

Time Table

Session – IJEs 4th Session

Batch – IJE- D 10 & IJE/25-26 /01
 Session Date – 20.10.2025 to 13.12.2025

Course Coordinators		IJE- D/10 (Trainees-18)		IJE/25-26 /01 (Trainees-06)		- Sh. Adarsh Soni - Sh. Anurag Singh			
Days/Period	I (09:40-10:40)	II (10:40-11:40)	III (11:55-12:45)	IV (12:45-13:30)	V (14:30-15:45)	VI (16:00-17:00)			
Monday	ADS	ANS	RCS	AK	MK	AH			
Tuesday	AY	NCJ	Tea Break 11:40	ADS	ANS	RCS	Tea Break 15:45 to	ALS	Lab/Library
Wednesday	MK	AM	to 11:55	AH	ALS	AY	16:00	AH	श्रमदान
Thursday	ANS	RCS	14:30	AK	MK	ALS			
Friday	AK	AY			ALS				
Saturday	NCJ	ANS	ADS	MK					

(N.C.Jaiswal)

Sr.Lecturer & Course Director/STC/CB

ABSTRACT OF MODULES

SL. NO.	Name of Post	Stream	Module No.	Duration in Weeks	Page No
1	Sr. Section Engineer	C&W	MSE-C	52	3 - 4
2	Sr. Section Engineer	Diesel	MSE-D	52	5 - 6
3	Sr. Section Engineer	Workshop	MSE-W	52	7 - 8
4	Junior Engineer (RRB)	C&W	MJR-C	52	9 - 10
5	Junior Engineer (RRB)	Diesel	MJR-D	52	11 - 12
6	Junior Engineer (RRB)	Workshop	MJR-W	52	13 - 14
7	Junior Engineer	C&W	MJI-C	52	15 - 16
8	Junior Engineer	Diesel	MJI-D	52	17 - 18
9	Junior Engineer	Workshop	MJI-W	52	19 - 20
10	Junior Engineer	C&W	MJP-C	13	21
11	Junior Engineer	Diesel	MJP-D	13	22
12	Junior Engineer	Workshop	MJP-W	13	23

Module Code

1. M Mechanical
2. SE Section Engineer
3. JR JE- RRB
4. JI JE- Intermediate
5. JP JE-Promotional
6. C C&W
7. D Diesel
8. W Workshop

Subject Code

1. M Module
2. R Railway
3. E Engineering
4. T Theory
5. C C&W
6. D Diesel
7. W Workshop

MCT 2/1- from S.No-1 to 12

MCT 2/2 Up to S.No- 13 to 26

(Visit & review to be divided In both the subjects)

SUBJECT NAME	C & W THEORY-02	
SUBJECT CODE	MCT-02	
MODULE	MSE-C, MJR-C, MJI-C	
Sl. No.	Topic	Duration in Hours
1	Train lighting & Air-Conditioning: Maintenance of Battery and Battery box, RMPU, Lay-out of TL & AC equipment in Non-AC/AC and Power cars, Alternator, Invertor, RRU, IVC (inter vehicle couplers), SG, EOG, HOG	24
2	Toilet Systems: WRA and plumbing system, Bio toilets & Bio-vacuum toilets	06
3	EnHM: MCC, OBHS, CTS, Pest control, Rodent control & Bed bugs control, Linen distribution, laundry: BOOT Laundry Equipment, disposal of solid waste, quick watering system, automatic coach washing plant, waste water recycling, Station cleaning, cleaning of IT device, electrical equipment	24
4	Design features of various wagons including Stainless steel wagons, Aluminum wagons, Higher Axle load wagons, BOBRN Wagon including its door opening mechanism	18
5	New pattern of Train examination of goods stock- CC/Premium/End to End, long haul, heavy haul, Issue of BPC, e-BPC, FMM	06
6	Wagon manufacturing - use of huck bolts	06
7	ODC: classification, procedure for sanction, movement guidelines	06
8	Container wagons-BLC Train operation and maintenance practice	06
9	IRCA Part III	12
10	Repair & maintenance of goods stock-ROH	12
11	Tank Wagons - repairs & maintenance	06
12	Twin pipe air brake system in wagon, BMBS in wagon, Brake Binding- Causes & remedies	12
13	Train Parting - Causes & remedies	12
14	Tippler operation, Silo loading; recovery of damages during loading unloading from private siding, warranty claims of wagon items	06
15	Accident Relief Train	06
16	Derailment Mechanism	06
17	Accident Investigation, CRS Inquiry	06
18	Disaster Management - Role of Supervisors	15
19	Prevention of accident on C&W account	12
20	ART/MFD/SPART/140T Crane Maintenance	09
21	Layout of Coaching & goods stock yard and its infrastructural facilities	12
22	Weigh bridge: AMC, test special, Calibration, action to be taken in case of overloading	06
23	WILD, Hot Box detector, Track side bogie monitoring system, Action to be taken on reporting	06

Sl. No.	Topic	Duration in Hours
24	Depot stores management	06
25	Marshaling of trains	06
26	Role of Supervisors to minimize sick figures/coach detachment/ineffective %	06
27	Visit to major coaching depot	06
28	Visit to major goods depot	18
29	Review	12
Total		288

Shri Adarsh Soni (Ch-1,4,) & Shri. Manish Kumar (Ch -2,3,)

SUBJECT NAME	DIESEL LOCOMOTIVE THEORY(MECHANICAL)-03 M
SUBJECT CODE	MDT-03 M
MODULE	MJI-D
Sl. No.	Topic
1	Power pack - Cylinder head, cylinder liner, connecting rod. cam shaft etc. (Alco & HHP)
2	Supercharging principles, methods and various testing parameters, Air and CCB (Alco & HHP)
3	Air compressor types, function and overhauling procedures (Alco & HHP); Air-Dryer
4	Fuel system - components, function, defects and remedy, Fuel injection system (Alco & HHP)
	Total

Shri. Anurag Singh (Ch - 1 to 4), Shri Ratnesh Srivastava (Ch – 5)

SUBJECT NAME	DIESEL LOCOMOTIVE THEORY(ELECTRICAL)-03 E
SUBJECT CODE	MDT-03 E
MODULE	MJI-D
Sl. No	Topic
1	Various types of Transmission, feature of an ideal transmission in Diesel Loco, AC-DC, AC-AC transmission
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
3	Excitation systems for Alco and HHP loco
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
5	DEMU-DPC Electrical and control system, EP Brake, train lighting, SPART
	Total

SUBJECT NAME	DIESEL LOCOMOTIVE THEORY(MECHANICAL)-04 M
SUBJECT CODE	MDT-04 M
MODULE	MJI-D
Sl. No.	Topic
1	Lube oil system - components, function, defects and remedy (Alco & HHP)
2	Cooling water system - components, function, defects and remedy, Radiator fan - principle, operation and maintenance (Alco & HHP)
3	Layout of shop and shed, Schedule of maintenance (Alco & HHP), Shed management, Record keeping, Outages, Super checking
4	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)
5	GE loco – Mechanical System
6	DEMU DPC – Power pack and mechanical System
7	Safety & Misc items- Cab equipment, driver seat, sanding equipment, Hand brake etc
8	Testing of Engines - Dry-run-Test, Blow-bye test, Random test, Load Box testing
Total	

Shri. Anurag Singh (Ch –1,2,4) Shri Ratnesh Srivastava (Ch – 3,5,6,7)

SUBJECT NAME	DIESEL LOCOMOTIVE THEORY(ELECTRICAL)-04 E
SUBJECT CODE	MDT-04 E
MODULE	MJI-D
Sl. No	Topic
1	Dynamic brake system, Transition system - circuit analysis, defects and remedy for Alco
2	Microprocessor based controls, APU, REMMLLOT, Distributed Power Control System (DPCS)
3	Types of governors, overhauling procedure, testing methods
4	Various safety devices, Horn, Head light, Wiper, Emergency switches and alarm fitted in Loco - working principles
5	Testing of Engines - Load Box testing, MU operation testing
6	Dynamic brake system, circuit analysis defect and remedy for HHP loco
7	GE Loco- electrical machines and control system
	Total

Examination Pattern

C&W				Diesel			
Paper	Subject	Marks	Total	Paper	Subjects	Marks	Total
I	MCT-2/1	100	100	I	MDT-03 M/E	100	100
II	MCT-2/2	100	100	II	MDT-04 M/E	100	100
TOTAL			150	TOTAL			150