

| Total Trainees=21 Course Coordinator= Shri Adarsh Soni Session Date= 01-03-2026 to 29-03-2026 | | | | | | | | | | | |
|--|---------|---------|---------------------------------------|---------|---------|--------------------------------------|---------|---------------------------------------|---------|--|--|
| Days/Period | (09:40- | (10:40- | | (11:55- | (12:45- | | (14:30- | | (16:00- | | |
| | 10:40) | 11:40) | | 12:45) | 13:30) | | 15:45) | | 17:00) | | |
| Monday | ADS | | Tea Break 11:40 to 11:55 | ANS | | Lunch 13:30 to 14:30 | MK | Tea Break 15:45 to 16:00 | MK | | |
| Tuesday | RCS | | | ADS | | | ANS | | ANS | | |
| Wednesday | MK | | | RCS | | | ADS | | ADS | | |
| Thursday | ANS | | | ADS | | | RCS | | RCS | | |
| Friday | ADS | | | ANS | | | MK | | MK | | |
| Saturday | ANS | | | RCS | | | | | | | |

ADS- Sh. Adarsh Soni

RCS- Sh. Ratnesh Chandra Srivastava

MK- Sh. Manish Kumar

ANS- Sh. Anurag Singh

Sr.Lecturer & Course Co Ordinator/STC/CB

Encl: Module & Subject details.

MODULE - MJP D

| | |
|-----------------------------------|-----------------------------|
| Name of the Post /Category | Junior Engineer |
| Stream | Diesel |
| Mode of Appointment | Promotion Through seniority |
| Min. Qualification | --- |
| Total Duration of Training Period | 13 weeks |

| Session | Type | Subject | Subject code | Duration in days | Activity Centre |
|--------------------|-------|--|---------------|------------------|-------------------|
| I | THEO | Computer Awareness | MRT-14 | 06 | STC |
| | | Industrial Safety, First aid & Fire Fighting | MRT-16 | 03 | |
| | | Accident and Disaster Management | MRT-17 | 02 | |
| | | Supervisory Skills | MRT-18 | 03 | |
| | | Technical English | MRT-19 | 03 | |
| | | Manufacturing Processes (MP) | MET-12 | 04 | |
| | | Industrial Engineering | MET-13 | 01 | |
| | | Engineering Drawing (ED) | MET-14 | 02 | |
| | | Sub Total (Theory) | | 24 | |
| II | THEO | Stream Specific Theory | MDT-05 M/E | 24 | STC |
| | PRACT | Diesel Loco POH Workshop | | 06 | Respective Places |
| | | Practical training Diesel Shed | | 06 | |
| | | On Job training | | 12 | |
| | | Total | | 24 | |
| III | | Refreshing/Examination/Viva | | 06 | |
| Grand total | | | | 78 | |

EXAMINATION PATTERN

| DIESEL | | | |
|--------------------|---------------|--------|------------|
| Paper | Subjects | Marks* | Total |
| I | MRT-14 | 30 | 150 |
| | MRT-16 | 30 | |
| | MRT-17 | 30 | |
| | MRT-18 | 30 | |
| | MRT-19 | 30 | |
| II | MET-12 | 75 | 150 |
| | MET-13 | 25 | |
| | MET-14 | 50 | |
| TOTAL | | | 300 |
| I | MDT-05 M/E | 100 | 100 |
| II | | 50 | 50 |
| III | | 50 | 50 |
| TOTAL | | | 200 |
| GRAND TOTAL | | | 500 |

| | |
|---------------------|--|
| SUBJECT NAME | DIESEL LOCOMOTIVE THEORY(MECHANICAL)-5M |
| SUBJECT CODE | MDT-05 M |
| MODULE | MJR-D |
| DURATION | 24 Days |

| Sl. No. | Topic | Durati on in Hours | |
|----------------|--|-----------------------------------|-----|
| 1 | Power pack – Cylinder head, cylinder liner, connecting rod, cam shaft etc (Alco & HHP) | 24 | ANS |
| 2 | Supercharging principles, methods and various testing parameters, Air and Computer Control Brake | 18 | |
| 3 | Air compressor, types, function and overhauling procedures; Air- Dryer | 12 | |
| 4 | Fuel system – components, function, defects and remedy, Fuel injection system (Alco & HHP) | 12 | |
| 5 | Lube oil system – components, function, defects and remedy (Alco & HHP) | 12 | |
| 6 | Cooling water system – components, function, defects and remedy, Radiator fan – principle, operation and maintenance (Alco & HHP) | 12 | ADS |
| 7 | Layout of shop and shed, Schedule of maintenance (Alco & HHP), Shed management, Record keeping, Outages, Super checking | 12 | |
| 8 | Loco maintenance procedure; Bogies- types, load transfer, transmission of TE, suspension system; Cattle guard, gear case, wheel profile, specification & defect, coupling, bearing fitment etc. (Alco & HHP) | 12 | |
| 9 | GE loco- Mechanical System | 08 | |
| 10 | DEMU-DPC Power pack and its mechanical system | 12 | |
| 11 | Safety & Misc items- Cab equipment, Driver seat, Sanding equipment, Hand brake etc | 04 | |
| 12 | Testing of Engines - Dry-run-Test, Blow-by test, Random test, Load Box testing | 06 | |
| | Total | 144 | |

| | |
|---------------------|---|
| SUBJECT NAME | DIESEL LOCOMOTIVE THEORY (ELECTRICAL)-5E |
| SUBJECT CODE | MDT-05 E |
| MODULE | MJR-D |
| DURATION | 24 Days |

| Sl. No | Topic | Duration in Hours | |
|---------------|---|--------------------------|-----|
| 1 | Various types of Transmission, feature of an Ideal transmission in Diesel Loco, AC-DC, AC-AC transmission | 06 | MK |
| 2 | Various rotating equipment such as TA, TM, EG, AG, DB Blower, CCEM, ECC, Fuel booster motor- Description/Overhauling/Repair/Testing, common problems & remedy for Alco loco | 18 | |
| 3 | Excitation systems for Alco and HHP loco | 12 | |
| 4 | Various rotating equipment such as TA, CA, AG, DB blower, starting motor, DB grid motor, Radiator fan motor, TCC Blower, FP motor etc for HHP loco | 18 | |
| 5 | Dynamic brake system, Transition system - circuit analysis, defects and remedy for Alco | 12 | |
| 6 | Microprocessor based controls, APU, REMMLLOT, Distributed Power Control System (DPCS) | 18 | RCS |
| 7 | Types of governors, overhauling procedure, testing methods | 08 | |
| 8 | Various safety devices, Horn, Head light, Wiper, Emergency switches and alarm fitted in Loco - working principles | 08 | |
| 9 | Testing of Engines - Load Box testing, MU operation testing | 12 | |
| 10 | Dynamic brake system, circuit analysis defect and remedy for HHP loco | 12 | |
| 11 | GE Loco- electrical machines and control system | 08 | |
| 12 | DEMU-DPC Electrical and control system, EP Brake, train lighting, SPART | 12 | |
| | Total | 144 | |