



PBC No. 08 / 2025

दक्षिणरेलवे Southern Railway प्रधानमुख्यकार्मिकअधिकारीकार्यालय Office of the Principal Chief Personnel Officer प्रधानकार्यालय, कार्मिकविभाग, चेन्नै-600003 Headquarters, Personnel Department, Chennai-600003

सं/No:P(S)563/VII/Tech.III/Power/TL-LDCE [Comp.No.520041] दिनांक/Dated:09.01.2025

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 MDZTI/TPJ, ZETTC/AVD, ETC/PER, DPOs/SPOs/WPOs/APOs of HQ/Divisions/Workshops/Units.

Syllabus for the post of Tech.III/ Electrical/ Power in Level-2 and Tech.III/ Electrical/ TL in Level-2 against 25% LDCE Intermediate Apprentice quota of Electrical Department.

Railway Board's letter No.E(NG)I/2022/PM1/36 dated 08.02.2024 संदर्भ/Ref: 1) (RBE No.11/2024) under PBC No.21/2024 dated 13.02.2024.

> PCPO/MAS' letter No.P(Co-ord) CCBT/2024 dated 20.11.2024 2) (PBC No.253/2024).

The syllabus for the post of Tech.III/ Electrical/ Power in Level-2 and Tech.III/ Electrical/ TL in Level-2 against 25% LDCE Intermediate Apprentice quota approved by PCEE, are enclosed for information, guidance and necessary action.

This has the approval of the competent authority.

संलग्नक/Encl.: 3 pages.

Asst.Personnel Officer/C,M&E for Principal Chief Personnel Officer

प्रतिलिपि/Copy to: The General Secretary/SRMU

The General Secretary/DREU

The General Secretary/AISCTREA The General Secretary/AIOBCREA

The General Secretary/NFIR

IT Section/PB/HQ - to upload on the SR website.

Annexure 'A'

SYLLABUS FOR THE SELECITON TO THE POST OF TECH. GR. III / POWER AGAINST 25%LDCE OUOTA IN ELECTRICAL/GS DEPARTMENT

(Enclosure to the letter No. जे/पी/J/P502259 Dt.19.11.2024)

- 1. How to use the measuring instrument calipers, micrometers, voltmeter, ammeter, energy measures, tri-vector meters, instances relay timers.
- 2. Draw simple writing diagram by connecting lights and fans wattage allowed in each short circuits, light and power.
- 3. Knowledge about power supply LT medium and high-tension supply how to test the single phase 3 phase supply of LT medium and how to test the high-tension supply.
- 4. Maximum error allowed for energy meters and frequency meters.
- 5. Knowledge about protective devices such as fuses, MCBs circuit breakers isolators, overload relays.
- 6. Maintenance of electric fans, light lifting, switch gears transformers and pumps.
- 7. Knowledge about connection of DOL star delta starter Auto transformer starter. Rotor Rheostat.
- 8. Knowledge about UG cable, LT distribution, cable jointing, jumper connection etc.
- 9. Knowledge about lighting of PF, station building, yard and type of fitting used in the above locations.
- 10. Knowledge about method of testing insulation resistance in electrical installations such as wiring, motors, UG cables, HT structure, OCBs, switch gears.
- 11. Methods of earth testing and knowledge about resistance value to be maintained in various installations in Railways.
- 12. Energy conservation followed in Railways.
- 13. Maintenance of centrifugal pump, submersible pump, VT pumps etc.
- 14. Overhauling of AC ceiling fans, light fitting, motors and TL fans regulators etc.
- 15. First aid practices and artificial respiration, any other items pertaining to this trade
- 16. Testing of transformer oil.
- 17. Size of wire gauges of current ratio

- 18. Safety equipment in Substation / Switch room.
- 19. Substation Layout
- 20. Maintenance and operation of DG sets.
- 21. Maintenance of CLS AT panels.
- 22. Maintenance of UPS system for PRS/UTS
- 23. Official Language policy and rules.

Annexure-II

SYLLABUS FOR TECH-III/TL AGAINST 25%LDCE QUOTA

- 1. How to use the measuring instrument calipers, micrometers, voltmeter, ammeter, energy measures, tri-vector meters, instanceous relay timers.
- 2. Knowledge about method of testing insulation resistance in electrical installations such as wiring, motors, UG cables, switch gears.
- 3. Methods of earth testing in coaches.
- 4. Testing and maintenance of cells and battery charger.
- 5. Knowledge about wiring of TL coaches and sizes of wires used in TL coaches.
- 6. Various equipment used in TL coaches and their capacities, various capacity of MCBs used in TL coaches, sizes of fuse wires and their ratings.
- 7. Knowledge about alternators/generators/ motors.
- 8. System of TL voltage and their advantageous fire precaution to be followed in TL coaches various methods of fire fighting equipments.
- 9. Fire aid practices and artificial respiration, any other items pertaining
- 10. DC meter Types.
- 11. Size of wire gauges of current ratio.
- 12. Types of belts and method of replacement in TL coaches.
- 13. Knowledge about checking of axle policy suspension arrangement of under gear equipments.
- 14. Capacity of batteries used in TL coaches and method of charging at yard.
- 15. Fortnight inspection of TL cells, testing of alternator, regulators of TL coaches
- 16. Checking of earth fault in TL coach
- 17. Various types of fittings used and wattage in various types of coaches.
- 18. Modified diagram of TL coaches
- 19. Anti theft measure in TL systems, Fire prevention measures.
- 20. En-route attention, PF duty.
- 21. Knowledge about EFT connection.
- 22. Trouble shooting of TL coaches
- 23.Official Language policy and rules.
