

# दक्षिण पूर्व मध्य रेलवे SOUTH EAST CENTRAL RAILWAY मंडल कार्यालय DIVISIONAL OFFICE कार्मिक विभाग PERSONNEL DEPARTMENT, किंग्सवे, नागपुर KINGSWAY, NAGPUR-440001

Notification No. 18/2025 Date: 27.02.2025

द.पु.म. रेलवे के नागपुर मंडल के यांत्रिक) डीजल (विभाग में पे मैट्रिक्स लेवल-6 में 25% इंटरमीडिएट अपरेंटिस कोटा के तहत कनिष्ठ अभियंता (डी/वि.) के पद को भरने हेतु ।

Filling up the post of Junior Engineer (D/E)) against 25% IAQ (Intermediate Apprentice Quota) in Pay Matrix Level-6 in Mechanical (Diesel) Department of Nagpur Division of SECR.

संदर्भ: प्रधान मुख्य कार्मिक अधिकारी/बिलासपुर के स्थापना नियम सं./Ref: PCPO/BSP's Estt Rule No. 07/2003, 26/2003, 190/2006, 102/2010, 315/2019, 07/2020, पत्र सं. P-HQ/RUL/105/12/1401 दिनांक/Date 05.09.2012. एवं P-HQ/RUL/105/2 दिनांक/Date 13.07.2023.

| 13.07.2023.  |   |
|--|---|
| आवेदन/ विकल्प प्रस्तुत करने<br>की अंतिम तिथि Last<br>date for submission of<br>application/options | 10.03.2025  |
| पद का नाम  | कनिष्ठ अभियंता (विद्युत/डीजल)   |
|  | Junior Engineer( D/E )  |
| Name of the post<br>रिक्तियां  |   |
|  | कुल–01 (सामान्य-01)   |
| VACANCY  | Total - 01 (UR-01)  |
| क्रमचारियों की पात्रता और  | 1) मैकेनिकल (डीजल) विभाग के इलेक्ट्रिकल विंग में कुशल ग्रेड के रूप सभी  |
| सेवा शर्तें ELIGIBILITY  | सेवारत कर्मचारी जिनके पास : All serving employees in the  |
| AND SERVICE  | Skilled Grade in Electrical Wing of Mechanical (Diesel)   |
| CONDITIONS OF  | Department having:  |
| STAFF  | a) प्रासंगिक ट्रेड में आईटीआई/एक्ट अप्रेंटिसशिप उत्तीर्णता Passed   |
|  | ITI/ ACT Apprenticeship in relevant trade   |
|  | या /or  |
|  | b) विज्ञान स्ट्रीम में 10+2 की योग्यता हो । 10+2 qualification in   |
|  | Science steam 2) मैकेनिकल (डीजल) विभाग के इलेक्ट्रिकल विंग में कुशल ग्रेड के रूप में तीन वर्ष की नियमित सेवा हो। Three years of regular service in the electrical wing of the Mechanical (Diesel) Department as a skilled grade. 3) अधिसूचना की तिथि के अनुसार, सभी वर्ग के उम्मीदवारों के मामले में वालंटियर कर्मचारियों की आयु 47 वर्ष से कम होनी चाहिए अर्थात कर्मचारी का जन्म 27.02.1978 के बाद हुआ होना चाहिए। As on the date of notification, the volunteering staff should be below the age of 47 years in all categories i.e. Employee should have born later than 27.02.1978 |
| पाठ्यक्रम Syllabus   | संबंधित कर्मचारियों के बीच व्यापक प्रकाशन हेतु पाठ्यक्रम संलग्न है। The syllabus is enclosed herewith for wide publication among  |
|  | the concerned staff.  |



| चयन पूर्व कोचिंग Pre-                       | अनुसूचित जाति/अनुसूचित जनजाति के अभ्यर्थियों को पदोन्नति-पूर्व   |
|---|--|
| selection coaching                          | प्रशिक्षण देना आवश्यक नहीं है, जब उन्हें सामान्य वरिष्ठता के अनुसार  |
| -   | चयन के लिए उपस्थित होना होता है, जिसमें कोई आरक्षित रिक्ति   |
|   | मौजूद नहीं होती है। It is not necessary to impart pre-   |
|   | promotional training to SC/ST candidates when they are   |
|   | required to appear for selection as per general seniority in which there is no reserve vacancy exists.                                       |
| चयन का तरीका                                | 1) परीक्षा कंप्यूटर आधारित टेस्ट मोड पर होगी। (सीबीटी)   |
| Mode of Selection                           | Examination will be on Computer Based Test (CBT) Mode.   |
|   | 2) सभी प्रश्न बहुविकल्पीय प्रश्न )MCQ) के होंगे। All questions will  |
|   | be of Multiple Choice Question (MCQ).  |
|   | 3) कुल प्रश्नों की संख्या 110 होगी (राजभाषा नियमों के 10 प्रश्नों  |
|   | सहित)। हालाँकि, उम्मीदवारों को किसी भी 100 प्रश्नों का उत्तर देना  |
|   | होगा। Total No. of question will be 110 (Including 10 questions from Official language rules). However,                                      |
|   | candidates have to answer any 100 questions.   |
|   | 4) प्रत्येक गलत उत्तर के विरुद्ध 1/3 की दर से नकारात्मक अंकन   |
|   | किया जाएगा। There will be negative marking @ 1/3   |
|   | against every wrong answer.  |
|   | 5) सी.बी.टी के लिए अर्हक अंक 60% होंगे। Qualifying marks for<br>Computer Based Test (CBT) will be of 60%.                                    |
|   | 6) परीक्षा की समय अवधि 2 घंटे होगी। The duration of  |
|   | examination under objective type multiple choice will be   |
|   | 2 hours.<br>पैनल विशेष रूप से सी.बी.टी में प्राप्त अंक और सेवा के रिकॉर्ड  |
| पैनल का प्रकाशन                             |  |
| Publication of Panel                        | एपीएआर), पुरस्कार, सजा आदिके अनुसार मेरिट के क्रम के आधार (  |
|   | पर तैयार किया जाएगा। Panel will be prepared exclusively based on the Order of Merit as per the score obtained in                             |
|   | CBT and Record of service (APAR's, Award, Punishment   |
|   | etc.)  |
| पूर्व प्रमोशनल प्रशिक्षण<br>Pre Promotional | पैनल में शामिल कर्मचारियों को अनिवार्य पूर्व पदोन्नति प्रशिक्षण में उत्तीर्ण होना<br>आवश्यक है। Empanelled staff is required to be passed in |
| Training                                    | mandatory pre promotional training.  |
| आवेदन प्रस्तुत करना                         | 1) अभ्यर्थी को दिए गए प्रारूप (संलग्न) में नियंत्रण आधिकारा  |
| Submission of applications                  | (वरि.मं.यां.अ (डीजल)/मोतीबाग या मं.यां.अ.,डेमु शेड/ग़ोंदिया ) द्वारा   |
| applications                                | विधिवत हस्ताक्षरित आवेदन करना चाहिए। Candidate   |
|   | should/must apply in the given format (attached) duly signed by the Controlling Officer (Sr.DME(Diesel)/MIB or                               |
|   | DMF Demu Shed/Gondia).   |
|   | 2) सभी आवेदन उचित प्रारूप में नियंत्रण अधिकारी द्वारा विधिवत<br>अग्रेषित करके उससे वरि.मं.का.अधि. के पास 10.03.2025 तक पहुंच                 |
|   | to the format duly   |
|   | जाने चाहिए। All applications in proper format duly forwarded by the Controlling Officer should/must reach                                    |
|   | in Sr. DPO's on or before <b>10.03.2025</b> .  |
|   | 3) आवेदन पत्र पीडीएफ प्रारूप में ई) मेल-srdponagpur@gmail.com) क   |
|   | माध्यम से सीनियर डीपीओ कार्यालय को भी भेजे जा सकते हैं।  |
|   | Applications can also be sent to Sr. DPO's office through  |



|                           | e-mail (srdponagpun@gmail.com) in pdf format.  |
|---------------------------|--|
|                           |  |
| परीक्षा की तिथि एवं स्थान | दिनांक: 15.04.2025   |
| Date of Examination &     | स्थानः सीबीटी रूम्, दूसरी मंजिल, डीआरएम बिल्डिंग, द .म .पू .रेलवे, नागपुर।                     |
| Venue                     | ्यदि आवश्यक हो तो स्थान और तिथि को अल्प सूचना पर बंदला जा सकता                                 |
|                           | ਰੈ) Venue: CBT room, 2nd floor, DRM Building, S. E. C.   |
|                           | Railway, Nagpur. (Venue & date may be changed in short   |
| सामान्य जानकारी           | notice if required)  |
| General Information       | 1) किसी भी परिस्थिति में कोई पूरक परीक्षा आयोजित नहीं की जाएगी।                                |
| General information       | No supplementary examination will be conducted at any  |
|                           | circumstances.   |
|                           | 2) अभ्यर्थियों को सलाह दी जाती है कि वे उचित पहचान जापन के साथ                                 |
|                           | परीक्षा की निर्धारित तिथि पर उपस्थित होंगे । Candidates are                                    |
|                           | advised to attend on schedule date of exam along with  |
|                           | proper identification memo.  |
|                           | 3) यदि अभ्यर्थी की ओर से किसी अनुचित साधन का उपयोग देखा जाता                                   |
|                           | है, तो उन्हें परीक्षा हॉल छोड़ने के लिए कहा जाएगा और रैलवे सेवा                                |
|                           | आचरण नियम के तहत कार्रवाई का सामना करना पड़ेगा। If use any                                     |
|                           | unfair means is noticed from the candidate, they shall be                                      |
|                           | asked to leave the examination hall and has to face action under railway service conduct rule. |
|                           | 4) यदि आवेदक के संबंध में किसी भी स्तर पर कोई विसंगति पाई जाती है तो                           |
|                           | बिना किसी सूचना के उम्मीदवारी रद्द कर दी जाएगी। If any   |
|                           | discrepancy is found at any stage in regard to the   |
|                           | applicant the candidature is liable to be cancelled without                                    |
|                           | any information.   |
|                           | 5) कर्मचारियों को इस अधिसूचना के जारी होने की तिथि यानी 27.02.2025                             |
|                           | तक आयु और शैक्षणिक योग्यता और अन्य सेवा शर्ती की सेवा शर्ती को पूरा                            |
|                           | करना चाहिए। As such employees should fulfil the service  |
|                           | conditions of age and educational qualification and other                                      |
|                           | service conditions as on the date of issue of this notification i.e. as on <b>27.02.2025</b> . |
| Note:                     | notheddon ner do on artoa.2020.  |

Note:

a) होम पेज का लिंक : द.पू.म. रेलवे के विभाग डिवीजन/ $\rightarrow$  डिवीजन  $\rightarrow$  नागपुर  $\rightarrow$  कार्मिक  $\rightarrow$  अधिसूचनाएं. Link of the Home page: Dept./Div of SECR  $\rightarrow$  Division  $\rightarrow$  Nagpur  $\rightarrow$  Personnel  $\rightarrow$  Notifications.

b) Enclosed- Proforma Application (Annexure 'A') & Syllabus.

(Susheel Kumar Lakra)
Assistant Personnel Officer-II
For Sr. Divisional Personnel Officer.
S.E.C. Railway, Nagpur.

Copy forwarded for information and necessary action to:

1. Sr. DME(D)/MIB 2. DME(Demu Shed/G 3. SSE (D/E) MIB & G 4. Ch.OS/Mech.Bills 5. DC/SERMC/NAG 6. DS/AISCSTREA 7.

DS/SECROBCREA (NAG) 8. राजभाषा अधिकारी/नागपुर

For Sr. Divisional Personnel Officer

यांत्रिक (डीजल) विभाग के विद्युत विंग में 25% इंटरमीडिएट अपरेंटिस कोटा के तहत पे मैट्रिक्स लेवल-6 में किनिष्ठ अभियंता (डी/वि.) की पदोन्नति के लिए कर्मचारियों की आवेदन का प्रारूप । Format for application of the staff for promotion of Junior Engineer (D/E) in Pay Matrix Level-6 against 25% IAQ in

| Electrical wing | g of Mechanical | (Diesel) Dep | partment. |
|-----------------|-----------------|--------------|-----------|

| S.N. | Particulars                                 | Details          |
|------|---|------------------|
| 1    | आवेदक का नाम Name of applicant              |                  |
| 2    | पदनाम Designation                           |                  |
| 3.   | भविष्यनिधि नं. PF NO.                       |                  |
| 4    | HRMS ID                                     |                  |
| 5    | वर्तमान वेतन लेवल Present Pay Level         |                  |
| 6    | वर्तमान स्टेशन/यूनिट का स्थान Place of      |                  |
|      | current station/unit                        |                  |
| 7    | जन्मतिथि (सेवा रिकार्ड के अनुसार) Date of   |                  |
|      | Birth (as per Service Record)               |                  |
| 8    | रेलवे में नियुक्ति की तिथि Date of          |                  |
|      | Appointment in Railway                      |                  |
| 9    | Length of service in Technician (D/E)) Post | Year Months Days |
| 10   | समुदाय(सेवा रिकार्ड के अनुसार) /            |                  |
|      | Community (as per Service Record)           |                  |
| 11   | शैक्षणिक योग्यता(सेवा रिकार्ड के अनुसार)/   |                  |
|      | Education qualification(as per Service      |                  |
|      | Record)                                     |                  |
| 12   | Mobile No.                                  |                  |

#### <u>घोषणा</u> Declaration

|                     |               |                | ٠ ٢                  | तद्दवारा घाषणा क     | रता हाक मन क            | ानष्ठ आभयता     |
|---------------------|---------------|----------------|----------------------|----------------------|-------------------------|-----------------|
| डी(.वि/ के पद के वि | तेए जारी अधिर | खना के नियमों  | और शर्तों को पढ      | त और स्पष्ट रूप से   | समझ लिया है। मैं        | ਧੂਨ ਮੀ ਬੀਬੂਗਾ   |
| करता हूं कि मैं कि  | सी भी D&A/S   | PF/Via मामले   | से मक्त हं। मैं र    | ह भी घोषित करत       | हिं कि मेरे दारा टी     | ो गर्द उपागेक्त |
| जानकारी मेरी जान    | कारी के अनम   | ार सता सदी है  | । गारोन्दि के परि    | गामान्यक्ता में प्रज | । पू विश्व वर द्वारा या | יוע סיינוענו    |
| पोस्टिंग            | को<br>को      | 3)             | 1/4412111 47 414     | .णामस्परूप, म प्रश   | ासन द्वारा तय किए       |                 |
|                     |               | ตา             | _ <del>o</del> p     | लिए                  | तयार                    | रहूंगा।         |
| I                   |               |                | Design               | he                   | ereby declare t         | that I have     |
| gone through t      | he terms &    | conditions     | of notification      | n issued for th      | e post of Junio         | or Engineer     |
| (D/E) and und       | erstood clea  | ırly. I also h | ereby declare        | that I will be       | ready to move           | on transfer     |
| to any station,     | if I am pror  | noted. I also  | declare that         | I am free from       | any D&A/SPE             | /Vig cases.     |
| I also declare th   | nat the abov  | ve informatio  | on given by m        | ie is true/corre     | ct as per my kr         | nowledge.       |
|                     |               |                |                      |                      |                         |                 |
| दिनांक:             |               |                |                      |                      | (भावेत्रक वे            | र्म हस्ताक्षर)  |
| 147,                |               |                |                      |                      | (जायदम प                | ० हस्तादार)     |
|                     | •             |                |                      |                      | नाम:                    |                 |
|                     |               |                |                      |                      |                         |                 |
|                     |               |                |                      |                      |                         |                 |
| Shri                |               |                |                      | is free f            |                         | case of now     |
| Shri                |               |                |                      | is free f            | rom any D&A             | case of now.    |
| Shri                |               |                |                      | is free f            |                         | case of now.    |
| Shri                |               |                |                      | is free f            |                         | case of now.    |
| Shri                |               |                |                      |                      | rom any D&A             | case of now.    |
| Shri                |               |                | ture & Nam           | e of Superviso       | rom any D&A             | case of now.    |
| Shri                |               |                |                      | e of Superviso       | rom any D&A             | case of now.    |
| Shri                |               |                | ture & Nam           | e of Superviso       | rom any D&A             | case of now.    |
| Shri                |               |                | ture & Nam           | e of Superviso       | rom any D&A             | case of now.    |
| Shri                | ·<br>· · ·    | Signa          | ture & Nam<br>Forwar | e of Superviso       | rom any D&A<br>or       | case of now.    |



# Syllabus for written examination for the post of J.E. (D/E) for pay matrix Level-6 against 25% IMA Quota in Mechanical (D) Department

### (A) TECHNICAL:-

ABOUT ALCO LOCOMOTIVE, DEMU (1400HHP, 1600HHP)& 3PHASE AC MEMU.

#### CONTENT:-

| and stationary machines/circuits, governors, safety devices, tests, electrical fittings, electronic cards, MEP 660, all electrical component Trouble shootings etc.  Basic Electricity:-What is ELECTRICAL source of Electricity, Effect Electrical current, etc. P.D. Current Alternate current& Direct Current Resistance, Specific Resistance, Temperature coefficient conductor insulators, power & energy, Electrical circuit, Graphical Symbol, Ohms Lasseries & parallel Circuits, Laws of Resistance, Fuses, its types & uses electrical circuits & Faradays laws of electromagnetic induction.  BATTERIES:- Type of cell, What is a Battery, Construction of Batter, charging & discharging of batteries, Commissioning of new batter Maintenance of battery capacity, testing of battery DC motor its type function, generator its type & function.   | CONTE  |   |  |  |  |
|---|--------|---|--|--|--|
| and stationary machines/circuits, governors, safety devices, tests, electrical fittings, electronic cards, MEP 660, all electrical componer Trouble shootings etc.  Basic Electricity:-What is ELECTRICAL source of Electricity, Effect Electrical current, etc. P.D. Current Alternate current& Direct Curre Resistance, Specific Resistance, Temperature coefficient conducto insulators, power & energy, Electrical circuit, Graphical Symbol, Ohms La Series & parallel Circuits, Laws of Resistance, Fuses, its types & uses electrical circuits & Faradays laws of electromagnetic induction .  BATTERIES:- Type of cell, What is a Battery, Construction of Batte, charging & discharging of batteries, Commissioning of new batte Maintenance of battery capacity, testing of battery DC motor its type function, generator its type & function.  Identification of various equipments & their function equipped with Alco lo SPIC (700HP) 1400HHP, 1600HHP DEMU, 3PHASE A.C. MEMU, 700 H& 1400 HHP DEMU (BHEL & CGL)  Engine Control Panel.  Control Circuit.  Power Circuit.  Power Circuit.  Power Circuit.  Battery changing circuit 110 & 24 volt.  Main Traction Alternator.  Auxiliary Alternator.  Auxiliary Alternator.  Traction Motor.  Main Rectifier.  Main Rectifier Blower Motor | Sr.No. |   |  |  |  |
| Electrical current, etc. P.D. Current Alternate current& Direct Curre Resistance, Specific Resistance, Temperature coefficient conductor insulators, power & energy, Electrical circuit, Graphical Symbol, Ohms Laseries & parallel Circuits, Laws of Resistance, Fuses, its types & uses electrical circuits & Faradays laws of electromagnetic induction.  BATTERIES:- Type of cell, What is a Battery, Construction of Batter, charging & discharging of batteries, Commissioning of new batter Maintenance of battery capacity, testing of battery DC motor its type function, generator its type & function.  Identification of various equipments & their function equipped with Alco lo ,SPIC (700HP) 1400HHP, 1600HHP DEMU, 3PHASE A.C. MEMU, 700 F. Engine Control Panel.  Control Circuit.  Power Circuit.  PAC (Passenger Alarm Chain) circuit.  Engine cranking circuit.  Battery changing circuit 110 & 24 volt.  Main Traction Alternator.  Auxiliary Alternator.  Traction Motor.  Main Rectifier.  Main Rectifier Blower Motor  | 1      | General information about WDG3AWDS6 Alco locos- All electrical rotating and stationary machines/circuits, governors, safety devices, tests, all electrical fittings, electronic cards, MEP 660, all electrical components, Trouble shootings etc.         |  |  |  |
| ,SPIC (700HP) 1400HHP, 1600HHP DEMU, 3PHASE A.C. MEMU, 700 H & 1400 HHP DEMU (BHEL & CGL)  • Engine Control Panel.  • Control Circuit.  • Power Circuit.  • Light & Fan circuit.  • PAC (Passenger Alarm Chain) circuit.  • Engine cranking circuit.  • Battery changing circuit 110 & 24 volt.  • Main Traction Alternator.  • Auxiliary Alternator.  • Traction Motor.  • Main Rectifier.  • Main Rectifier Blower Motor  | 2      | BATTERIES:- Type of cell, What is a Battery, Construction of Battery, charging & discharging of batteries, Commissioning of new battery, Maintenance of battery capacity, testing of battery DC motor its type & function, generator its type & function. |  |  |  |
| <ul> <li>&amp; 1400 HHP DEMU (BHEL &amp; CGL)</li> <li>Engine Control Panel.</li> <li>Control Circuit.</li> <li>Power Circuit.</li> <li>Light &amp; Fan circuit.</li> <li>PAC (Passenger Alarm Chain) circuit.</li> <li>Engine cranking circuit.</li> <li>Battery changing circuit 110 &amp; 24 volt.</li> <li>Main Traction Alternator.</li> <li>Auxiliary Alternator.</li> <li>Traction Motor.</li> <li>Main Rectifier.</li> <li>Main Rectifier Blower Motor</li> </ul>   | 3      | Identification of various equipments & their function equipped with Alco loco   |  |  |  |
| <ul> <li>Engine Control Panel.</li> <li>Control Circuit.</li> <li>Power Circuit.</li> <li>Light &amp; Fan circuit.</li> <li>PAC (Passenger Alarm Chain) circuit.</li> <li>Engine cranking circuit.</li> <li>Battery changing circuit 110 &amp; 24 volt.</li> <li>Main Traction Alternator.</li> <li>Auxiliary Alternator.</li> <li>Traction Motor.</li> <li>Main Rectifier.</li> <li>Main Rectifier Blower Motor</li> </ul>   |        |   |  |  |  |
| <ul> <li>Control Circuit.</li> <li>Power Circuit.</li> <li>Light &amp; Fan circuit.</li> <li>PAC (Passenger Alarm Chain) circuit.</li> <li>Engine cranking circuit.</li> <li>Battery changing circuit 110 &amp; 24 volt.</li> <li>Main Traction Alternator.</li> <li>Auxiliary Alternator.</li> <li>Traction Motor.</li> <li>Main Rectifier.</li> <li>Main Rectifier Blower Motor</li> </ul>  |        |   |  |  |  |
| <ul> <li>Light &amp; Fan circuit.</li> <li>PAC (Passenger Alarm Chain) circuit.</li> <li>Engine cranking circuit.</li> <li>Battery changing circuit 110 &amp; 24 volt.</li> <li>Main Traction Alternator.</li> <li>Auxiliary Alternator.</li> <li>Traction Motor.</li> <li>Main Rectifier.</li> <li>Main Rectifier Blower Motor</li> </ul>  |        |   |  |  |  |
| <ul> <li>PAC (Passenger Alarm Chain) circuit.</li> <li>Engine cranking circuit.</li> <li>Battery changing circuit 110 &amp; 24 volt.</li> <li>Main Traction Alternator.</li> <li>Auxiliary Alternator.</li> <li>Traction Motor.</li> <li>Main Rectifier.</li> <li>Main Rectifier Blower Motor</li> </ul>  |        | Power Circuit.  |  |  |  |
| <ul> <li>Engine cranking circuit.</li> <li>Battery changing circuit 110 &amp; 24 volt.</li> <li>Main Traction Alternator.</li> <li>Auxiliary Alternator.</li> <li>Traction Motor.</li> <li>Main Rectifier.</li> <li>Main Rectifier Blower Motor</li> </ul>  | •      | Light & Fan circuit.  |  |  |  |
| <ul> <li>Battery changing circuit 110 &amp; 24 volt.</li> <li>Main Traction Alternator.</li> <li>Auxiliary Alternator.</li> <li>Traction Motor.</li> <li>Main Rectifier.</li> <li>Main Rectifier Blower Motor</li> </ul>  |        | ,   |  |  |  |
| <ul> <li>Main Traction Alternator.</li> <li>Auxiliary Alternator.</li> <li>Traction Motor.</li> <li>Main Rectifier.</li> <li>Main Rectifier Blower Motor</li> </ul>   |        | <ul> <li>Battery changing circuit 110 &amp; 24 volt.</li> <li>Main Traction Alternator.</li> </ul>  |  |  |  |
| <ul> <li>Auxiliary Alternator.</li> <li>Traction Motor.</li> <li>Main Rectifier.</li> <li>Main Rectifier Blower Motor</li> </ul>  |        |   |  |  |  |
| <ul> <li>Traction Motor,</li> <li>Main Rectifier.</li> <li>Main Rectifier Blower Motor</li> </ul>   |        |   |  |  |  |
| <ul> <li>Main Rectifier.</li> <li>Main Rectifier Blower Motor</li> </ul>  |        |   |  |  |  |
| Main Rectifier Blower Motor   |        |   |  |  |  |
|   |        |   |  |  |  |
|   |        |   |  |  |  |
| • 24 Volt Alternator.   |        |   |  |  |  |
| Engine safety devices.  |        |   |  |  |  |
| LCC (Locomotive control Card).  |        | - ·   |  |  |  |
| DCS (Driver control Switch), ECS (Engine control Switch), Master  |        | DCS (Driver control Switch), ECS (Engine control Switch), Master  |  |  |  |

|            | Controller.   |
|------------|---|
| 9          |   |
|            | MCB (Miniature circuit Braker).   |
|            | Motor cut out switches, Light & Fan contactor.  |
| 1          | Switch gear box (Reverser, line contactor, shunt, Traction Motor  |
|            | Overload Relay).  |
|            | RR Unit (Rectifier and Regulator Unit)  |
| 7          | • Safety items (Head light, Flasher light, tail light, Marker light, Control  |
|            | & Power circuit ground Relay)   |
|            | Indication panel  |
|            | EP Brake system   |
|            | Parking Brake system  |
|            | Inter Vehicular Coupler (A, B, C, D, E)   |
|            | mest vermediat Godplet (A, B, G, D, E)  |
|            |   |
|            | 1600 HUD DEMIL Make Madha (T MD5 040 )(0)   |
|            | 1600 HHP DEMU Make-Medha (Type MDE 648 V2)  |
|            | DDU (Display Control Unit) Mater Controller, PIS (Public information  |
|            | system)   |
| 6          | Control circuit, Power circuit, Light & Fan circuit, PAC (Passenger)  |
|            | Alarm Chain) circuit.   |
| -          | Engine cranking circuit.  |
|            | 110 volt & 24 volt changing circuit.  |
|            | Main Traction Alternator  |
|            | Traction Motor  |
|            | PAC (Passenger Alarm Chain) circuit.  |
|            | Main Rectifier  |
|            | DCS (Driver control Switch), GCS (Guard Control Switch), ECS  |
| ų.         | (Engine control Switch), IS (Isolation Switch)  |
|            | VCC (Vehicle Control Computer), ECU (Engine Control Unit), HCU  |
|            | (Hydraulic Control Unit), ECM (Engine Control Module).  |
|            | EP Brake System   |
|            | Parking Brake System  |
|            | IVC (Inter Vehicular Coupler).  |
|            |   |
|            | TCC (Traction Control Computer).  |
| <b>(2)</b> | • Engine safety devices.  |
| 16         | Safety Items (Head light, Flasher light, tail light, Marker light, Control     Safety Items (Head light, Flasher light, tail light, Marker light, Control |
|            | & Power circuit ground Relay)   |
|            | ADB (Analog Distribution Box)   |
|            | BCR (Brake changer Resistor)  |
|            | CGR (Control Ground Relay), PGR (Power Ground Relay).   |
|            | MCB (Miniature circuit Braker)  |
|            | • 24V & 110V Battery.   |
|            | NVR (Network Video Recording) & CCTV.   |
| 4          | Function & Operation of Temperature Switch, Circuit breakers, Axle  |
|            | generator Etc   |
| 5          | Switches:-Their Function & Operation(a)All Pneumatic Pressure switches,   |
|            | battery ammeter, battery knife switch, Magnet Valve , All Safety Device Etc.  |
| 6          | Speedometer Data Fitting Procedure, Memory Downloading& their Fitting &   |
| 3          | Function.   |
|            |   |

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| • | 7        | All Electrical Rotating Components Fittings & Their Function, Overhauling Procedure, of Alco Locomotives.   |  |  |  |
|---|----------|---|--|--|--|
|   | 8        | Measuring Instruments, Multi meter, Continuant Tester, Megger, cell tester Etc.   |  |  |  |
|   | 9        | Overhauling of the following components & their function  a) Starting motor15 HPDC Series for SPIC  b) Pre Priming Motor (DC)  c) AC Fuel Pump Booster Motors  d) AC Cyclonic Dust Blower Motors  e) Auxiliary generator/Exciter Generator  f) ECC (EDDY Current Clutch  g) DC Series Motor |  |  |  |
|   | 10       | Circuit Diagram & their Description , Knowledge of the Alco loco/SPIC  a) Starting Circuit b) Power Circuit c) Battery Charging Circuit d) Propulsion Control Circuit   |  |  |  |
|   | <b>@</b> | e) Dynamic breaking Circuit f) Radiator Fan Circuit g) Engine Speed Circuit h) Lightning Circuit  |  |  |  |

## (B) OTHERS:-

| Sr.No. | Topic   |  |  |  |
|--------|---|--|--|--|
| 1.     | Establishment rules for leaves, passes, staff Amenities, retirement, settlement Compassionate appointment, other establishment matters Etc. |  |  |  |
| 2.     | Logical Reasoning.  |  |  |  |
| 3.     | Maths:- As per CBSE 10 <sup>th</sup> std. Syllabus  |  |  |  |
| 4.     | English :- As per CBSE 10 <sup>th</sup> std. Syllabus  Rajbhasha, Official language acts and constitutional provisions,                     |  |  |  |
| 5.     |   |  |  |  |

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