Circle, Angle Subtended by a Chord at a point, Perpendicular from the Centre to a Chord, Equal Chords and their distances from the Centre, Angle subtended by an Arc of a Circle, Cyclic Quadrilaterals, Tangent to a Circle, number of Tangents from a point on a Circle, Area of Sector and Segment of a Circle
- 3.3.5 Surface Areas and Volumes of cuboid, cone, cylinder, and sphere; and Combination of Solids

3.4 Coordinate Geometry

- 3.4.1 Basics of the Cartesian system
- 3.4.2 Distance Formula

- 3.5 Introduction to Trigonometry
 - 3.5.1 Trigonometric Ratios
 - 3.5.2 Trigonometric Ratios of Specific Angles
 - 3.5.3 Trigonometric Identities
 - 3.5.4 Applications of Trigonometry: Heights and Distances

- 3.6 Statistics
 - 3.6.1 Mean, Mode, Median of Grouped Data
 - 3.6.1 Mean Deviation & Standard Deviation

Part-4: General Science

- 4.1 Matter in Our Surroundings: Physical Nature of Matter, Characteristics of Particles of Matter, States of Matter, Mixture, Solution, Concentration of a Solution, Compound
- 4.2 Atoms, Molecules and Chemical Reactions, Structure of the Atom, Valency, Atomic Number, Mass Number, Isotopes, Isobars, Laws of Chemical Combination, Chemical Equations, Types of Chemical Reactions, Oxidation and Reduction, Acids, Bases and Salts, Name of salts and compounds, Types of Oxides, Properties and Laboratory Preparation of Oxygen, Hydrogen, and Nitrogen
- 4.3 Metals and Non-metals (Physical Properties, Chemical Properties), Ores of Metals, Corrosion and its prevention
- 4.4 Carbon and Its Compounds: Bonding in Carbon, Versatile Nature of Carbon, Chemical Properties of Carbon Compounds, Important Carbon Compounds – Ethanol and Ethanoic Acid, Soaps and Detergents
- 4.5 Force and Laws of Motion: Motion Along a Straight Line, Uniform Motion and Non-Uniform Motion, Speed with Direction, Acceleration, Equations of Motion, Uniform Circular Motion, Balanced and Unbalanced Forces, Laws of Motion, Inertia and Mass
- 4.6 Gravitation: Universal Law of Gravitation, Free Fall, Mass & Weight, Thrust and Pressure, Buoyancy, Archimedes' Principle
- 4.7 Work and Energy: Scientific Conception of Work, Forms of Energy, Potential Energy, Potential Energy of an Object at a Height, Law of Conservation of Energy, Power, Method of Heat Transfer
- 4.8 Sound: Propagation of Sound, Characteristics of a Sound Wave, Reflection of Sound, Echo, Reverberation, Range of Hearing, Applications of Ultrasound
- 4.9 Light: Reflection and Refraction, Spherical Mirrors, Sign Convention for Reflection by Spherical Mirrors, Refractive Index, Refraction through a Rectangular Glass Slab & prism, Atmospheric Refraction, Refraction by Spherical Lenses, Image Formation by Lenses, The Human Eye, Dispersion of White Light by a Glass Prism
- 4.10 Electricity: Electric Current and Circuit, Electric Potential and Potential Difference, Symbols of some commonly used components in circuit diagrams, Ohm's Law, Factors affecting the Resistance, Resistance of a System of Resistors, Heating Effect of Electric Current, Electric Power, Domestic Electric Circuits
- 4.11 Magnetic Effects of Electric Current: Magnetic Field and Field Lines, Magnetic Field due to a Current-Carrying Conductor, Force on a Current-Carrying Conductor in a Magnetic Field

Part-5: Establishment Rules

- 5.1 Pass Rules
- 5.2 Leave Rules
- 5.3 Payment of Wages Act
- 5.4 Hours of Employment Regulations
- 5.5 D&AR (Disciplinary & Appeal Rules)
- 5.6 Workmen's Compensation Act
- 5.7 Factory Act
- 5.8 Basic Knowledge about HRMS, RESS, HIMIS, NPS/UPS, and UMID web portals/App

Part-6 Stores

- 6.1 System of receiving and issuing goods from the store, local purchase, and inventory control
- 6.2 Stock and Non-Stock Items, PL Number
- 6.3 Basic Knowledge about UDM, GEM, IMMS, IREPS

Part-7 राजभाषा

- 7.1 संघ की राजभाषा नीति का सामान्य परिचय
- 7.2 राजभाषा अधिनियम 1963
- 7.3 राजभाषा संशोधन नियम 1976
- 7.4 राजभाषा संकल्प 1968
- 7.5 राजभाषा से संबंधित वार्षिक पाठ्यक्रम एवं प्रचलित शब्दावली

Part-8 Professional Knowledge

8.1 ALCO Locomotive

- 8.1.1 Design and construction of ALCO Locomotive
- 8.1.2 Basic knowledge of Battery charging and cranking system
- 8.1.3 Basic idea of electrical control system of ALCO loco
- 8.1.4 Basic knowledge of power transmission system
- 8.1.5 Relays and power contactors of ALCO Locomotive
- 8.1.6 Electrical Sub assembly of ALCO locomotive: Traction Alternator, Traction Motor, Auxiliary Generator, Exciter, Rectifier, Radiator Fan Motor, Dynamic Brake Fan Motor, Fuel Pump Motor, Dust Bin Blower Motor
- 8.1.7 Maintenance and overhauling of electrical equipment
- 8.1.8 Basic idea of REMMLOT
- 8.1.9 Testing of Engines: Load Box testing, self load, ETS test
- 8.1.10 Idea of maintenance schedules T1, M1, M2, M12, M18, M24 & M72

8.2 HHP Locomotive

- 8.2.1 Basic knowledge of Electric equipment in GM locos
- 8.2.2 Basic knowledge of Electric control system
- 8.2.3 Starting circuit and components
- 8.2.4 Running maintenance of Electric rotating machines and rectifiers
- 8.2.5 Overhauling of Electric rotating machines
- 8.2.6 Basic knowledge of Power transmission in GM loco
- 8.2.7 Working of VCD, Auto flasher light and sanding system
- 8.2.8 Various types of GM Locomotives: WDG4, WDP4, WDP4D
- 8.2.9 Testing of Loco: Load box test, self load, Auto test
- 8.2.10 Various schedule: 30 Days, 90 Days, 180 Days, Yearly, 3 yearly and 6 yearly

8.3 Electric Locomotive

- 8.3.1 Basic knowledge of General construction of Electric Locomotive
- 8.3.2 Basic knowledge of Traction equipment: Bridge rectifier block, Traction motor, Smoothing reactor
- 8.3.3 Safety relays and their working
- 8.3.4 Running maintenance of all rotating machines and static devices.
- 8.3.5 Basic knowledge of Auxiliary electric machines: MVMT, MVSI, MVRH, MVSL, MCP, MCPA and MPH



- 8.3.6 Overhauling of all electric equipment
- 8.3.7 Testing of VCD, Sanding and Auto flasher
- 8.3.8 Testing of Locomotive: Tripping via different faults, Notch progression and regression
- 8.3.9 Various maintenance schedules: IA, IB, IC and TOH

8.4 T-18 (Vande Bharat)

- 8.4.1 Basic Knowledge of T-18, Formation of T-18
- 8.4.2 Basic knowledge various equipment fitted in different coaches
- 8.4.3 Safety and passenger amenity items
- 8.4.4 Circuit Breakers and Electrical Systems
- 8.4.5 Traction System and Motors
- 8.4.6 Main transformer and Auxiliary Systems
- 8.4.7 HVAC and Comfort Systems
- 8.4.8 Emergency Systems and Communication Safety & security items like CCTV, Public Information System (PIS)
- 8.4.9 Various maintenance schedule: Trip, Monthly, Quarterly and 9 Monthly

8.5 DEMU

- 8.5.1 Configuration of DEMU trains
- 8.5.2 Electrical control system of driving power car
- 8.5.3 Basic knowledge of Rectifier, Relays, Power contactors and Battery box
- 8.5.4 Passenger Amenities & safety items
- 8.5.5 Maintenance checks of DPC: A check, B check, C check and D check

8.6 MEMU/EMU

- 8.6.1 Basic knowledge of working of EMU/MEMU trains
- 8.6.2 Basic configuration of EMU/MEMU trains
- 8.6.3 Battery charging and Auxiliary system
- 8.6.4 Passenger Amenities & safety items
- 8.6.5 Various maintenance schedules: IA and IC

8.7 General

- 8.7.1 Basic knowledge of Voltage, Current, Resistance and Electrical Power
- 8.7.2 Various type of Batteries used in different locomotive and its charging
- 8.7.3 Industrial Safety, Fire Safety, Housekeeping and First Aid
- 8.7.4 Basic knowledge & advantages of CNC machines and their major applications
- 8.7.5 Basic knowledge of e-office and SLAM portal
- 8.7.6 Basic knowledge of computers: MS Word, MS Excel, MS PowerPoint, working of computers and peripherals
- 8.7.7 Knowledge of the Time office, Progress, Procedure for the Gate Pass etc
- 8.7.8 Procedure of Ferrous and Non-Ferrous scrap disposal
- 8.7.9 Knowledge of hazardous work and its disposal
- 8.7.10 Procedure of condemnation of various rolling stock
- 8.7.11 Duties, responsibilities, and role of Junior Engineer: To motivate the staff working under him for punctuality, developing a positive attitude and increasing production