

Training Module for Train Controller Refresher

Department	Transportation
Course No.	TR-3
Category	Train Controller
Stage	Refresher
Duration	06 Working Days = 36 Hours (Excluding Safety Camp)

Module No.	Description	Hours	Days
TR-3/1	Transportation -1 (Lower Transportation)	12	02
TR-3/2	Transportation -2 (Commercial)	03	0½
TR-3/3	Transportation -3 (Higher Transportation)	06	01
TR-3/4	Safety Management	06	01
TR-3/5	Information Technology	03	0½
TR-3/6	Ethical Leadership & Soft Skill	03	0½
TR-3/7	Examination	03	0½
	Total	36	06

TR-3/1.1	Role and importance of Train Controller in Railway Transportation, Important definitions, brief idea of signals, placement and their indications. Revised Interlocking standard
TR-3/1.2	Various operating forms, authorities and their uses.
TR-3/1.3	Essentials of system of working (Absolute Block System, Automatic Block System & One Train only system), Condition for granting line clear and taking of signals, Starting of the train, Simultaneous Reception of Trains.
TR-3/1.4	Shunting method, stages and responsibilities on Absolute Block System, Shunting in Automatic section.
TR-3/1.5	Head light, Marker light, flasher light and their failures, Speed of trains, engine pushing, Types of Speed Restrictions, imposing and removal of speed restriction, exchanging of signal by staff during train working, Whistle code.
TR-3/1.6	General Train working, with special attention on ODC, Crane working, Material train working, Long haul goods train, Container train, Special/VIP train, EMU/DMU/MEMU, Lobby working.
TR-3/1.7	Working of trains during abnormal conditions i.e. TFC, TSL, Train parting, delayed train, engine failure etc.
TR-3/1.8	Hot axle/Hanging part in train, running of train without TL/TB or without Brake Van/Guard, reversal of points on single and double line, Infringement of Fouling mark.
TR-3/1.9	Stabling of load on running line, Securing of load, Block rake of passenger and goods trains, marshalling of special stock, Dead Engine, Inspection carriage, Attaching of vehicles outside brake van.
TR-3/1.10	Duties of Train Controller and brief idea about master chart, punctuality, Station Working Rules, Traffic Working Order, Working Time Table. Load Table, Wagon Turn Round, Section Capacity, Through put, Time Tabling, General precedence order of trains, Engineering Scale Plan, Signal Interlocking Plan, Detailed Project Report.
TR-3/1.11	Types and working of Level Crossing Gate.
TR-3/1.12	Track Maintenance/working through machines (TM, PQRS, TRT, RRV), Patrolling of Line, Trolleys, Motor Trolley, Material Lorry, Rail Dolley, Engineering Line Block, Integrated Block.
TR-3/1.13	Discussion on latest Railway Board/HQ Circulars, JPO, Safety Circulars, Discussion on latest Amendment Slips of G&SR, Accident Manual, Operating manual and Block Working Manual, Knowledge of recent new technologies.

TR-3/2 TRANSPORTATION - 2	
TR-3/2.1	Registration, Indent and allotment of wagon, WRF, Priority schedule. Freight Incentive scheme. Weightment and Punitive charges, Free time for loading/unloading, Demurrage & Wharfage, stacking of goods.
TR-3/2.2	Rules regarding rebooking and diversion of traffic, short off destination, change of commodity and change of destination.
TR-3/2.3	Child Right , Child Protection And Related Laws

TR-3/3 TRANSPORTATION - 3	
MECHANICAL	
TR-3/3.1	Braking system on Indian Railways, Working of single and double pipe Air Brake System, Primary and Secondary Maintenance, various kinds of BPC and its validity, GDR, Percentage of brake power required in trains.
TR-3/3.2	Symptoms of Hot axle, Alarm chain pulling – resetting/isolating, causes of brake binding and its releasing. Working of train having flat Tyre.
ELECTRICAL	
TR-3/3.3	Brief idea of latest train lighting system and traction supply system (Electric), Power Block & Traffic Block.
TR-3/3.4	OHE Failure and action to be taken by Train Controller, precautions during abnormal working in Electrified section. Permit to work in OHE.
ENGINEERING	
TR-3/3.5	Engineering Block, procedure, precaution during train working, Distressing work, duration of block in various conditions.
TR-3/3.6	Types of Track Machine, difference between them, productivity per hour, their working and stabling.

TR- 3/4 Safety Management	
TR-3/4.1	Accident - Various important definition, classification of accident, Running of ART/ARME, Target time of ART/ARME, Hooters and Mock Drill, reporting of accidents. Duties of Train Controller and CTNLS at the time of accident, causes and remedy of major accidents.

TR-3/4.2	Disaster Management – Introduction, Various Organizations, Developments on DM at National level, Golden Hour, DM Plans – at Divisional & Zonal levels, Various Telephone Nos. of Authorities to be used in requirement of assistance. Working of trains during disasters (Floods, Cyclones, Earthquakes etc)
TR-3/4.3	Fire Fighting – Theory & Demonstration, Civil defence. Types of fire, causes of fire in train and at station, types of fire extinguisher, upkeep/readiness and use of fire extinguisher. Prevention of fire. Half day for Hands on Practice.

TR-3/5 INFORMATION TECHNOLOGY IN TRAIN OPERATION	
TR-3/5.1	Fundamental of FOIS, ICMS, CMS, RMS, TMS, WILD (wheel impact load detector), SIMRAN (software impact rail network), SATSANG (software aided train scheduling) and advantage.
TR-3/5.2	Applications of COA, use and reports generated through COA and ICMS, FOIS-COA integration.

TI/TP-3/6 ETHICAL LEADERSHIP & SOFT SKILL	
TI/TP-3/6.1	Ethics – Meaning, Role, Need, Value and Importance in public life.
TI/TP-3/6.2	Leadership – Meaning, Role, Need, Value and Importance, Team building, Crowded/Mob Management.
TI/TP-3/6.3	Personality Development - Meaning, Need and Importance. Positive Attitude Development, Effective communication Skills, Patience, Brain Storming, Perception. Forgiveness, Case studies/ inspirational videos.
TI/TP-3/6.4	Stress Management - Meaning, Causes, Symptoms, remedies importance in personal and professional life.
TI/TP-3/6.6	Soft Skills – Meaning, Requirements and its importance in public life.
TI/TP-3/6.7	Yoga & Meditation

TR-2/7	EXAMINATION	Day	Hours
TR-2/7.1	Paper – 1 (Transportation) = Max Marks: 100 Model Room	1	3

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