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**(3) Tenure: -**

- i) Maximum tenure of Instructors in one consecutive spell should be 05 years.
- ii) Cooling off period between two tenures should be at least one year.
- iii) They will be repatriated to parent cadre on completion of their tenure period or three months prior to the date of their retirement or when their performance is found to be not satisfactory at any time without assigning any reasons whatsoever whichever is earlier.

**(4) Teaching Allowance: -**

- i) 12% of Basic Pay as per Railway Boards letter dated 06.10.2017.

**(5) General Conditions: -**

- i) Should have proper communication skill especially in Tamil, English and Hindi.
- ii) Should have the ability to take classes.
- iii) Syllabus for the written examination is enclosed as **Annexure 'A'**.
- iv) Application proforma is enclosed as **Annexure 'B'**.

The employees working under your control may please be notified and the application received from eligible employees in the enclosed pro-forma (**Annexure - B**) may be forwarded in one bunch so as to reach this office on or before 19.01.2024 there are no volunteers a "NIL" statement should be sent within the target date.

One copy of the notification is to be exhibited in the notice board for wide publicity among the staff in each depot.

**Encl.:** Syllabus and Pro-forma.

Digitally Signed by Ramesh

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Date: 20-12-2023 16:19:36

Reason: Approved

सहायक कार्मिक अधिकारी/इन्फ्रा  
**Assistant Personnel Officer/Infra**  
वररष्ठ मंडल कारमर्याक अधधिकारी/सेलम  
**for Sr. Divisional Personnel Officer/SA**

**C/- Sr. DEE/TRD/SA for kind information**  
Ch. OS/Est./TRD, OS/IT Cell, OS/Confidential/PB  
DS/SRMU, AI SC/ST REA, AI OBC REA & AIRPFREA

**ANNEXURE-A****SYLLABUS FOR INSTRUCTOR / TRD (Ex-Cadre) AT MDDTI/ ED IN PML -7****1. GENERAL**

- 1.1 Organizational Structure of Indian Railway and Electrical Department
- 1.2 History and importance of Railway Electric Traction.
- 1.3 Railway Electrification
- 1.4 Inter-Departmental Co-ordination
- 1.5 Communication, teaching skills, knowledge of public speaking and general knowledge.
- 1.6 Different types of locomotives, EMU/MEMU used on Indian Railway.

**2. OVERHEAD EQUIPMENTS AND POWER SUPPLY INSTALLATION**

- 2.1 Principles for layout plans for 25kV AC Traction & OHE Sectioning
- 2.2 Layout plan,
- 2.3 Cross section drawing, Structure erection drawing, Standard RDSO general arrangement drawings.
- 2.4 Bonding and Earthing for OHE and PSI
- 2.5 Foundations & Structures used for OHE
- 2.6 Foundation Bending Movement Code, Employment schedules
- 2.7 Characteristics of Conductors used for 25kV AC Traction
- 2.8 Cantilever Assembly, jumpers, Droppers
- 2.9 Type of OHEs, Speed Potential, Tension Length
- 2.10 Implantation, Contact wire height, Clearances
- 2.11 Regulating equipment's, Insulators, Span and Stagger
- 2.12 Turnout, Overlaps, Neutral Section, Section Insulator
- 2.13 SMIs, INs issued by RDSO for OHE & PSI
- 2.14 Regulations for Power Line Crossings of Railway Tracks
- 2.15 Procedure for Preparation & commissioning of Electric traction
- 2.16 Inputs required for running trains at 160kmph
- 2.17 Latest Development in TRD
- 2.18 Maintenance & Inspection schedules for OHE, PSI
- 2.19 Causes of Panto entanglement and remedies
- 2.20 Breakdown management in TRD
- 2.21 Reliability measures in TRD
- 2.22 Safety Precautions in Electrified section
- 2.23 Tower wagons and its maintenance
- 2.24 Protection Scheme of TSS
- 2.25 Guidelines for relay settings at TSS
- 2.26 Layout of Traction Sub-Stations and Switching Stations
- 2.27 Power requirements and Power Density
- 2.28 Traction tariff
- 2.29 Power Quality in Traction- Power Factor, Harmonics and their mitigation in Railway Traction
- 2.30 Power Procurement through Open Access- Power allocation, Power Exchange, Scheduling, Forecasting, Monitoring Availability based Tariff (ABT), Deviation Settlement Mechanism (DSM), Voltage Linked Reactive Power Changes



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**3. REMOTE CONTROL**

- 3.1 Operation of Traction Power Control
- 3.2 Power Blocks, Competency Certificates
- 3.3 Principles of working of SCADA

**4. MANUALS AND RULES: Up-to-date knowledge on:**

- 4.1 ACTM Volume I, II (Part I, II), III
- 4.2 General Rules
- 4.3 Schedule of Dimensions
- 4.4 Part J of IRPWM
- 4.5 Chapter 22 of Signal Manual – Volume II

**5. OFFICIAL LANGUAGE RULES AND POLICY**

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**ANNEXURE-B****APPLICATION FOR THE POST OF INSTRUCTOR / TRD (Ex-Cadre) AT MDDTI/ ED  
IN PAY MATRIX LEVEL -7**

1. Name of the employee  
(IN BLOCK LETTERS) :
2. Designation and Station :
3. Date of Birth :
4. Date of initial appointment :
5. Initial appointment as :
6. Qualification :
  - (a) Educational :
  - (b) Technical :
7. Promotion to the Present Grade :
8. Present Level in 7th PC Matrix :
9. Presently holding post is a : Cadre / Ex-Cadre
10. Community :
11. Railway Telephone No. :
12. Mobile No. :

**DECLARATION**

I hereby declare that the particulars given in this application are true, complete and correct to the best of my knowledge and belief. In the event of any information being found false or incorrect or ineligibility being detected any time, I am liable to be taken up under D&AR.

Place:

Date:

Signature of the Applicant

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The particulars furnished by the applicant have been verified and found correct. There are no DAR/Vig. cases pending against the applicant. Forwarded to Sr. DPO for further action please.

Signature & Designation of the  
Controlling  
Supervisor with Date

