

EAST COAST RAILWAY

Office of the
Principal Chief Personnel Officer
Bhubaneswar.
Date: 24. 11.2022

No.ECoR/Pers/Gaz/Elect./AEE-70%/Sel/23-24

The PCEE-ECoR/BBS.

The CAO(Con)/BBS, CPD/RE/BBS, GM/RVNL/BBS.

The Dy. CVO, SPO/Con/BBS, SPO/Con/VSKP, SPO/RE/BBS.

The Sr. DPO-KUR, WAT & SBP.

The Sr. DEE- KUR, WAT & SBP.

The CWM/CRW/MCS, WPO-CRW/MCS.

The GM(P) & PCEE-SER/GRC & SECR/BSP.

All Concerned.

Sub: Formation of Group-B/Electrical Panel of AEE against 70% selection through CBT for the assessment period 2023-24 in Electrical Engineering Department/ECoR.

1. It has been decided by Railway Board to hold Centralized Computer based objective type examination (CBT) for formation of Group-B Electrical Panel of 03 posts (01-UR, 01-SC & 01-ST) of AEE against 70% selection in Electrical Engineering Department of East Coast Railway for the assessment period 2023-24.
2. As per Railway Board's letter No. E(GP)2022/2/4 dated 18.10.2022, the CBT Centralized Computer based objective type examination shall be held on 22.01.2023 (Sunday) by DG/NAIR. The time and venue of the CBT will be intimated in due course.
3. **Conditions of Eligibility:**
 - I. As per Recruitment Rules for the Group-'B' post of Assistant Electrical Engineer published by Railway Board vide Notification No. 2016/E(G)RR/15/2/Electrical dated 19.02.2019, Non-Ministerial Group-C staff of Electrical Engineering Department and are holding the posts in Level-6 and above in the pay matrix with three years of regular service in Level-6 and above in the pay matrix, are eligible to appear for the selection.
 - II. Where juniors who have completed their qualifying or eligibility service and are being considered for promotion, their seniors would also be considered provided they are not short of the requisite qualifying or eligibility service by more than half of such qualifying or eligibility service or two years, whichever is less, and have successfully completed their probation period for promotion to the next higher grade along with their juniors who have already completed such qualifying or eligibility service.
 - III. The service will be reckoned as on **01.01.2023.**
4. A provisional list of 13 Nos. of eligible candidates (10 candidates in order of seniority as per Integrated Seniority list published vide letter No. ECoR/Pers/08/Elect/Inte. Seniority/AEE(70%)/Part-III/Circulation dated 03.11.2022 as per extant rule and 03 against twice failed candidates of Electrical Department who have completed minimum three years of non-fortuitous service in Pay Level-7 as on 01.01.2023 (Cut off date) and are coming in the zone of consideration for the assessment period of 2023-24 is enclosed at Annexure-A. Also an additional list of 13 Nos. of candidates, next in order of seniority are placed in the Stand-by List at Annexure-B. Against any unwilling candidate of Annexure-A, the willing candidate of Annexure-B may be considered for the CBT to the extent of making good the zone of consideration.

5. The candidature of the candidates is accepted provisionally. In case, any candidate is subsequently found ineligible for the above selection at any stage, his/her candidature will be rejected without any further notice.
6. The eligible candidates enlisted at Annexure-A & B should submit their options (willingness/unwillingness) **latest by 07.12.2022** in the attached format (Annexure-C) to the concerned Controlling Officers/Personnel Officers and the same should be forwarded to the Dy.CPO (Gaz) **latest by 12.12.2022** positively in a consolidated statement along with the individual options.
7. It is the employee's responsibility to advise his/her willingness/unwillingness to take the selection, and failure to respond or to provide the intimation within the period allowed will be treated as unwillingness on his/her part to take the selection. If willingness/unwillingness is not received within the above mentioned stipulated date, it will be deemed that the candidate has availed of the opportunity of appearing in the selection & it will be treated as his/her unwillingness to take the selection.
8. In case any candidate is on leave or on deputation to other Railways/Units/office or on sick list, the Controlling officer concerned and the offices where he/she last worked should send necessary advice to the authority under whom he/she is working or the Medical Authority as the case may be and an acknowledgement obtained. Options of the staff concerned need not be sent to this office directly. Controlling officers/Personnel officers should ensure that options received by their offices after 07.12.2022 should not be forwarded to this office under any circumstances. All the particulars filled by the applicants at Annexure- C (Option form) should be verified by Personnel Officers before forwarding to HQrs office. Their IPAS numbers, HRMS ID, Mobile numbers and e-mail ID should be verified since the examination will be conducted through CBT and all future correspondences with the applicants will be done with their IPAS, Mobile number and e-mail ID.
9. Pre-Promotional Training (PPT) for a period of 60 hours or 15 working days/On line/Off line to the enlisted and willing SC/ST candidates should be arranged by the Executive side in terms of Railway Board's letter No. E(GP)2022/2/4 dtd. 18.10.2022. **The same should be completed by 05.01.2023 positively and compliance report to be sent to this office immediately.** As it is mandatory, refusal, if any, should be obtained in writing.
10. **Objective and Scheme of Examination:** The examination aims at a comprehensive assessment of knowledge of the candidates related to their professional ability, Official language policy, Establishment and Financial Rules. ***The formation of the panel will be on the basis of 'Seniority-cum-Suitability'.*** Selection of candidates for empanelment is based on (i) CBT Examination on a single day, (ii) Viva-voce (with prior Medical Fitness test) and Assessment of Record of Service by the Selection Committee.
11. **CBT Examination:** In order to bring objectivity to the Selection process, it has been decided by Railway Board vide letter No. E(GP)2022/2/4 dtd. 07.10.2022 read with RBE No. 53/2019 that the CBT examination shall comprise of one Paper which shall have 100% Objective type Multiple Choice Questions only. The paper will be of 100 marks with distribution as given below:-
 - a) Professional Subject including optional questions
of 10 marks on Official language policy & Rules : 70 marks
 - b) Establishment and Financial Rules : 30 marks
 - c) Qualifying marks : 60

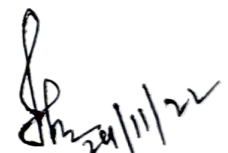
- d) All objective type questions carry equal marks.
- e) There shall be negative marking for incorrect answers. One-third of the marks allotted for each question will be deducted for every wrong answer as per RBE No. 53/2019.
- f) The duration of the examination for 70% selection through CBT shall be of **02 hours.**
- g) **Syllabus:** The syllabus as prescribed by Railway Board vide letter No. E(GP)2022/2/4 dtd. 07.11.2022 for 70% selection for Group 'B' post of AEE including syllabus for Establishment & Financial Rules in Electrical Department is enclosed.

12. Viva-voce & Record of Service:

	Maximum Marks	Qualifying marks
1. Viva-voce	25	30 (Including at least 15 marks in the record of Service)
2. Record of Service	25	

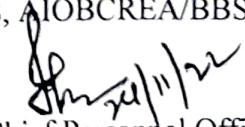
13. The Controlling Officers/Sr.DPO/DPO/WPO/SPO of concerned Unit/Division should ensure that the ACRs/APARs of the candidates for the last five years i.e. 2017-18 to 2021-22 completed in all respects, SRs & Personal files are kept ready with them and they should send the same to Dy. CPO(Gaz) when called for.
14. In terms of Railway Board's letter No. E(GP)80/2/8 dtd. 31.10.91 only those candidates who qualify in the medical examination of prescribed standard are eligible to appear in the viva-voce test.
15. The above Notification is uploaded in ECoR website: www.eastcoastrailways.gov.in → Recruitment Info → Recruitment Information → **Click Here for HQ Notifications.**

- Encl: (i) List of candidates (Annexure-A & B).
(ii) Application Format (Annexure-C)
(iii) Syllabus


(H.K. Mahanand)

Dy.Chief Personnel Officer (Gaz)
For Principal Chief Personnel Officer

- Copy to: (1) Sr. System Manager (IT)/BBS for uploading in ECoR's website.
(2) The Genl. Secretary- ECoRSC/BBS, ECoRSU/BBS, AISCSTREA/BBS, AIOBCREA/BBS.
(3) Notice Board.


For Principal Chief Personnel Officer

**Provisional List of Candidates for promotion to the post of AEE (Gr.B) against 70% selection quota in
Electrical Department for assessment period 2023-24.**

Sl. No.	Name(Shri)	Comm	Desig.	Pay Level	Divn/ Unit	Date of Birth	Date of Initial Appt.	Date of entry in GP 4200/- (Level-6)		Date of entry in GP 4600/- on regular measure with due regard to inter-se seniority in the panel	Effective date of Seniority
								Date of Entry in 5000-8000/- (in 5th CPC scale) with due regard to inter-se seniority in the panel	Date of Entry in 5500-9000/- (in 5th CPC scale) with due regard to inter-se seniority in the panel		
1	2	3	4	5	6	7	8	9	10	11	12
1	K.C. Sinku	ST	SSE	4600	KUR	01.07.64	31.05.88	-	-	14.11.95	14.11.95
2	R.R. Das	UR	SSE	4600	KUR	15.07.69	27.09.95	-	-	27.09.96	27.09.96
3	G. Sarvarayudu	UR	SSE	4600	WAT	29.08.70	01.04.96	-	-	17.04.97	17.04.97
4	B.K. Mallick	UR	SSE	4600	HQ	04.08.65	05.07.96	-	-	05.07.97	05.07.97
5	Sadananda Sahu	UR	SSE	4600	WAT	08.07.72	07.08.97	-	-	06.08.98	06.08.98
6	G. Lakra	ST	SSE	4600	HQ	04.05.66	22.10.92	-	12.08.96	13.08.98	13.08.98
7	C.K. Subudhi	UR	SSE	4600	HQ	05.08.72	16.08.97	-	-	14.08.98	14.08.98
8	G. Majhi	ST	LP(M)	4200	SBP	26.04.69	15.04.88	22.04.95	28.08.98	-	28.08.98
9	Bhanja Behera	SC	SSE	4600	KUR	23.06.71	11.09.97	-	-	12.09.98	12.09.98
10	P.K. Tripathy	UR	SSE	4600	HQ	13.06.68	07.08.97	-	-	20.10.98	20.10.98
11	K.C. Majhi	ST	SSE	4600	HQ	09.07.72	16.12.97	-	-	16.12.98	16.12.98
12	P. Babu Rao	UR	LP(M)	4200	SBP	10.03.69	21.12.88	01.03.94	27.08.99	-	27.08.99
13	S. Baliarsingh	UR	LP(M)	4200	SBP	12.06.66	05.12.90	05.12.96	27.08.99	-	27.08.99

XXXXX



**Provisional Standby List of Candidates for promotion to the post of AEE (Gr.B) against 70% selection quota in
Electrical Department for assessment period 2023-24**

Sl. No.	Name(Shri)	Comm	Desig.	Pay Level	Divn/ Unit	Date of Birth	Date of Initial Appt.	Date of entry in GP 4200/- (Level-6)		Date of entry in GP 4600/- on regular measure with due regard to inter-se seniority in the panel	Effective date of Seniority
								Date of Entry in 5000-8000/- (in 5th CPC scale) with due regard to inter-se seniority in the panel	Date of Entry in 5500-9000/- (in 5th CPC scale) with due regard to inter-se seniority in the panel		
1	R.K. Das	UR	CLI	4600	SBP	25.02.66	06.02.93	11.04.97	27.08.99	-	27.08.99
2	S.K. Das	UR	CLI	4600	SBP	05.07.67	06.02.93	11.04.97	27.08.99	27.11.06	27.08.99
3	D.K. Sahu	UR	LP(M)	4200	SBP	13.06.69	06.02.93	11.04.97	27.08.99	-	27.08.99
4	B. Nath Sahoo	UR	LP(M)	4200	SBP	14.05.71	06.02.93	11.04.97	27.08.99	-	27.08.99
5	B.K.Toppo	ST	SSE	4600	SBP	07.07.63	18.06.90	07.09.92	13.04.95	21.12.99	21.12.99
6	A. Prakash Rao	UR	SSE	4600	WAT	16.04.66	28.02.88	28.02.89	-	04.04.00	04.04.00
7	G. Bandopadhyaya	UR	CLI	4600	SBP	30.11.67	14.09.93	12.11.97	10.04.00	14.12.06	10.04.00
8	R.K.Biruly	ST	LP(M)	4200	SBP	04.04.64	01.05.87	23.08.92	21.03.01	-	21.03.01
9	G.R.Sahoo	UR	LP(M)	4200	SBP	26.06.69	16.03.93	12.11.97	21.03.01	-	21.03.01
10	M.R. Gajendra	SC	LP(M)	4200	SBP	09.09.68	09.09.94	06.01.98	21.03.01	-	21.03.01
11	P.K. Mazumdar	SC	CLI	4600	SBP	01.03.70	10.11.95	04.08.98	01.08.01	07.01.04	01.08.01
12	A.K. Kanungo	UR	SSE	4600	KUR	02.01.75	19.10.00	-	-	05.12.01	05.12.01
13	S.N. Thakur	UR	LP(M)	4200	SBP	10.11.69	14.09.93	12.11.97	15.04.02	-	15.04.02

XXXXX



East Coast Railway
Application for Selection to Group-B post of AEE against 70% selection for
2023-24 (CBT)

OPTION: Whether Willing/Unwilling

- | | | |
|--------------------------------------|---|---|
| 1. Name of the Applicant | : | |
| 2. Designation | : | |
| 3. Place of posting | : | |
| 4. Community (UR/SC/ST) | : | |
| 5. Date of Birth (DD/MM/YYYY) | : | |
| 6. Date of Appointment | : | |
| 7. IPAS No. (in 11 digits) | : | |
| 8. HRMS ID | : | |
| 9. Controlling Officer | : | |
| 10. Unit/Division | : | |
| 11. Mobile No./Alternate Mobile No. | : | 1. _____ 2. _____ |
| 12. Email ID (in capital letters) | : | |
| 13. Date | : | |
| 14. Whether belongs to PwBD category | : | YES / NO (please tick) |
| (i) | | If yes, please specify the category with %age |
| (ii) | | Whether Scribe is required |
| | : | YES / NO (please tick) |

Signature of the candidate

Counter signature of the controlling officer:
(With Designation and seal)

(Note: Willingness/Unwillingness to be submitted on or before 07.12.2022)

Proforma of statement for submission of options by Divisions to HQs.

Sl. No	Name, Design/ station	I-PASS No.	Comm. (UR/SC/ ST)	Place of posting	DOB	HRMS ID	Controlling officer	Unit/ Division	Mobile No.	E-mail ID	Whether belong to PwBD (with Specification)
--------	-----------------------	------------	-------------------	------------------	-----	---------	---------------------	----------------	------------	-----------	---

Syllabus for promotion to Group- B posts - 70% selection and 30% LDCE.

Syllabus for Establishment Rules:

1. Organization of the Personnel Department in Railways objectives functions and policies of Personnel Department.
2. Recruitment and Training, Classification of Services, Recruitment in Different services, Railway Recruitment Boards & Railway Recruitment Cells Compassionate Ground Appointments, Initial & In Service Training, Refresher Courses, Central Training Institutes, Training Centers in Zones, Divisions & Workshops, Training Modules for different posts, Training under Apprentices Act, Online Training, APARs.
3. General conditions of service in Railways, Seniority, Lien, Inter Railway & Inter Division transfers, Deputation, Promotion Policy & methods. Selection, Suitability, Trade Tests, Leave Rules, Pass Rules, Joining Time Reservation policy, HOER, Overtime, Payment of wages, current CPC Pay Rules, Advances in Railways.
4. Manpower planning, Rightsizing & Benchmarking, creation, extension and surrender of posts, creation of posts against new assets, different types of posts including workcharged posts.
5. The Railway Servants (Discipline & Appeal) Rules, 1968 and related instructions.
6. The Railway Services (Conduct) Rules, 1966 and related instructions.
7. Retirement benefits, qualifying service, pension, family pension, commutation gratuity, new pension scheme.
8. Staff welfare, SBF, Railway institutes, Railway schools, Ex-gratia payment, Incentive Bouns Scheme, Staff Grievances Redressal Mechanisms.
9. Industrial relations in Railways, recognized trade unions, industrial disputes. The Industrial Disputes Act, 1947. The Industrial Relations Code, 2020. The Trade Unions Act, 1926, PNM, PREM, JCM, Various Associations & Informal Meetings.
10. The Factories Act, 1948. The workmen's Compensation Act, 1923. Functions of Labour Enforcement Officers, Right to Information Act.
11. The scope of Information Technology in Railway e – office. HRMS, IPAS , LIMBS, ARPAN, CPGRAMS, ANUBHAV etc.

Syllabus for Financial Rules:

1. Parliamentary Control over Railway Finance, Public Accountability, Canons of Financial Propriety.
2. Railway Budget - Budgetary terms, Types of Budgets, Budget cycle, Demand of Grants, Budgetary and Financial Reviews.
3. Rules of Allocation - Classification of expenditure - Control of expenditure - Responsibility Accounting - Performance Budgeting - Exchequer Control - Financial Results of Working lines.
4. Works Programme - Financial justification of Works - Surveys - Preparation of Estimates - Capital Budget - Control over Capital Expenditure - Reappropriation of Funds.
5. Financial control over Stores Expenditure - Purchase and Stores Keeping Procedure - Inventory Control and ABC Analysis.
6. Financial & Cost Control in Railway Workshops/Sheds/Units.
7. Rules and procedure relating to Tenders and contracts for execution of works and Procurement of Stores, M&P Programme and RSP.
8. Procedure for Possessing and finalizing Audit Objections and Draft Paras.
9. Delegation of Powers.
10. Losses, Frauds and Embezzlements.
11. General Financial Rules
12. Government e-Market (GeM)
13. Classification of Railway Revenue (Earnings)
14. Information Technology in general with specific reference to Railway's IT Applications
15. Taxation matters with special focus on GST & Income Tax
16. Organization of CGA and C&AG
17. Any other topic felt necessary from time to time

Syllabus for 70% Selections for promotion to Group 'B' posts of AEE in Electrical Department.

A. Professional Subjects:

Part I: General Electrical Engg.

1. Electrical Circuits: Electrical Circuit Elements (Resistance, Inductance and capacitance), Voltage and Current Sources, Ohm's law, Kirchoff's Voltage and Current Laws, DC & AC circuit analysis.
2. Electronic Devices & Analog Electronics: Semiconductor Diodes, Diode Rectifiers, Bipolar Junction Transistor, JFET, MOSFET, Transistor Biasing Circuits.
3. Power Electronics: Characteristics and comparison of Power Diodes, BJTs, Thyristors, SCR, GTO, IGBT and Power MOSFET. One phase and Three phase uncontrolled and controlled rectifiers, Features and working of Variable Voltage Variable Frequency (VVVF) drives and its applications.
4. Electrical Engg. Materials: Properties & applications of Electrical insulating materials, Magnetic materials, Conducting materials & Semiconducting materials.
5. Electrical Machines: DC Machines, Induction Machines and Synchronous Machines. Losses in rotating machines. Single phase and three phase transformers. Losses and efficiency of transformers, Machine Drives.
6. Renewable Energy Sources: Climate change, Global warming, Various sources of Renewable energy- Resources and applications, Solar Cells, Rooftop solar and land based solar plants- Concepts of Basic Design, construction and maintenance, Off grid and Grid connected solar plants, Wind turbines, Net Zero carbon emission, ECBC, Round the clock green energy, Energy Storage systems, Policies and regulations , Net and Gross metering, Business model, tendering.
7. Power System and Protection: Basic concepts of electrical power generation and various equipment. Concepts of transmission lines, cables, Series and shunt compensation, Electric field distribution and insulators, Distribution systems, Per-unit quantities, Circuit breakers, Concept of protection.

Part II: Railways Electrical Engg.

1. General Services:

- a. Power Supply arrangement: Radial distribution system, Looped(Ring Main)
- b. distribution systems. Layout & Equipment at Distribution sub-station. Operation & Maintenance of sub-station, Various testing at sub-station, overhead & underground distribution, protective devices & their coordination. Construction, erection & commissioning of new sub-station and distribution lines. Basic features of PVC and
- c. XLPE cables. Cable rating and derating, Cable laying. Concept of average

demand, peak demand, load factor & electrical billing. Power factor improvement, Electrical & fire safety, Safety auditing of sub-station, concept of energy audit, Functions of Electrical Inspector to Government (EIG) in Railways. Power line crossing, Electricity Act-2003, CEA Regulations, SCADA and Substation automation. Earthing arrangement.

- d. Building Electrification: Types of various wiring methods, metering & safety measures. Wire, switchgears & fittings used for wiring, Energy efficient appliances, scale of fittings as per policy in various types of quarters, various types of Tariffs, commercial connection, concept of prepaid and postpaid metering, concept of smart meters. Safety coordination, Electrical accidents and prevention.
- e. Illumination & Lighting: Various parameters related to illumination, Different types of illumination sources, lighting methods, classification of lux levels at various types of stations, yard lighting & street lighting. Passenger amenities at Railway stations.
- f. Water supply: Types of water supply system, Pumping system, Classification of pumps, Comparison of various pumps, fluid theory, discharge calculations. Centrifugal pump, turbine pump, Submersible pumps, characteristic curve of pumps, efficiency. Cavitations & priming of pumps, necessity of multistage pumping, storage capacity and purification of water. Installation, maintenance & troubleshooting of pumps, Starter & drives of pumps, automation of pumps.
- g. Lift & Escalator: Working of Lift & Escalator, Installation of Lift and Escalator. Maintenance, various safety devices, control panels & Safety aspects.
- h. Air Conditioning & Refrigeration: Theory of air conditioning, refrigeration cycles, various types of refrigerants, window/split/package AC unit. Central air conditioning plant, VRF system, air cooling systems, planning for capacity and drives for refrigeration plant, Maintenance and troubleshooting.
- i. Energy Conservation: Need of conservation of energy, Various measures being taken by railways to conserve energy in the field of Electrical General Services. Necessity and implementation of Open Access in Indian Railways. Energy conservation Act.

2. Traction distribution:

- a. OHE: Basic design concepts of TRD system of conventional and 2x25kV system. Types of overhead equipment. Sectioning principles of OHE. Various parts of OHE. Foot Patrolling, current collection, Tower wagons, seasonal & cyclic checks, maintenance Schedule, Preventive maintenance Tools, failure investigation of OHE, earthing and bonding. Railway Electrification and process of construction. Power Blocks & Procedure to obtain it.
- b. PSI: Schematics of 1x25kV and 2x25kV traction substation with names/ratings of various equipment, protection scheme for TSS. Fixed and dynamic PF correction, Feeding stations, SSP & SPs, 132 kV transmission lines, PSI equipment.

Maintenance and failure investigation of PSI equipment.

- c. SCADA and Miscellaneous items: Operation and maintenance of remote control, traction power control organization, permit to work, emergency arrangements, coordination with operating and other departments. Liaison with supply authorities, maintenance and failure investigation of SCADA equipment.
- d. NDT techniques, Open Access, safety precautions for electrified sections, Latest development in TRD, MSG meetings. Instructions issued by Railway Board, RDSO's TI/MI, TCs, IRSOD & ACTM.

3. Train Lighting and AC Coaches:

Systems of Train Lighting and Air conditioning on coaches, Self Generating Coaches, ICF TL/AC Coach Generation system. Equipment, circuits and protection in ICF TL/AC coaches. Emergency feed extension in coaches. EOG and HOG systems in coaches - Hotel Load converter and Interlocking panel. Equipment, power circuits and protection systems in LHB TL/AC coaches, Power car and Pantry car. Air Conditioning in ICF/LHB coaches, Heat Load Calculation, Precooling, Pulldown and Dynodrive tests. Maintenance schedules of ICF and LHB coaches. Duties of ACCM/ACCA. Pre-cooling of AC Coaches. Fire causes and prevention measures in coaches. SMIs, Modification Sheets and Technical circulars issued by RDSO and instructions by Railway Board and RDSO.

4. Electric Locos:

Organizational structure and duties of officers & staff. Conventional AC & 3 phase locomotives on IR. Equipment in locomotives, their functioning / operations, maintenance / overhauling and testing parameters & maintenance schedules. Reliability & safety action plans. Traction Power Circuit, Auxiliary Circuit, Control Circuits and Pneumatic Circuits. Different types of braking arrangements. Locomotive maintenance schedules & various tests to be carried out. Working of Electric Loco Shed & Electric Loco Workshop. Safety items and safety checks involved in safe locomotive operation. Relevant paras of ACTM, Accident Manual, G&SR, IR SOD and Instructions issued by Railway Board, RDSO and CLW. Latest developments in the field of electric locomotives.

5. EMU and MEMU/Metros:

Concept of EMU/MEMU/Metro trains, various types of EMU/MEMU stock, Conventional & 3 phase EMUs & their salient features. Different types of brakes used in EMU/MEMU/Metros. Power circuits, auxiliary, control circuits. Mechanical components and its functions. Different electrical equipment and its functions. Inspection/Maintenance/Overhauling schedules of EMUs/MEMU/Metros. Safety precautions and fire prevention in EMU/MEMU/Metros. Train Control Management System(TCMS). Recent developments in EMU/MEMU/Metros.

6. Electric Loco and EMU Operation:

Organizational structure and duties of officers & staff. Crew management – Training, Monitoring & Counseling. Crew & loco links. HOER & Duty Rules. Loco utilization. SPAD (Signal Passing At Danger). Management of Crew lobby, running room, trips shed & TLC / Power controller office. Working of CMS & FOIS. Safe, punctual & efficient loco / EMU operation with online troubleshooting of locomotive / EMU failures. Relevant paras of ACTM, Accident Manual, G&SR, Instructions issued by Railway Board & RDSO. Latest developments in the field of electric locomotives / EMU operations.

7. Store Matters:

Procedure related to procurement of stock items and non-stock items, distribution and accountal of stores. Receipt and custody of stores. Sale of surplus stores. Inventory management, ABC Analysis. Procurement through GeM, IREPS. Schedule of powers under stores matters.

8. Tenders and Contracts:

Work proposals, Types of estimates & estimation stages. Type of tenders, earnest money, Performance guarantee, security deposit, technical & financial eligibility criteria, Merits and demerits of EPC tender. IRPMS. Procedure and stages of e-tendering through IREPS, General Condition of Contract (GCC) for works and service contracts, various provisions in Schedule of Power (SOP) under works matters, Basic principles of Project management, quality control in electrical works.