



भारत सरकार / **GOVERNMENT OF INDIA**
रेल मंत्रालय / **MINISTRY OF RAILWAYS**
(रेलवे बोर्ड/Railway Board)



2025/E(Trg.)/41/1

New Delhi, Dated: As signed

The General Managers,
All Indian Railways & PUs.

The Director Generals/Director
All Centralized Training Institutes,
RDSO/Lucknow.

Sub:- Training Modules for Non Gazetted Staff of Traffic Dept(Traffic Control Cadre)

Ref: Board's letter no. 2025/E(Trg)/41/1 dated 19.02.2025 (RBE No. 16/2025)

Railway Board had constituted a Committee to examine various issues regarding traffic control and suggest measures to address the same. The Committee's recommendations have since been accepted by the Board, and after a comprehensive assessment Training module for non-gazetted Staff of Traffic Department (Traffic Control Cadre) has been developed and approved by Board (M/O&BD)&(DG/HR).

2. The Training Module for First / Initial Recruitment / Selection in the Traffic Control Cadre, as approved by Board shall apply to all inductions made there under and thereafter upon the issuance of the 2025 Recruitment Notification (CEN 04/2025). Under the revised cadre structure:

- **Direct Recruitment candidates (60%) are inducted in Level-6 as Traffic Controllers, and**
- **LDCE/Promotional candidates (40%) are inducted in the respective level as provided under the approved cadre structure.**

2.1 Further the existing 54-day training module (Section Controller – Course No. T1/TP-3 issued vide RBE 16/2025) shall continue to apply to candidates who were inducted in Level-6 prior to issuance of the 2025 Recruitment Notification (CEN 04/2025), including those selected through LDCE under the pre-revised provisions.

3. Accordingly, the training module for Non Gazetted Staff of Traffic Deptt (Traffic Control Cadre) has been scanned and uploaded under Non Gazetted Training Circulars on 'Indian Railways' website and can be viewed or downloaded from railnet.

Kindly acknowledge receipt.

D.A.:As Above

Digitally signed by
Neelam Sharma
Date: 05-03-2026
14:49:05

(Neelam Sharma)
Dy. Director-II, Estt. (Training)
Railway Board.
Ph No. 011-23047105

2025/E(Trg)/41/1**New Delhi, dated: As Signed**

Copy to:

- 1) The General Secretary, NFIR, 3 Chelmsford Road, New Delhi for information (Copy may be downloaded from Non-Gazetted Training Circulars/Railnet/Internet).
- 2) The General Secretary, AIRF, 4 State Entry Road, New Delhi for information (Copy may be downloaded from Non-Gazetted Training Circulars/Railnet/Internet).
- 3) The Secretary General, FROA, R.No.256-A, Rail Bhavan, New Delhi for information (Copy may be downloaded from Non-Gazetted Training Circulars/Railnet/Internet).
- 4) The Secretary General, IRPOF, R.No.268, Rail Bhavan, New Delhi for information (Copy may be downloaded from Non-Gazetted Training Circulars/Railnet/Internet).
- 5) All Members, Department Council & Secretary Staff side National Council 13-C, Feroz shah Road, New Delhi (Copy may be downloaded from Non-Gazetted Training Circulars/Railnet/Internet).
- 6) The Secretary General, AIRPF Association, Room No.256-D, Rail Bhavan, New Delhi (Copy may be downloaded from Non-Gazetted Training Circulars/Railnet/Internet).
- 7) General Secretary, All India SC & ST Railway Employees Association, 171/B-3, Basant Lane Railway Colony, New Delhi (Copy may be downloaded from Non-Gazetted Training Circulars/Railnet/Internet).

**Digitally signed by
Tejendra Singh
Date: 09-03-2026**

**11:09:44
For Principal Executive Director (IR) /Railway Board**

Copy to:

- i) PS & ED(PG) to MR, MoSR (S) & MoSR (R)
- ii) PSO/Sr.PPS to CRB, MF, M(Infra.), M(TRS), M(O&BD), DG(HR), DG(RHS) & DG(RPF)
- iii) Sr.PPS/PPS/PS to AM(Budget), AM(CE), AM(C&IS), AM(Comml.), AM(E&HM), AM(Fin), AM(HR), AM(L&A), AM(Mech.), AM(Plg.), AM(Project), AM(PU), AM(RS), AM(Sig.), AM(Staff), AM(Traction), AM(T&C), AM(Tele), AM(TT), AM(Works), PED(Vig.), PED(Safety), PED(Coaching), LA,
- iv) ED(Plg.), ED(Accts.), EDCE(B&S), EDCE(G), EDCE(Plg.), ED(CHG), ED(CC), ED(C&IS), ED(E&R), EDEE(Dev), EDEE(G), EDEE(M), EDEE(RS), EDE, ED(RRB), PEDE(N), EDE(Res), EDF, EDF(B), EDF(X)I, EDF(X)II, ED(H), JS(C), EDME(Chg.), EDME(Fr.), EDME(PU&W), ED(PC)I, ED(PC)II, EDRE, ED(Safety), ED(Safety)-II, IG./RPF(Hqs), ED(Sig.), ED(SP), EDRS(G), EDRS(S), ED(TD), EDTC(R), EDCE(P), ED(PM), ED(FM), EDPG, EDTT(F), EDTT(S), EDV(E), EDV(Elect), EDV(T), EDVE(S), ED(W).
- v) E(NG)I, E(NG)II, E(G), F(E)I, F(E)II, F(E)III, E(SCT)I, E(SCT)II branches of Railway Board.

Training components on First / Initial recruitment / Selection in Traffic Control Cadre:

Duration 52 Weeks

S.No.	Component / Bit	Duration in Weeks
1.	ZRTI - Phase1	08
2.	Loco Pilot Simulation Training	01
3.	Train Manager	02
4.	ASM / SM / Dy SS / SS	03
5.	IT Systems - COA / FOIS / ICMS / TMS etc. at CRIS / ZRTI	02
6.	Ports / DFCCIL / NHRCL /Metro/ SPVs / ATC / Gati Shakti Terminals	02
7.	Yard Master / Shunting	01
8.	S&T Systems	01
9.	Track Infra / Track Machines / LC Gate working	01
10.	TRD	01
11.	C&W	01
12.	Safety including ART and Traffic Restoration	01
13.	ZRTI - Phase 2 (Phase 2 may also include basic proficiency in prescribed language tests, network congestion, optimization, transport planning and passing simulation tests on control / station working)	04
14.	On-job Training (OJT) in the Division allotted to the candidates.	23
15.	Final Assessment and awarding a certificate of competency	01
	Total	52

Note:

- i. Successful completion of training would require passing with a prescribed level of proficiency in identified components.
- ii. For candidates from selection from feeder categories, the duration of training would be duly adjusted factoring in for their respective field of experience in feeder category and adding suitable additional components, so that total duration remains one year.
- iii. Module-wise content of Training, including refresher training at various stages / levels, would be issued by the Training Directorate /RB, covering all aspects of control working and complexity of tasks / planning /coordination with all departments / branches involved in Train Operations.

Serial No. 01 (ZRTI PHASE-1) for 08 Weeks

Module	Description	Days	Hours
1	Foundation Course	02	12
2	Basic Transportation (GSR)	29	174
3	Commercial Policies and Rules	06	36
4	Vigilance Awareness	01	06
5	Establishment Matters	03	18
6	National Policy of Women Empowerment	1/2	03
7	Environment and Climate change	1/2	03
8	Care and protection of vulnerable children	01	06
9	Disaster Management	01	06
10	First Aid	1/2	03
11	Fire fighting	1/2	03
12	Kavach	01	06
13	Yoga, Meditation and Shramdan, Sports	02	12
	Total	48	288

Module No.-1 Foundation Course	
1.1	Admission Formalities
1.2	History and Development of Indian Railways, its prime objectives-Vision
1.3	Organisational Setup of Indian Railways- Railway Board, Zonal Railway, Divisional Level & Station/Depot Level
1.4	Various Departments of Indian Railways- Their functions- an Introduction
1.5	Organisational Setup of Traffic Department- Role of Operating, Commercial Department
1.6	Control Department - Structure, Role, Importance and Functions in Operations.
1.7	Safety Department - Role, Importance and Functions in Railway Operations, CRS: Organization, Importance and Functions.
1.8	Official Language Implementation- Importance- Various Incentives for qualifying in Hindi proficiency

Module No.-2 Basic Transportation (GSR)	
2.1	Introduction of Railway Act 1989, Brief overview of the Right to Information (RTI) Act, IRSOD, Rules Opening of Section for Public Carriage, G&SR, BWM, AM, OM, WTT, SWR, JPO, Circular, Standing Order Book, General Order Book, Railway Gazette etc.
2.2	Rules applying to Railway Servants
2.3	Terms use in- Rules (Definitions), at Station, in Yard, in control office

2.4	<p>Signals:</p> <p>Fixed Signals in Multiple Aspect Colour light signals - Distant, Inner Distant, Combination of Distant Signal with Last Stop signal and Gate stop signal, Home, Routing Home, Starter, Inter-Starter, Advanced Starter, Calling-On Signal, Shunt Signal- Types, Gate Stop Signal with 'G' and without 'G' marker, Intermediate Block Stop Signal on Single line, Double line and multiple line, Indicators - Route indicators, Shunting Permitted Indicator, Boards- Warning Boards (Passenger, Goods, Shunting & Station), Shunting/Block Section Limit Board, Caution & Termination Indication Boards, etc. Hand Signals and their description, knowledge and their exhibition, Fog / Detonating Signals, VTO, Fog signal post, Fog Signalling , station detonator register, Working of trains in thick and foggy weather, Warning Signal .</p>
2.5	<p>Classification of Stations, Minimum Equipment of Signals- Two Aspect colour light area, and Multiple Aspect Area, Station layouts, CSL, CSR, Marshalling yards, Components of Goods and Coaching yards, Terminal yards</p>
2.6	<p>Points and its components -</p> <p>Points and crossovers, turnouts, types of points, setting and securing of Points, Point indicator and trap indicator, Isolation - Definition, Objective, Approved means of isolation, Interlocking - Definition, Essentials of Interlocking, Kinds and Standards of interlocking, Various interlocking devices - Mechanical, Electro mechanical, Electronic and digital interlocking devices - Lever, Lever cabin, Panel, RRI, VDU, BPAC, HASSDAC</p>
2.7	<p>Boards - Warning Boards (Passenger, Goods, Shunting & Station), Shunting/Block Section Limit Board, Caution & Termination Indication Boards, D-Class Station Boars, H Board, Sign-A & B Boards, etc.</p>
2.8	<p>System of working-</p> <p>Absolute Block System, condition for granting line clear, Conditions for taking OFF signals</p> <p>Automatic Block System- Passing Automatic / Semi- Automatic / Semi- Automatic Gate Stop Signal / Modified Semi- Automatic Stop Signal at 'ON', Movement against direction of traffic</p> <p>One Train Only System</p> <p>Other system of working applicable on concern railway.</p>
2.9	<p>Operating Forms</p>
2.10	<p>Various Authorities to Proceed - Single line and Double line, Block instrument Failure, Follow up action, Procedure for preparation and issue of authorities</p>
2.11	<p>Reception and despatch of trains When Signal is Working, Crossing and Precedence of Trains</p>
2.12	<p>Procedure for dealing trains during failure of all reception and despatch stop signals, Intermediate Block Stop Signal, Shunt signal, Shunting Permitted Indicator, Gate Stop Signal</p> <p>Other occasions- Reception and Despatch: Reception on</p>

	obstructed/non-running/non-signalled Road, Despatch from a Non- Running/ Non- Signalled Road, line governed by common Starter Responsibilities of Controller during Block Failure and abnormal conditions.
2.13	Control & Working of Stations - Standard Time, Advertised Time, Various safety aspects and special features. Action to be taken when trains not accommodate in CSL,
2.14	Shunting - Definition, Types, Control, Supervision, Shunting on Gradients and Authorities,
2.15	Securing of Vehicles - Stabling of train at Station /Yard /Siding - Role of station and running staff, Clearing of Stabled load from Station Ghat section rules- Slip siding and Catch siding
2.16	Caution Order - Types, Circumstances, computer printed caution order, exchange of caution messages through E-Mail/ICMS, Receiving/Cancelling Caution Order Message, Making Entries in Caution Order Register
2.17	Engine Pushing, Goods Train without Guard/ BV
2.18	Relief/Assistant engine in Absolute/Automatic Block system
2.19	Marshalling Goods trains, Passenger Trains and inspection trains, ODC
2.20	Level Crossing -Types, Classification, Working and Failure
2.21	Abnormal Working- Total interruption of Communication, TSL Working in Absolute Block System. Prolong Failure, Signals and communication failure and TSL working, in ABS

Module No.-3 Commercial Policies and Rules	
3.1	Brief introduction and role of commercial department
	Classification of station & minimum amenities provided at stations and brief idea about Halt station
	Booking of coach & Special Train (FTR)
	eRD, Booking and acceptance of Goods traffic, PTO, Ban, Restriction
	Allotment & Supply, Change of destination, Change of commodity
	General features of rates and freight structure and Online payment
	Procedure for re-booking and diversion, Short of destination
3.2	Demurrage and wharfage rules, stacking permission and rules, Waiver of Demurrage and wharfage
	Introduction to Railway Finance, earning and expenditure.
	Freight incentive schemes & Transportation products
	Weighment, Re-weighment, Punitive charges
	Brief idea about Siding & types of siding, PFT, Port & GCT
	EOL scheme, Siding & Shunting charge
Un connected , Un delivered, Over carrying consignment & working of NR cell	

Claims, Causes & preventions, Measures to improve railway earnings
Commercial Statistics IT, FOIS, TMS, PMS, NTES
Common carrier liability under section 93 to 104, Provision of 123 to 129 of Rly. Act

Module No.-4 Vigilance Awareness	
4.1	Organization, Objective, Vision
4.2	Various Vigilance Check
4.3	Malpractice in allotment, supply and placement of wagons
4.4	Malpractice in allotment, supply and placement of Parcel
4.5	Vigilance Awareness

Module No.-5 Establishment Matters	
5.1	Leave - their kinds and rules, Leave encashment Rule.
5.2	Passes - their kinds, Rules and eligibility.
5.3	Pay & Allowances - Entitlements, Rules regarding various allowances.
5.4	Main provisions of Railway Service Conduct Rules
5.5	HWPR, Duty hours of running staff.
5.6	D& AR - Brief Introduction-Standard Forms, Provision and procedure under Discipline and Appeal Rule 1968
5.7	NPS,UPS, relevant factors and calculation, benefits, disposal of dues by Society Bank in case of employee's death
5.8	PNM, JCM, PREM, RTI, SBF, Confidential Report (APAR).
5.9	Medical Entitlements.
5.10	Seniority after the Induction Course at ZRTI. Career Prospects

Module No.-6 National Policy of Women Empowerment	
6.1	Introduction
6.2	Goal and Objectives
6.3	Policy Prescriptions
6.4	Economic Empowerment of women
6.5	Social Empowerment of Women
6.6	Violence against women
6.5	Rights of the Girl Child
6.6	Protection against sexual harassment
6.7	MEA and other passenger amenities

Module No.-7 Environment and Climate change	
7.1	Pollution Control
7.2	Environment Management System and accreditation
7.3	Energy Management including Energy audit
7.4	Water Management including water Audit

7.5 Solid waste Management

Module No.-8 Care and protection of vulnerable children	
8.1	Introduction- Brief about the Organization, Introduce the training and sharing of objective.
8.2	Pre-Assessment- To understand participant's knowledge, attitude, practice in relation to child protection.
8.3	Introduction to child rights- The participant's to gain an understanding of the following:
8.4	Who is child, why children are and street and on railway platforms? And their vulnerabilities, What are child Right
8.5	Introduction to child Protection Mechanism and legal framework in India- Brief introduction and highlights of major laws on child protection with special focus on juvenile Justice (Care and Protection) Act. 2015
8.6	Orientation on Railway's SOP for Railways to care and protection of children in contact with Railways- introduction to key components of the SOP and Guidebook, Participants to be introduced to the various roles and responsibilities SS/SM, Roles and responsibilities of CHD with specific focus on RPF, Protocols to be followed in relation with children at the Rly stations and in Train
8.7	Open discussion- open discussion with participants about challenges while dealing with children

Module No.-09 Disaster Management	
9.1	Introduction
9.2	Various Organizations
9.3	Developments on DM at National level
9.4	Golden Hours
9.5	DM Plans - at Divisional & Zonal levels,
9.6	Various Telephone Nos. of Authorities to be used in requirement of assistance.
9.7	Working of trains during flood
9.8	Working of trains during cyclone
9.9	Working train during earthquakes
9.10	Ordering of ART and ARME

Module No.-10 First Aid	
10.1	Aims and Objective of First Aid, Respiration, Fractures, Poisons, Injuries to internal Organs. (Theory & Practical)
10.2	Principles of First Aid, Brief description of the structure and functions of the body. General description of heart and vessels. Circulation of blood. Heart attack, Blood pressure & CVS.
10.3	Hand On Practice

Module No.-11 Fire Fighting	
11	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. Hands on Practice.

Module No.-12 KAVACH	
12.1	Station Master Operation Cum Indication Panel (SM-OCIP): Introduction to SM-OCIP, Provisions in Station Master Operation Cum Indication Panel, Manual SOS generation/ Cancellation, SOS acknowledgement by SM
12.2	Operational Modes of OnboardKavach for Version 4.0: Driver Machine Interface (DMI) at a glance, Different Types of Operational Modes of OnboardKavach for Version 4.0, Mode Transitions in KavachVer 4.0, Features available at different Operational Modes in Kavach.
12.3	FAQ related to Kavach
12.4	Overview of other Train Control Systems such as CBTC, ETCS, ATP etc

Module No.-13 Yoga, Meditation and Shramdan, Sports	
13	Yoga, Meditation and Shramdan, Sports

Serial No. 02 (Loco Pilot Simulation Training) for 01 week

S.No.	Description	Days	Hours
1.	<p><u>Loco Pilot Simulator Training:</u></p> <ul style="list-style-type: none"> • Various types of Locomotives and its Hauling Capacity • Speed of Loco motives and Train Dynamics • Working of RTIS,CMS and GPS • 10 hour rule and Power Plan • Role of Controllers in energy efficient Train driving practices • Running of Trains during Natural Calamities, specially Rainy seasons • Simulator Training <p>Role and responsibility of Controller and Loco Pilot in Train running</p>	06	36

Serial No. 03 (Train Manager) for 02 Weeks

Module	Description	Days	Hours
1.	Working of Trains generally	07	42

2.	Control & Working of Stations	02	12
3.	Abnormal Working	03	18
	Total	12	72

Module-01 Working of Trains generally	
1.1	Brakevan safety fittings, SLR equipment, Guard personal store,
1.2	Working of EMU / DMU, MEMU
1.3	Goods load table and passenger load table.
1.4	Std. Time, Advertised Time, Setting Watch, Time of attendance, On & Off Registers.
1.5	Speed Chart for Various Condition and Various Stock
1.6	Head light, Speedometer, Marker light, Flasher light, Side lights, LV Board / Tail lamp.
1.7	Equipments of Brake Van & Guard
1.8	Manning of Engine in motion, Persons in Engine and Brakevan, Driving Electric Train.
1.9	Examination of Train by Engine Crew, Coupling & uncoupling.
1.10	<ul style="list-style-type: none"> • Starting of Trains • Duties of Guard before starting, on run and on arrival • Rules for Exchanging of all right signals • Detaching engine both in block section and station section • Responsibility of Guard about caution order • Action to be taken when fouling mark clear or not clear
1.11	Responsibility of Guard regarding punctuality, Role of Guard for Punctual running of passenger carrying train, Time tabling, Rake Link
1.12	Train held up at First Stop Signal
1.13	Attracting attention of LP, Application of Hand Brakes.
1.14	Berthing of Trains, Manning of Engine
1.15	Long Haul Trains -Need-Advantages-Special precautions
1.16	Working of goods trains - CC+6+2, CC+8+2.
1.17	Material Train
1.18	Pushing Back

Module No.-02 Control & Working of Stations	
2.1	Operating forms - Responsibility of Train Manager
2.2	Duties of Train Manager during Shunting
2.3	Duties of Train Manager when load Stabling at Station/Section & Clearance the Load
2.4	GDR check and Continuity Test of Goods and Coaching Trains
2.5	Stalled in Mid - section

Module No.-03 Abnormal Working	

1.	Protection rules
2.	Demanding and Cancellation of Relief Engine/Train into obstructed Block Section
3.	Track defect
4.	Train Parting
5.	Train Dividing
6.	Duties of Train Manager - <ul style="list-style-type: none"> • Cattle run over cases, • Obstruction in block section, • Train delayed in block section, • Loco pilot reporting any abnormal condition in block section., • Train stall on gradient, • OHE failure, • ACP, Engine failure, • Application of brake /hand brake.
7.	Movement against Direction of Traffic.
8.	Competency Certificate
9.	Flat tyre,
10.	Hot axle
11.	Brake Binding
12.	Duties of SM, Train Manager, LP, Controller and Supervisors of various department in case of Serious Accidents

Serial No. 04 (ASM/SM/Dy.SS/SS) for 03 Weeks

Module	Description	Days	Hours
1.	Signals	02	12
2.	Block Working	03	18
3.	Panel, RRI, EI & VDU - Parts & Functions	02	12
4.	Working of Trains generally	03	18
5.	Duties of SM in Various Cases	03	18
6.	Working of Trains in Electrified Section & Power Block	02	12
7.	Patrolling & Line Blocking	01	06
8.	Abnormal Working	02	12
	Total	18	108

Module No.-01 Signals	
1.1	Failure of all Signals-Reception & Departure Stop Signals
1.2	Passing Intermediate Block Stop Signal at 'ON' and Resetting pass at ON
1.3	Failure of Gate Stop Signal & Passing Gate Stop Signal at "ON"
1.4	Failure of Signals at Station & Section in Automatic Block territory

Module No.-02 Block Working	
2.1	Order of Precedence of Trains & Control Working, Means of Communication
2.2	Documents connected with Block Working - Block Competency Certificate, Train Signal Register, PN Book, Block Instrument/Track Circuit/Axle Counter & BPAC - UFSBI (single and double line) Objective of provision Bell Code Signals-Types, significance,
2.3	Block Instruments : <ul style="list-style-type: none"> • Single line and Double line Parts & Functions • Bell Codes • Precautions before granting/asking Line Clear, before closing the Block Section, Testing before Taking over charge • Failure Occasions - Restoration by S&T Officials, SMS themselves, DSTE/ASTE • Normal working, Normal Cancellation, Push back Cancellation & Testing
2.4	Authority to Proceed without Line Clear-Issue & circumstances, Sending assisting engine in obstructed Block section Block Failure - Follow Up Action Filling up of Operating Forms - Hands on Training Hand on Practice in Model room

Module No. -03 Panel, RRI, EI & VDU - Parts & Functions	
3.1	Normal Reception & Despatch
3.2	R&D during Signal Failure, Point Failure, Panel Failure
3.3	use of crank handle, Overhauling, cable maggering, Cross over testing, crank handle testing, use of cross over, siding working
3.4	NI work and precautions

Module No.-04 Working of Trains Generally	
4.1	Conditions and precautions for granting line clear and clearing back section
4.2	Important papers, P.No. Sheet, and precautions while using them.
4.3	Working of trains in Thick and foggy weather
4.4	Procedure for draw ahead of train up to fouling mark when fouling mark is not clear
4.5	Procedure for draw ahead of train up to last stop signal when train waiting for line clear
4.6	Engine Whistle codes
4.7	Procedure for put back of signals
4.8	Speed-Maximum Permissible Speed & Booked Speed
4.9	Working of Material Train
4.10	Working of Track Maintenance Machine

4.11	Working of Tower wagon,
4.12	Working of Trolley, Motor trolley, lorry

Module No.-05 Duties of SM in Various Cases	
5.1	Person run over cases, Cattle run over cases
5.2	Obstruction in block section
5.3	Patrolman delayed in block section, Train delayed in block section, Rail fracture, Loco pilot reporting any abnormal condition in block section, OHE failure, Traffic, Engineering, Power Block
5.4	Passing of train without tail lamp / tail board
5.5	In case of serious accident, Signal passing at danger by Loco Pilot
5.6	Bursting of points
5.7	Breach of block rule, Sabotage and train wrecking
5.8	Staff / passengers creating nuisance in station premises.
5.9	Safety equipments, boards, passenger amenities available at station
5.10	Registers maintained at station.
5.11	Safety counselling and monitoring, Safety categorization, safety meetings
5.12	Exchanging of hand signals with train crew
5.13	Responsibility of Station Master regarding punctuality

Module No.-06 Working of Trains in Electrified Section & Power Block	
6.1	Working of Trains in Electrified Sections - Parts of OHE- Power Supply arrangements
6.2	Traction Power Control Organisation
6.3	Power Blocks - Kinds - Registers
6.4	SCADA

Module No.-07 Patrolling & Line Blocking	
7.1	Patrolling of lines - Kinds of Patrolling, SM's responsibilities
7.2	Line Block-Requisition, Imposition, Extension, Removal
7.3	Working of OHE Ladder Trolley.

Module No.-08 Abnormal Working	
8.1	Absolute Block System- TIC, TSL
8.2	Automatic Block System - All Signals Failed and Communication available, All Signal failed and no communication, TSL working
8.3	Duties of SM in Case of Accident

Serial No. 05 (IT Systems) for 02 Weeks

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S.No.	Description	Days
1.	COA	1 st day
2.	ICMS, COIS	2 nd day
3.	FOIS	3 rd day
4.	CMS	4 th day
5.	SIMS	5 th day
6.	PRS, UTS, NTES	6 th day
7.	HRMS	7 th day
8.	E-TSR,	8 th day
9.	Data Logger, GPS	9 th day
10.	MS Excel, Basic exposor to googlesheet, AI and use of Data analytics	10 th day
11.	E-RR	11 th day
12.	E-procurement System	12 th day

Serial No. 06 (Ports/ DFCCIL ETC) for 02 Weeks

S.No.	Topics/ Particulars	Days
1.	Brief introduction and role of commercial department	1 st day
2.	Classification of station & minimum amenities provided at stations and brief idea about Halt station	
3.	Booking of coach & Special Train (FTR)	2 nd day
4.	eRD, Booking and acceptance of Goods traffic, PTO, Ban, Restriction	3 rd day
5.	Allotment & Supply, Change of destination, Change of commodity	
6.	General features of rates and freight structure and Online payment	4 th day
7.	Procedure for re-booking and diversion, Short of destination	5 th day
8.	Demurrage and wharfage rules, stacking permission and rules, Waiver of Demurrage and wharfage	
9.	Freight incentive schemes & Transportation products	6 th day
10.	Weighment, Re-weighment, Punitive charges	
11.	Brief idea about Siding & types of siding, PFT, Port & GCT	7 th day
12.	EOL scheme, Siding & Shunting charge	8 th day
13.	Un connected , Un delivered, Over carrying consignment & working of NR cell	9 th day
14.	Claims, Causes & preventions, Measures to improve railway earnings	10 th day

15.	Commercial Statistics IT, FOIS, TMS, PMS, NTES	11 th day
16.	Common carrier liability under section 93 to 104, Provision of 123 to 129 of Rly. Act	12 th day

Serial No. 07 (Yard Master /Shunting) for 01 Weeks

S.No.	Topics/ Particulars	Days
1.	Yard - Types, components of yard, need at present scenario. Marshalling of Goods Train, framing of two train, different types of Goods trains.	1 st day
2.	Sick siding - the importance, role, ROH, POH. Securing of load at running and non running line.	2 nd day
3.	Examination of Train - classification, minimum requirement. Man hour concept. Continuity test, issue of BPC, types of BPC. Combined lobby concept.	3 rd day
4.	Train ordering, PDD, PAD, Shed outage, Shunting engine hours. Transshipment.	4 th day
5.	Yard congestion. Statistics maintained at the yard. Role of TNC. VG.	5 th day
6.	Shunting at yard , at station, shunting at the Ghat station,	6 th day

Serial No. 08 (S&T system) for 01 Weeks

S.No.	Description	Days
1.	Interlocking, basic of Interlocking. Types of Interlocking - Direct, In direct. Standard of Interlocking.	1 st day
2.	DPR, ESP, SIP. Route Table. Integrity test/ overhauling Disconnection & Reconnection, Worked which needed disconnection Pane, RRI Electronic Interlocking - the main features. Isolation	2 nd day
3.	Data Logger - use the role during abnormal circumstances. Relay Room -opening /closing Crank handle Joint Point crossing testing.	3 rd day
4.	Summer and Mansoon precaution Alliance with other department	4 th day

	Scheduled of maintenance. Concept of rusty rail and precaution	
5.	Concept of rusty rail and precaution Signal sighting committee. Focusing of signal Procedure for Commissioning of Signalling Installations	5 th day
6.	Level crossing Gate - Interlocking, motor operated lifting barrier, cranking, sliding boom, testing of sliding boom. ATP, ETCS, IRATP (TCAS) & TMS Earthing, Bonding, Surge & Lightning Protection System Preventive maintenance module concept	6 th day

Serial No. 09 (Track Infra etc.) for 01 Week

S.No.	Description	Days
	Specific duty Under G&SR- Duties of P. Way Official Co-ordination With Other Departments Maintenance Schedule.	1 st day
	Basics About track- Types Of route, Types Of Level Crossing , Rail Wheel Interface, Sleepers And Ballast	2 nd day
	Types Of Track Defects- Slack/Rough Running , Lurch ,Buckling, Rail Fracture .	3 rd day
	Action In Case Of Weather Warning Message - Different Types of Patrolling, Different Types Of Track Protection .	4 th day
	Type Of Block and Working Of Track machine , Types Of Engineering Works - Short Duration And Long Duration Work ,CTR,TRR ,TSR,DSW, etc.	5 th day
6.	Elementary Knowledge Of All Types Of Track Machines and Progress,	6 th day

Serial No. 10 (TRD) for 01 Week

S. No.	Description	Days
1.	a) Basics about Electric traction b) Elementary knowledge about OHE c)Neutral section d) 2X25kV System	1 st day
2.	a) Specific duties under G&SR b) Duties of OHE staff and co-ordination with TPC & other department. c)Precaution for movement of ODC in 25kV electrified section.	2 nd day
3.	a) Maintenance schedule b) Reporting of abnormalities and action to be taken	3 rd day

	c) Working of tower wagon d)Case studies of various OHE breakdowns and accident.	
4.	a) Types of power block, b) Transverse & longitudinal protection, c)Precaution and procedure, d)Power block registers, Standard forms for power block message. e) Power block for movement of ODC	4 th day
5.	a) TSS/FP, SSP, SP, sector, sub sector, double sub sector, elementary section. b) Operation of isolator switches & authorized person, competency certificate c) OHE sectioning diagram d)SCADA	5 th day
6.	Visit to Traction power control and remote control center (RCC) office	6 th day

Serial No. 11 (C&W) for 01 Week

S. No.	Description	Days
1.	Introduction of C&W department, Different types of Rolling stock Nomenclature, Maintenance schedule POH,ROH,IOH Air brake system - working method with diagrams, parts & functions, working single pipe and Twin pipe air brake system. BMBS and APS, Hand brake in rolling stock.	1 st day
2.	Continuity test, Brake power certificates - kinds - Coaching & Freight trains, percentage of brake power required in goods/mixed/passenger trains, LHB coach, Hybrid coach, conventional coach, Train working in case air suspension bellow ruptured/punctured Alarm chain pulling - resetting & isolation, FIBA, Fire Detection(VESDA), etc. Train Parting , Reason and remedial action , Hot axle symptoms and action to be taken	2 nd day
3.	Guard & Loco Pilot check - clearance from road side station/sidings/non-TXR points & brake power calculation , cases of brake binding and releasing, Flat tire detection and action to be taken, Isolation /bypassing of coaches pneumatically	3 rd day
4.	Technical Visit to C&W BTC /Coach care centre BSL	4 th day
5.	Locos - Types of Locos Alco / GM/ GE Locos locos Like WDM3D, WDG4, WDP4,WDP4D, WDG4D,WDG4G, WDG6G , Hauling capacity of various locomotives , Detention , Balancing of diesel Locos, Power Plan / Outage / Measures to improve the loco utilization , Economy in fuel consumption /	Day 5 th 1 st half

	Manage loco failure , Dead loco movement of Diesel Locomotives ALCO loco with IRAB1 system and locomotives with CCB system / GM/GE Locos	DSL
6.	Technical Visit to DSL DTC / BSL	Day 5 th 2 nd half DSL
7.	Locos - Types , Hauling capacity , detention , balancing , power plan , outage measures to improve loco utilisation , engine link , Maintenance - Scheduling of various locos , POH, ROH , Nomination of Locos for various services, managing loco failure , Dead loco movement , Crew Management - Crew link , Booking of crew, lobby working , 10 hour rule , HQ and outstation rest , Running Room and other facilities for crew.	Day 6 th 1 st half AC
8.	Technical Visit to DTC / BSL	Day 6 th 2 nd half AC

Serial No. 12 (Safety including ART and Traffic restoration) for 01 Weeks

S. No.	Description	Days
1.	Safety organization, importance of safety. Accident - types, role of various official in the case of accident. Safety equipment available at station/ yard, SLR/Brake van, Engine, Level crossing gate. Mansoon, winter, summer patrolling. New technology to ensure safety - KAVACH, WILD, OMRS, TMS, TAWD, AAWS,CBTC, ETCS etc.	1 st day
2.	Disaster management - NDRF. Role of Various civil authority in the accident Role of CCRS/ CRS in the accident.	2 nd day
3.	Ex Gratia amount. Level of Enquiry Norms of minimum punishment.	3 rd day
4.	ART - types A class & B class, locations, Mobile Road ART. MRV / SPARME - components, marshaling, inspection schedule by various authority.	4 th day

	Hooter code and target time. Mock drill its objects.	
5.	Inspections - Types, objects, quota, compliance of Inspection. Preventive measure.	5 th day
6.	Train scheduling /diverging/ cancelation during accident, Role of Commercial during accident. Preparing of Joint Note, Parameters of Track, rolling stock, dissent note.	6 th day

Serial No. 13 (ZRTI PHASE - 2) for 04 Weeks

Module	Description	Days	Hours
1.	Control Organisation	03	18
2.	Planning	01	06
3.	Goods train operations	04	24
4.	Passenger train operation	04	24
5.	Loco Utilisation	03	18
6.	Operating Statistics	02	12
7.	Train Papers	01	06
8.	Inspections	01	06
9.	Non-Interlocked working	01	06
10.	Charting	04	24
	Total	24	144

Module No. 01 Control Organisation	
1.1	Organisational Setup
1.2	functions of various controls - trains, traffic, punctuality, power, traction loco, crew, traction power, engineering, S&T, security, C&W, General Electrical
1.3	Facility in control office. IT Tools (COA, FOIS, RMS, TMS (Terminal management system), TMS (Track management system) COIS, ICMS, PAM, CMS, NTES, WILD, SIMRAN, etc- an overview and integration) with hand on practice.
1.4	Master Chart - preparation, advance plotting and planning
1.5	Duties of Trains Controller, traffic controller, Punctuality Controller, Chief Controller, Various Registers maintained at Control office
1.6	Trains Branch- Preparation of various reports on hourly, daily and periodically, Preparation of statistics, USF, Data collection/ monitoring on FOIS and ICMS
1.7	Working of Central and Emergency Control at HQ, Disaster Management set up, Disaster management set up and standard operating procedures and records.

Module No. 02 Planning	
2.1	Detailed Project Report, IRPSM – Proposal uploading, vetting and sanctioning.
2.2	ESP, e-DAS
2.3	SIP, Traction diagram, Route Control Chart
2.4	SWRD, Gradient

Module No. 03 Goods train operations	
3.1	Nomenclature of various goods stock, Wagon Numbering System Maintenance schedule of Rolling stock, Brake Power Certificate
3.2	Kinds of goods trains, load, ordering of goods train, average speed of goods train, Pre-departure and Post arrival detention, putting back of ordered goods trains, Express goods train and Goods time table, Section congestion, Yard congestion.
3.3	Interchange of Goods trains – Forecast and commitments for the day, factors affecting interchange, Monitoring of interchange through FOIS.
3.4	Block rake marshalling –, movement, special goods stock, CONCORD, CONTRACK, MMTS (multi modal transport system) Steel rakes and NMG, Restricted and prohibited trains, TPMS, e- Act,
3.5	Marshalling yard and its components
3.6	Wagon pool, wagon census and conduction of census through FOIS, stock report Allotment of wagons, RAS for coal & iron ore, Quotas and restrictions, Preferential traffic schedule
3.7	Line Capacity – calculation, factor affecting line capacity, measures to improve line capacity, Load Table, Requirement of Banking and Assisting Engine,
3.8	Throughput – factor affecting, measures to improve throughput, Goods Terminal, various Sidings – working, measures to reduce detention
3.9	Crane working
3.10	ODC sanction and operation

Module No. 04 Passenger train operations	
4.1	Nomenclature of various coaching stock, Special features of New coaching stock
4.2	Types of passenger carrying trains – Mail/Express, Super Fast, Passenger viz conventional, EMU, DEMU, MEMU, Amrit Bharat, Tejas & Vande Bharat
4.3	Time tabling of Passenger trains – types, procedure for preparation, issue and revision , SATSANG, Platform occupation Chart, pit-line occupation char.
4.4	Running time- Calculation, Speed trial, MPS, Booked Speed, Speed

	over Facing Points, turnouts, Various time allowances.
4.4	Punctuality – calculation, factors affecting punctuality and measures to improve punctuality, PAM, GPS, Data logger, e-TSR, LTM-Cause wise analysis
4.5	Rake link- Preparation and issue of Rake link booklet Movement of special / VIP trains, precautions for military and ‘mela’ special.

Module No. 05 Loco Utilisation	
5.1	Locos – types
5.2	hauling capacity, detention, balancing
5.3	power plan, outage, measures to improve loco utilisation
5.4	Maintenance – Scheduling of various locos,
5.5	engine link, Crew link, POH, ROH, nomination of locos for various services and sections
5.6	economy in fuel consumption, Managing loco failures, Dead loco movement
Module No. 06 Operating Statistics	
6.1	Wagon holding- Average wagon balance, Wagon KM per Wagon Day, NTKM per Engine Hour, NTKM per Wagon Day, EKM per Engine Day on Line In Use etc. Coaching efficiency indices -Operating ratio, Passenger Train Performance, Vehicle Kilometres per Vehicles Day, Average Speeds, Shunting Kilometres per 100 Train Kilometres (Passenger including proportion of Mixed)
6.2	Wagon turn round – calculation and measures to improve wagon turn round,
6.3	Operating Ratio

Module No. 07 Train Papers	
6.1	Combined Train Report, Rough Journal Book, Vehicle Guidance , Late Train Memo

Module No. 08 Inspections	
7.1	Inspections - Objectives, types, levels, periodicity, Techniques, follow up

Module No. 09 Non-Interlocked Working	
8.1	Non-Interlocked working - Temporary Working Instructions and Safety precautions, Preparation of chart, planning train operations, precautions to reduce train detentions

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Module No. 10 Charting	
8.1	Charting - Train Ordering, entering train timings, Plotting, work-on-line, line block, traffic block, power block, caution order, abnormal working, failures of all types, movement of motor trolleys, stabling of vehicles at stations, line position of stations, Various kinds of Report generation, Freight path forecasting.

Serial No. 14 (On-job Training-OJT in the Division allotted to the candidates) for 23 Weeks

S.No.	Description	Weeks
01	Practical Trainings: <ol style="list-style-type: none"> 1. Station and station Master Office working (Gate, Panel, Shunting, Block Instruments) - 3 Weeks 2. Train Manager (Working on Goods, Passenger, EMU Trains) - 1 Week. 3. Yard Working - 1 week 4. NI Working - 1 Week 5. Foot Plating with LP on Loco - 1 Week 6. Lobby Working- 1 Week 7. Hands on Practice on COA, FOIS, RMS, TMS, COIS, ICMS, PAM, CMS Etc. (4 WEEKS) 8. On Control Board (6 weeks) 9. In control Office on various Points (5 weeks) 	23

Serial No. 15 (Final assessment and awarding a certificate of competency) for one week

S.No.	Description	Weeks
01	Examination: <ol style="list-style-type: none"> 1. Written after completion of serial number 1-4 2. Written after completion of serial number 5-11 3. Written after completion of serial number 12-13 4. Control Charting exam after completion of serial number 12-13 5. Practical Model Room with Viva- Voce. 	01
