

No. HQ/HR/RTI/HR Deptt./2023

Dated:24.02.2025

Sub: Application of under RTI Act-2005.

Ref: Registration No. DFCCL/R/E/25/00037 dated: 16.01.2025

Reply to RTI No. 45 dated 16.01.2025

Question No.	Information Sought For:	Proposed Reply/ Remarks
1	Please provide a policy copy of the training period of Junior Manager(OP&BD) in respect of Direct Recruits and Promotee Officer.	Training Module of OP&BD Department of DFCCIL is attached as Annexure A.
2	Please provide a training scheduled planned for Junior Manager (OP&BD) promoted in CBT 2023.	
3	Please provide a syllabus and training curriculum provided to direct recruits of Junior Manager(OP&BD).	
4	Please provide training schedule, curriculum and details of Institution where training of Junior Manager (OP&BD) in CBT 2021	

Schedule for promotional courses may be obtained from Cadre.

GM/HR

AGM/Admin(PIO)

W. S. Saini
24/02/25
Dy. General Manager/HR



डेडीकेटेड फ्रेट कोरीडोर

A Government of India (Ministry of Railways) Enterprise

डेडीकेटेड फ्रेट कोरीडोर कार्पोरेशन ऑफ़ इंडिया लि.

भारत सरकार (रेल मंत्रालय) का उपक्रम

Dedicated Freight Corridor Corporation of India Ltd.

No. HQ/HR/Trg./RIT/05/2021 (CN-9466)

Date: 15.05.2024

Sub: Training Module of OP&BD Department of DFCCIL.

Ref: i. This office letter of even No. dated 04.04.2022; and

ii. This office letter No. ENWC0GENL(HR)/1/2021(CN-10507) dated 28.04.2023.

iii. This office letter of even No. dated 12.10.2023

The Competent Authority i.e. M.D, DFCCIL has approved the Revised Training Modules (Induction and Refresher) of OP&BD department. Summary of the Training is attached as Annexure-I and detailed training Module is attached as Annexure-II.

DA: As above


(R S Rawat)
AGM/HR

Copy for kind information and necessary action to:-

1. Secy to MD, DFCCIL - for kind information of MD;
2. Director/Infrastructure, Director /Finance, Director/OP&BD, , Director/PP and CVO.
3. All EDs - Corporate Office;
4. All GGMs and GMs, CGMs, GM(Co-ord) - for information of all employees
5. All HR officials - Unit and CO.
6. Dy General Manager/IT - for placing on Intranet.



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Annexure -I

Summary - OP&BD Department

Category / Grade	Training Details	Training Institute	Total Duration (In days)
JM & EXECUTIVE (E2 & E0)	Initial	DFC/HHI/ ZRTI	90 days
	Promotion		
Jr. EXECUTIVE (N-5)	Initial	DFC/HHI/ZRTI	24 days
	Promotion		
JM/Sr. Exe/Exe/Jr. Exe/ Trn Operation (E-2/E1/E0/N-5)	Refresher	DFC/HHI/ZRTI (including 3 days of safety camp at HHI, Noida)	15 days
Jr. EXE/MTS (N-5/N-1)	Refresher	DFC/HHI/ZRTI (including Safety Camp)	06 days
Section Controller	Initial Training & Training of officer joining on Deputation	DFC/HHI/ZRTI	34 days
Tr Controller	Refresher	DFC/HHI/ZRTI (Excluding Safety Camp)	06 days
Track Machine Supervisor Operator	Initial	DFC/HHI/ZRTI	18 days
	Promotion		
	Refresher	DFC/HHI/ZRTI (Excluding Safety Camp)	09 days

(Note : Refresher Courses will be due every three years)

FILE NO. OP&BD/STP/REG/17/5/2022 ONR-GM/GRAB/ID/SAFETY/CO/DFCC
 238868/2024/BR/REG/ID/SAFETY/CO/DFCC

**Training Module for
 Jr Manager /Executive (OP&BD) Initial/Promotion**

Department	Transportation
Course No.	TI/TP-1
Category	Jr Manager/Executive (Jr Executive for Crossing Station Train Operation)
Stage	Induction through Open Market or Promotion through Departmental Examination
Duration	90 working days / 540 Hours

Module No.	Description	Hours	Days
TI/TP-1/1	Foundation Course	12	02
TI/TP-1/2	Transportation -1(Lower Transportation)	216	36
TI/TP-1/3	Transportation - 2 (Commercial & Accounts)	48	08
TI/TP-1/4	Transportation - 3(Higher Transportation)	30	05
TI/TP-1/5	Transportation - 4(Other Departments)	36	06
TI/TP-1/6	Safety Management	18	03
TI/TP-1/7	Establishment	24	04
TI/TP-1/8	Information Technology	30	05
TI/TP-1/9	Ethical leadership & Soft Skills	18	03
TI/TP-1/10	Field training (12 DayX6 Hrs.)	72	12
TI/TP-1/11	Control Training (2 DayX6 Hrs.)	12	02
TI/TP-1/12	Examination	24	04
	TOTAL	540	90

TI/TP-1/1	FOUNDATION COURSE
TI/TP-1/1.1	Admission Formalities
TI/TP-1/1.2	History and Development of Indian Railways & DFCR, its prime objectives- Vision
TI/TP-1/1.3	Organizational Set up of Indian Railways , DFCR – Railway Board, Zonal Railway, DFCR Corporate , Divisional & DFCR Corridor Level & Station/Unit/ Depot Level
TI/TP-1/ 1.4	Various Departments of Indian Railways & DFCR – Their functions – an Introduction
TI/TP-1/ 1.5	Organizational Set up of Traffic Department/OP&BD – Role of Operating, Commercial Department
TI/TP-1/1.6	Control Department – Structure, Role, Importance and Functions in Operations.
TI/TP-1/1.7	Safety Department – Role, Importance and Functions in Railway/DFCR Operations, CRS: Organization, Importance and Functions.
TI/TP-1/1.8	Official Language Implementation – Importance – Various Incentives for qualifying in Hindi proficiency

TI/TP-1/2	TRANSPORTATION -1
TI/TP-1/2.1	Introduction, G&SR, BWM, AM, OM, WTT, SWR, Chapter No. 01 & 02 of G & SR, Rules applying to Railway/DFCR Servants
TI/TP-1/2.2	<p>Signals:</p> <p>Evolution of Signals, Type of Signals</p> <p>Fixed Signals in Multiple Aspect Territory</p> <p>Distant, Inner Distant, Combination of Distant Signal with Last Stop Signal & Gate Stop Signal</p> <p>Home, Inner Home, Routing Home</p> <p>Starter, Rear Starter, Inter Starter, Advanced Starter</p> <p>Calling-on Signal</p> <p>Shunt Signal – Types</p> <p>Gate Stop Signal – with & without 'G' Marker,</p> <p>Intermediate Block Stop Signal</p> <p>All Hand Signals & their Occasions</p> <p>Fog/De-tonating Signal, Fog Signaling, Warning Signal & Demo</p>
TI/TP-1/2.3	Isolation & Interlocking
TI/TP-1/2.4	Indicators – Point, Trap, Route
TI/TP-1/2.5	Boards – Warning Boards (Goods, Shunting & Station), Shunting/Block Section Limit Board, Caution & Termination Indication Boards, etc.
TI/TP-1/2.6	Classification of Stations, Minimum Equipment of Signals in Multiple Aspect Area, Station Section, Block Section-Conditions for granting Line Clear, Station Diagrams with MACL Signals at Different Classes of Stations
TI/TP-1/2.7	Conditions for taking 'off' Signals
TI/TP-1/2.8	Points & setting of Points,
TI/TP-1/2.9	<p>Failure of Points –Use of S&T(NM) Normal Maintenance, S&T(DN) Disconnection Notice,</p> <p>Hands on Training on Crank Handle, Clamping & padlocking of Points, Use of Through bolt & cotter, etc.</p>

TI/TP-1/2.10	<p>Signal Failure</p> <ul style="list-style-type: none"> • Failure of all Signals-Reception & Departure Stop Signals • Passing Intermediate Block Stop Signal at 'ON' • Passing Gate Stop Signal at "ON" • Reception on Obstructed/ Non-Running/Non-Signaled Road/Line • Dispatch from a Non- Running / Non-Signaled Road/Line, a line out of group of lines with Common Starter
TI/TP-1/2.11	<p>Panel and their use. Lever, RRI, EI & VDU – Parts & Functions – Hands on Training on Use of Key of SM's slide, Block Instrument Key, caution plate, no voltage plate, Track locking, Signal locking and Route locking through VDU.</p> <ul style="list-style-type: none"> • Normal Reception & Dispatch • R&D(Reception & Dispatch) during Signal Failure, Point Failure, Panel Failure • Shunt Movements
#*TI/TP-1/2.12	<p>Working of Trains generally :</p> <ul style="list-style-type: none"> • Systems of working • Conditions and precautions for granting line clear and clearing back section • Important papers, P.No. Sheet, TSR/eTSR and precautions while using them. • Working of trains in Thick and foggy weather. • Procedure for draw ahead of train up to fouling mark when fouling mark is not clear • Procedure for draw ahead of train up to last stop signal when train waiting for line clear • Engine Whistle codes • Procedure for put back of signals • Standard Time • Speed-Maximum Permissible Speed & Booked Speed • Time Table (WTT),Speed over Facing Points • Engine Pushing, Pushing back in absolute and automatic block system • Trains without Guard / BV / Guard & BV • Trains running with EOTT • Whistle Codes & Bell Codes • Working of Material Train & Track Maintenance Machine

TI/TP-1/2.13	<p>Control & Working of Stations :</p> <ul style="list-style-type: none"> • General duties • SWR-Contents, P. Way, Rule Diagram & OHE sectioning diagram-Rules for working in Electrified Section- Appendix 'G' • Shunting - Definition, Types, Control & Supervision of Shunting, Shunting on Gradients, Shunting Authorities, Shunting Techniques to maintain fluidity in Big Yards Goods measures to prevent accident during shunting movement • ODC movement, Marshaling • Securing of Vehicles /Engine, Escaping of Vehicles- Stabling at Station, Train Stalled in Mid-section • Slip siding and catch siding
TI/TP-1/2.14	<p>Duties of SM in case of -</p> <ul style="list-style-type: none"> • person run over cases, Cattle run over cases • Obstruction in block section • 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 • Track machine, Passing of train without tail lamp / tail board • In case of serious accident, Signal passing at danger by Loco Pilot • Bursting of points, Fire on train • Breach of block rule, Sabotage and train wrecking • Threat perception, Working of Tower wagon, Trolley, Motor trolley, lorry. • Staff / passengers creating nuisance in station premises. • Safety equipment's, boards, • Registers maintained at station. • Safety counselling and monitoring, Safety categorization, safety meetings • Exchanging of hand signals with train crew • Responsibility of Station Master regarding punctuality • use of crank handle, Overhauling, cable maggering, NI work and precautions, Cross over testing, crank handle testing, use of cross over siding working
TI/TP-1/2.15	<p>Working of Level Crossings – Types of LC, Classification– Working at Manned Non-Interlocked LC-Failure of LC, Abnormal working at LC.</p>
TI/TP-1/2.16	<p>Working of Trains in Electrified Sections - Parts of OHE-Power Supply arrangements, Traction Power Control Organization - Power Blocks – Kinds – Registers, SCADA</p>

TI/TP-1/2.17	Automatic Block System – S/L & D/L - <ul style="list-style-type: none"> • Kinds of Signals • Salient Features – Sequence of Aspects of Automatic Signals, Establishing Direction of Traffic, etc. • Passing Signals at 'On' • Various Authorities to Proceed Abnormal Occasions – Panel/VDU Failure, Prolonged failure of Signals, Failure of Both Signal & Communication, Sending Relief Engine, Single line working on D/L, Movement against DOT(Direction of Traffic) , etc. • Shunting in Automatic Territory • Competency Certificate • Modified Semi-Automatic Stop Signal Working
TI/TP-1/2.18	Practice of Forms/Authorities in Unusual working
TI/TP-1/2.19	Works of Short & Long duration-Protection at site, Engineering Indicators, Cause ways
TI/TP-1/2.20	Patrolling of lines – Kinds of Patrolling, SM's/ Executives responsibilities
TI/TP-1/2.21	Line Block-Requisition, Imposition, Extension, Removal
TI/TP-1/2.22	Introduction to Trolley, Lorry, Motor Trolley, etc. – Competency Certificate – Issue & Renewal, etc.
TI/TP-1/2.23	Working of Trolley, Lorry , OHE Ladder Trolley, Cycle Trolley
TI/TP-1/2.24	Working of Motor Trolley,
TI/TP-1/2.25	Caution Order – Preparation, Issue & Circumstances

BLOCK WORKING RULES	
TI/TP-1/2.26	System of Working – Definition, Different Systems – Introduction
TI/TP-1/2.27	Order of Precedence of Trains & Control Working
TI/TP-1/2.28	Means of Communication
TI/TP-1/2.29	Essentials of Absolute Block System
TI/TP-1/2.30	Documents connected with Block Working – Block Competency Certificate, Train Signal Register, PN Book
TI/TP-1/2.31	Block Instrument/Track Circuit/Axle Counter & BPAC – UFSBI (single and double line) Objective of provision
TI/TP-1/2.32	Bell Code Signals-Types, significance, follow up action
TI/TP-1/2.33	Various Authorities to Proceed – S/L & D/L
TI/TP-1/2.34	Block Instruments : <ul style="list-style-type: none"> • Single line and Double line • Parts & Functions • 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, • Hands on Training – Normal working, Normal Cancellation, Push back Cancellation & Testing
TI/TP-1/2.35	
TI/TP-1/2.36	Temporary Single line working on Double Line

TI/TP-1/2.37	Train dividing & Train parting
TI/TP-1/2.38	Authority to Proceed without Line Clear-Issue & circumstances, Sending assisting engine in obstructed Block section
TI/TP-1/2.39	Block Failure - Follow Up Action
TI/TP-1/2.40	Filling up of Operating Forms - Hands on Training
TI/TP-1/2.41	Hands on Practice at DFC Stations covered under TI/TP-1/10.1
TI/TP-1/2.42	Simulator Training/DFIS & VDU
TI/TP-1/2.43	Trains Clerk: GRS/ General Rules , Trains Clerk Duties, Registers, In Yards and Control Office Train Papers - CTR, VG, LTM Stock Report - Coaching & Freight- Yard & Control Office Various Registers, Forms & Memos Various types of Rolling Stock -Coaches & Wagons, Locos-Nomenclature, Features & Numbering Pooling of Wagons, Interchanging of Rolling Stock Coaching & Wagon Census Marshalling Yard Preferential Traffic Schedule, Operating Restrictions Goods Train Operation - Train Ordering, Various Types of Goods Trains, etc. Booking Crew for Trains, Crew Management in IR/DFCR Operating Indices - Passenger, Freight & Engine usage

TI/TP-1/3		TRANSPORTATION -2
Coaching Theory		
TI/TP-1/3.1	<ul style="list-style-type: none"> Organizational Structure, Role and Importance of Commercial Department /Business Development. Functions of Different branches, Books of Reference 	
TI/TP-1/3.2	Tickets : General Overview	
TI/TP-1/3.3		
TI/TP-1/3.4		
TI/TP-1/3.5		
TI/TP-1/3.6		
TI/TP-1/3.7		
TI/TP-1/3.8	Booking & detection - Booking of Animals & Birds - IRCA Coaching Tariff	
TI/TP-1/3.9	Acceptance & Booking of Parcels - IRCA Coaching Tariff, Preparation & Disposal of PWB, Rebooking of Parcels	
TI/TP-1/3.10	Responsibility of Railways as carrier of Parcels, etc. - Common Carrier liability	
TI/TP-1/3.11	Forwarding Note - Execution	
TI/TP-1/3.12		

TI/TP-1/5.2	<p>Engineering: Specific duties under G&S.R Duties of Civil Staff – Co-ordination with other Departments, Maintenance Schedule, etc. Basics about Track - Types of Routes, Track-Wheel Interface, Sleepers, Ballasts, etc. Schedule of Maintenance for Various Civil Officials – Keyman, MTS, Jr. Executive, Executive, Sr Executive, AM , Manager, DGM etc. Elementary Knowledge of All Types of Track Machines, Types of Blocks & Working of Track Machines, Types of Track Defects – Slack/Rough running, Lurch, Buckling, etc. Types of Engineering Works - CTR, DSW, TRR, TSR Station Yard Maintenance-Removal of rank vegetation, Prevention of trespassing, Drainage Improvements in Track circuited yards Blocking of Running Lines, Precautions, Blocks – Types, Integrated Block & Corridor Block, Short and Long duration works, Action in case of weather warning messages Subordination of Gang staff within station premises - Exchange of messages, Fog signaling</p>
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TI/TP-1/5.3	<p>Electrical: Specific duties under G&S.R Duties of OHE Staff – Co-ordination with other Departments, Maintenance Schedule, etc. Basics about AC Traction, Elementary Knowledge of OHE Schedule of Maintenance for Various OHE Officials Types of Power Block-Precautions & Procedures, Working of Tower Wagon Visit to Traction Power Controller Office, SCADA OHE Sectioning Diagram, FP, SSP, SP, Sector, Sub-Sector, Elementary and Neutral sections & Boards Reporting of abnormalities and action to be taken. Operation of Isolator Switches, Authorized Persons Types of Power Block, Precautions & Procedures, Power Block Registers Operation of Rotary Switch Locomotives - Kind, Features and Specifications</p>
TI/TP-1/5.4	<p>Mechanical : Rolling Stock – Features & Specifications how it rolls on Track – Track Bound, LHB and Hybrid coach, Locomotives - Kind, Features and Specifications Examinations - kinds, Things to be observed and Specifications, ROH, IOH, POH of Rolling Stock Brake System – Working of Air Brake System – Hand Brake in Wagons, GDR Check, Resetting of alarm chain apparatus, Abnormal occasions – Flat Tyre, Brake Binding, Hot Axle, open door etc. Brake Power Certificates – Various kinds of Coaching & Freight BPCs, Guard and Loco Pilot Check-Clearance from IMS station, ELB, Coupling Trouble Shooting of LHB coach, Long haul Operation Crew Management- CMS,</p>

TI/TP-1/6	SAFETY MANAGEMENT
TI/TP-1/6.1	<p>Accidents – Definitions, Threshold Value, Classification, Reporting, Assistance Protocol.</p> <p>Accident case studies, Safety in train operation</p> <ul style="list-style-type: none"> • Consequential & other Train accidents • Indicative Accidents – Class F, G & H • Accident Management- Sounding of Hooter, Movement of Relief trains • Chain of command during accident, Running of ART/SPART, ARME/SPARME, RCRV, Break down Special, Target Time, • Protection of line, Preservation of clues at the site • Various Accident Forms, • Duties of SM, Train Managers , LP, Controller and Supervisors of various department in case of Serious Accidents • Person falling out / knocked down by Trains – Duties of Train Manager & SM • Slack, Rough running reported by LPs / Train Managers • Fire on Trains, Hot Axle, Train Parting / Dividing • Prima-facie cause of accident, Reading and measurement at accident site by Supervisors and preparation of Joint Note • Ex-gratia payments • Causes of accidents and remedial measures • Accident enquiries, Levels of Enquiry
TI/TP-1/6.2	<p>Disaster Management – Introduction, Various Organizations, Developments on DM at National level, Golden Hour, DM Plans – at Corridor & Corporate levels, Various Telephone Nos. of Authorities to be used in requirement of assistance.</p> <p>Working of trains during disasters (Floods, Cyclones, and Earthquakes etc.)</p>
TI/TP-1/6.3	Guest lecture - by Corridor/Corporate / Supervisory Officials and Safety Counsellors on “Accident Management”
TI/TP-1/6.4	<p>First Aid – (Theory & Practical) Aims and Objective of First Aid, Respiration, Fractures, Poisons, Injuries to internal Organs.</p> <p>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. Half day for Hands on Practice.</p>
TI/TP-1/6.5	<p>Fire Fighting – Theory & Demonstration, Civil defense.</p> <p>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.</p> <p>Half day for Hands on Practice.</p>

TI/TP-1/7	ESTABLISHMENT & STORES
TI/TP-1/7.1	Leave - their kinds and rules, Leave encashment Rule.
TI/TP-1/7.2	
TI/TP-1/7.3	Pay & Allowances - Entitlements, Rules regarding TA, DA, Night Duty Allowance, Overtime and their curtailment, Contingency charges and Composite Transfer Grant.
TI/TP-1/7.4	Main provisions of DFCR Service Conduct Rules

TI/TP-1/7.5	Duty Roster - Description and classification, statutory provisions, periodical rest, long-on, short-off, split shift, penalty for violation of HOER, Job analysis procedure.
TI/TP-1/7.6	D& AR – Brief Introduction-Standard Forms, Provision under Discipline and Appeal Rule 1968, Definition of various authorities, suspension, Defense Counsellor, Principle of natural justice, speaking orders, procedure for imposition of minor and major penalty, appeal, revision and review, special attention on provision under section 14(4), NIP, facilities during suspension period. How to Conduct an Enquiry.
TI/TP-1/7.7	NPS, relevant factors and calculation, benefits Insurance etc.
TI/TP-1/7.8	Workmen Compensation Act 1923, Payment and Wages Act 1936, Industrial Dispute Act 1947, RTI, SBF, Disability act 2012 and 1995, Confidential Report (APAR).
TI/TP-1/7.9	Medical Entitlements.
TI/TP-1/7.10	Seniority after the Induction Course at DFCR ,Career Prospects
TI/TP-1/7.11	Stores Department - Functions - Indenting, Accountal, Issue/Disposal of Consumable & Non consumable stores, T&P items, Dead stock register, Various Books & Forms Stock sheet. Procurement

TI/TP-1/8	INFORMATION TECHNOLOGY
TI/TP-1/8.1	Computerization in Indian Railways & DFCR
TI/TP-1/8.2	Basic Knowledge of Computers(Word, Excel, Power Point), Means of Social Media and their uses
TI/TP-1/8.3	FOIS, RMS, TMS, COIS, ICMS, PAM, CMS, WILD, SIMRAN, SATSANG, DFIS,BMS, etc. an overview
TI/TP-1/8.4	COA – Introduction on Software, Hardware and Train charting, Computerized TSR.
TI/TP-1/8.5	E-procurement, SAP, GEM, etc.
TI/TP-1/8.6	Hands on Practice.
TI/TP-1/9	ETHICAL LEADERSHIP & SOFT SKILL
TI/TP-1/9.1	Ethics – Meaning, Role, Need, Value and Importance in public life.
TI/TP-1/9.2	Leadership – Meaning, Role, Need, Value and Importance, Team building, Crowed/Mob Management.
TI/TP-1/9.3	Personality Development - Meaning, Need and Importance. Positive Attitude Development, Effective communication Skills, Patience, Brain Storming, Perception, Forgiveness, Case studies/ inspirational videos.
TI/TP-1/9.4	Stress Management - Meaning, Causes, Symptoms, remedies, importance in personal and professional life.
TI/TP-1/9.5	Customer care - Public perception, public relations, courtesy, Customer service its importance and provision.
TI/TP-1/9.6	Soft Skills – Meaning, Requirements and its importance in public life.
TI/TP-1/9.7	Yoga, PT, Meditation and Shramdan.
TI/TP-1/9.8	Sports
TI/TP-1/10	FIELD TRAINING
TI/TP-1/10.1	Study Tour during the Training Course at HHI (12 Days) every saturday - Visit to a Small, Medium & Large Stations in the DFCR

TI/TP-1/11	CONTROL TRAINING		
TI/TP-1/11.1	Control Training In the OCC/DFCR for 2 Days.		

TI/TP-1/12	EXAMINATION	Day	Hours
TI/TP-1/12.1	Paper – 1 (G&SR, Operating Manual and Accident Manual) Max Marks: 100 [Obj: 40 Marks; Descriptive: 60 Marks]	1	3
TI/TP-1/12.2	Paper – 2 (Block Working Manual and Others) Max Marks: 100 [Obj: 40 Marks; Descriptive: 60 Marks]	2	3
TI/TP-1/12.3	Paper – 3 (Commercial and Accounts) Max Marks: 100 [Obj: 40 Marks; Descriptive: 60 Marks]	3	3
TI/TP-1/12.4	Practical Test : (Operation of various Block Instruments, Model Room, Filling up of Operating Forms, Working in EI/ VDU, Hand Cranking of Points, Clamping & Padlocking). Max Marks: 100	4	--

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Training Module for Section Controller Initial & Deputation in OCC

Department	Transportation
Course No.	TI/TP-3
Category	Section Controller Initial / Promotion
Stage	Induction through Open Market or Deputation to Control
Duration	54 working days / 324 Hours

S. No.	Subject	Hours	Days
TI/TP-3/1	Foundation Course	12	02
TI/TP-3/2	Transportation -1 (Lower Transportation)	60	10
TI/TP-3/3	Transportation - 2 (Commercial)	36	06
TI/TP-3/4	Transportation - 3 (Higher Transportation)	48	08
TI/TP-3/5	Transportation - 4 (Other Departments)	30	05
TI/TP-3/6	Practical Training	18	03
TI/TP-3/7	Safety Management	18	03
TI/TP-3/8	Information Technology	30	05
TI/TP-3/9	Ethical leadership & Soft Skills	18	03
TI/TP-3/10	Control Training (6 Days x 6 Hrs.)	36	06
TI/TP-3/11	Examination	18	03
	TOTAL	324	54

TI/TP-3/1 FOUNDATION COURSE	
TI/TP-3/1.1	Admission Formalities
TI/TP-3/1.2	History and Development of Indian Railways/DFCR, its prime objectives-Vision
TI/TP-3/1.3	Organizational Set up of Indian Railways/DFCR – Railway Board, Zonal Railway, DFCR Corporate , Divisional & DFCR Corridor Level & Station/Unit/Depot Level
TI/TP-3/1.4	Various Departments of Indian Railways/DFCR – Their functions – an Introduction
TI/TP-3/1.5	Organizational Set up of Traffic Department – Role of Operating, Commercial Department/ Business Development
TI/TP-3/1.6	Control Department – Structure, Role, Importance and Functions in Operations.
TI/TP-3/1.7	Safety Department – Role, Importance and Functions in Railway/DFCR Operations, CRS: Organization, Importance and Functions.
TI/TP-3/1.8	Official Language Implementation – Importance – Various Incentives for qualifying in Hindi proficiency

TI/TP-3/2 TRANSPORTATION - 1	
TI/TP-3/2.1	Safety Rules- G&SR, Special Instructions (BWM, AM, OM, WTT), Approved special Instructions, SWR and Miscellaneous Instructions- Introduction
TI/TP-3/2.2	Rules applying to Railway/DFCR servants generally
TI/TP-3/2.3	Definitions
TI/TP-3/2.4	Basic knowledge on P.Way, Rolling Stock, Electrical(Traction distribution) and S & T, CRIS and its various applications in Indian Railways/DFCR.
TI/TP-3/2.5	Signals - Fixed Signals in Multiple Aspect Colour light signals - Distant, Inner Distant, Combination of Distant Signal with Last Stop signal and Gate stop signal, Home, Inner Home ,Routing Home, Rear Starter, 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, Boards- Warning Boards (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 Signaling , station detonator register, Working of trains in thick and foggy Weather, Warning Signal.
TI/TP-3/2.6	Station layouts - CSL, Components of Goods and Coaching yards, Terminal yards
TI/TP-3/2.7	Points and its components - 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, Panel, EI, VDU, BPAC, MSDAC,SSDAC
TI/TP-3/2.9	Various Authorities to Proceed - Single line and Double line, Block instrument Failure, Follow up action, Procedure for preparation and issue of authorities

TI/TP-3/2.10	Reception and despatch of trains during signal failure - Duties of SM when signal is defective - Inspection of defective gear, reporting and recording of failures, restoration of failures - S&T/NM, Form-1 , DFCR-G&SR-209
TI/TP-3/2.11	Procedure for dealing trains during failure of all reception and dispatch stop signals, Intermediate Block Stop Signal, Shunt signal, Gate Stop Signal Other occasions- Reception and Dispatch: Reception on obstructed/non-running/non-signaled Road/Line, Dispatch from a Non- Running/ Non-Signaled Road/Line , line governed by common Starter Responsibilities of Controller during Block Failure and abnormal conditions.
TI/TP-3/2.12	Control & Working of Stations - Standard Time, Advertised Time, Station Working Rules – Various safety aspects and special features.
TI/TP-3/2.13	Shunting - Definition, Types, Control, Supervision, Shunting on Gradients and Authorities, Securing of Vehicles - Stabling of train at Station /Yard /Siding - Role of station and running staff, Slip siding and Catch siding
TI/TP-3/2.14	Caution Order - Types, Circumstances, computer printed caution order, exchange of caution messages through E-Mail, Receiving/Cancelling Caution Order Message, Making Entries in Caution Order Register Engine Pushing, Goods Train without Guard/ BV.
TI/TP-3/2.15	Abnormal Working - <ul style="list-style-type: none"> • Procedure for Sending relief engine • Temporary Single line working on Double line • Train parting, Train dividing • Run away trains , Vehicles escaping
TI/TP-3/2.16	Level Crossing -Types, Classification, Working and Failure
TI/TP-3/2.17	Automatic Block System - <ul style="list-style-type: none"> • Essentials and Salient features of Automatic Block System – Single line and Double line • Kinds of Signals in Automatic Territory • Various Authorities to Proceed - Single line and Double line • Passing Automatic / Semi- Automatic / Semi- Automatic Gate Stop Signal / Modified Semi- Automatic Stop Signal at 'ON', Movement against direction of traffic, Shunting • Sending Relief Engine/ Train into an Obstructed section • Abnormal working in Automatic Block System.

TI/TP-3/3 TRANSPORTATION - 2	
TI/TP-3/3.1	<ul style="list-style-type: none"> Brief introduction and role of commercial department Classification of station & minimum amenities provided at stations Booking of coach & Special Train (FTR) General features of rates and freight structure, Theory of rates, Routing, Opening and closing of halt station, Wagon demand, Registration, e-Registration, e-Demand, e-Payment allotment & supply of wagon, Change of destination, change of commodity Common carrier liability under section 93 to 104, Provision of 123 to 129 of Rly. Act public relations Procedure for re-booking and diversion, Short of destination Freight incentive schemes & Transportation products Down fall of traffic, Suggestions to capture the traffic, Measures to improve railway earnings
TI/TP-3/3.2	<ul style="list-style-type: none"> Rail-Road co-ordination and competition, Booking and acceptance of Goods traffic, Demurrage and wharfage rules, stacking permission and rules, Waiver of Demurrage and wharfage Types of sidings & opening of sidings, Traffic survey of new lines Weighment, Re-weighment, Punitive charges Private Freight Terminal, EOL Un connected , Un delivered, Over carrying consignment & working of NR cell Claims, Causes & preventions, Commercial Statistics IT, FOIS, TMS, PMS

TI/TP-3/4 TRANSPORTATION - 3	
TI/TP-3/4.1	<p>Control Organization :</p> <ul style="list-style-type: none"> Organizational Setup, functions of various controls – trains, traffic, punctuality, power, traction loco, crew, traction power, engineering, S&T, security, C&W, General Electrical Master Chart – preparation, advance plotting and planning Duties of Trains Controller- traffic controller, Chief Controller, Various Registers maintained at Control office Trains Branch- Preparation of various reports on hourly, daily and periodically, Preparation of statistics, USF, Data collection/ monitoring on FOIS/DFIS/Train Management System and ICMS Working of Central and Emergency Control at HQ
TI/TP-3/4.2	<p>Goods train operations –</p> <ul style="list-style-type: none"> Nomenclature of various goods stock, Maintenance schedule of Rolling stock, Brake Power Certificate 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 Interchange of Goods trains – Forecast and commitments for the day, factors affecting interchange Block rake marshaling – movement, special goods stock, CONCORD, CONTRACK, Steel rakes and NMG, Restricted and prohibited trains, TPMS, e-Act, ODC/ISMD Long Haul Operation

	<ul style="list-style-type: none"> • Wagon pool, wagon census, stock report • Allotment of wagons, Quotas and restrictions, Preferential traffic schedule • Line Capacity – calculation, factor affecting line capacity, measures to improve line capacity, Load Table, Requirement of Banking and Assisting Engine, • Throughput - factor affecting, measures to improve throughput, ESP, SIP, DPR, Goods Terminal, various Sidings – working, measures to reduce detention
TI/TP-3/4.3	<p>Passenger train operation – Nomenclature of various coaching stock, Special features of New coaching stock</p> <p>Types of passenger carrying trains – Mail/Express, Super-Fast, Passenger viz conventional, EMU, DEMU, MEMU, Train-18, Tejas, Train-20 etc.</p> <p>Time tabling of Passenger trains – types, procedure for preparation, issue and revision , SATSANG, Platform occupation Chart, pit-line occupation chart</p> <p>Running time- Calculation, Speed trial, MPS, Booked Speed, Speed over Facing Points, turnouts, Various time allowances.</p> <p>Punctuality – calculation, factors affecting punctuality and measures to improve punctuality, PAM, GPS, Data logger, e-TSR, LTM-Cause wise analysis</p> <p>Rake link- Preparation and issue of Rake link booklet</p> <p>Movement of special / VIP trains, precautions for military and 'mela' special</p>
TI/TP-3/4.4	<p>Loco Utilization - Locos – types, hauling capacity, detention, balancing, power plan, outage, measures to improve loco utilization, engine link, Maintenance – Scheduling of various locos, POH, ROH, nomination of locos for various services and sections, economy in fuel consumption, Managing loco failures, Dead loco movement</p>
TI/TP-3/4.5	<p>Crew Management - crew link, booking of crew, lobby working, 10 hour rule, HQ and outstation rest, Running room and other facilities for crew.</p>
TI/TP-3/4.6	<p>Operating Statistics 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.</p> <p>Wagon turn round – calculation and measures to improve wagon turn round,</p> <p>Operating Ratio:</p>
TI/TP-3/4.7	<p>Train Papers - Combined Train Report, Rough Journal Book, Vehicle Guidance , Late Train Memo</p>
TI/TP-3/4.8	<p>Inspections - Objectives, types, levels, periodicity, Techniques, follow up</p>
TI/TP-3/4.9	<p>Non-Interlocked working - Temporary Working Instructions and Safety precautions, Preparation of chart, planning train operations, precautions to reduce train detentions</p>

TI/TP-3/5 TRANSPORTATION - 4	
TI/TP-3/5.1	<p>S&T: Specific duties under G&S.R Duties of S&T Staff – Co-ordination with other Departments, Maintenance Schedule, etc. Forms & Memos:</p> <ul style="list-style-type: none"> • S&T (NM), S&T Form-1 • Failure Advice & Joint Restoration Memo • Route Release Memo, etc. <p>Joint Inspection of Points & Crossings with Jr Executive, Executive, Sr Executive – Civil Schedule, Observations, Follow up Signal Sighting Committee: Panel/ EI- Resetting of Route/BPAC, Data Logger-Use in failure restoration & Maintenance</p>
TI/TP-3/5.2	<p>Engineering : Specific duties under G&S.R Duties of CIVIL Staff – Co-ordination with other Departments, Maintenance Schedule, etc. Basics about Track, Track-Wheel Interface, Sleepers, Ballasts, etc. Types of Track Defects – Slack/Rough running, Lurch, Buckling, etc. Types of Track Machines- Types of Blocks & Working of Track Machines Types of Engineering Works-CTR,DSW,TRR,TSR Blocking of Running Lines, Precautions Integrated Block System & Block Corridor Action in case of weather warning messages</p>
TI/TP-3/5.3	<p>Electrical : Specific duties under G&S.R Duties of OHE Staff – Co-ordination with other Departments, Maintenance Schedule, etc. Basics about AC Traction- Elementary Knowledge of OHE Types of Power Block-Precautions & Procedures, Working of Tower Wagon Visit to Traction Power Controller Office, SCADA OHE Sectioning Diagram, FP, SSP, SP, Sector, Sub-Sector, Elementary and Neutral sections & Boards, Reporting of abnormalities and action to be taken. Operation of Isolator –Switches, Authorized Persons Types of Power Block, Precautions & Procedures, Power Block Registers</p>
TI/TP-3/5.4	<p>Mechanical : Rolling Stock – Features & Specifications Locomotives- Kind, Features and Specifications Examinations- kinds, Things to be observe and Specifications Brake System – Working of Air Brake System Abnormal occasions – Flat Tyre, Brake Binding, Hot Axle, open door etc. Brake Power Certificates – Various kinds of Coaching & Freight BPCs</p>

TI/TP-3/6 PRACTICAL TRAINING	
TI/TP-3/6.1	HOC/TOC, Login, Password, Observe current position, forecast and plan
TI/TP-3/6.2	Charting of trains in the section – Train Ordering, Entering train timings, Plotting work-on-line, line block, power block, caution order, abnormal working, failures of all types, movement of motor trolleys, stabling of vehicles at stations, line position of stations
TI/TP-3/6.3	COA hand held training through CRIS offline.

TI/TP-3/7 SAFETY MANAGEMENT	
TI/TP-3/7.1	<p>Accidents – Definitions, Threshold Value, Classification, Reporting, Assistance Protocol.</p> <ul style="list-style-type: none"> • Accident case studies, Safety in train operation • Consequential & other Train accidents • Indicative Accidents – Class F, G & H • Accident Management- Sounding of Hooter, Movement of Relief trains • Chain of command during accident, Running of ART/SPART, ARME/SPARME, RCRV, Break down Special, Target Time, • Protection of line, Preservation of clues at the site • Various Accident Forms, • Duties of SM, Guard, LP, Controller and Supervisors of various department in case of Serious Accidents • Person falling out / knocked down by Trains – Duties of Train Managers & SM • Slack, Rough running reported by LPs / Train Managers • Fire on Trains, Hot Axle, Train Parting / Dividing • Prima-facie cause of accident, Reading and measurement at accident site by Supervisors and preparation of Joint Note • Ex-gratia payments • Causes of accidents and remedial measures • Accident enquiries, Levels of Enquiry • Chronological Register (Log Book)
TI/TP-3/7.2	<p>Disaster Management – Introduction, Various Organizations, Developments on DM at National level, Golden Hour, DM Plans – at Corridor & Corporate Level, Various Telephone Nos. of Authorities to be used in requirement of assistance. Working of trains during disasters (Floods, Cyclones, Earthquakes etc.)</p>
TI/TP-3/7.3	<p>First Aid – (Theory & Practical) Aims and Objective of First Aid, Respiration, Fractures, Poisons, Injuries to internal Organs.</p> <p>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. Half Day Hands on Practice.</p>
TI/TP-3/7.4	<p>Fire Fighting – Theory & Demonstration, Civil defense. 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.</p> <p>Half Day Hands on Practice.</p>

TI/TP-3/8 INFORMATION TECHNOLOGY	
TI/TP-3/8.1	Computerization in Indian Railways/DFCR
TI/TP-3/8.2	Basic Knowledge of Computers (Word, Excel, Power Point), Means of Social Media and their uses.
TI/TP-3/8.3	COA, FOIS, RMS, TMS, COIS, ICMS, PAM, CMS, WILD, SIMRAN, SATSANG, DFIS Etc.- an overview and integration
TI/TP-3/8.4	Hand on Practice.

TI/TP-3/9 ETHICAL LEADERSHIP & SOFT SKILL	
TI/TP-3/9.1	Ethics – Meaning, Role, Need, Value and Importance in public life.
TI/TP-3/9.2	Leadership – Meaning, Role, Need, Value and Importance, Team building, Crowded/Mob Management.
TI/TP-3/9.3	Personality Development - Meaning, Need and Importance. Positive Attitude Development, Effective communication Skills, Patience, Brain Storming, Perception. Forgiveness, Case studies/ inspirational videos.
TI/TP-3/9.4	Stress Management - Meaning, Causes, Symptoms, remedies importance in personal and professional life.
TI/TP-3/9.5	Customer care - Public perception, public relations, courtesy, Customer service its importance and provision.
TI/TP-3/9.6	Soft Skills - Meaning, Requirements and its importance in public life.
TI/TP-3/9.7	Yoga, PT, Meditation and Shramdan.
TI/TP-3/9.8	Sports
TI/TP-3/10 CONTROL TRAINING	
TI/TP-3/10.1	Control Training In the OCC/DFCR for 6 Days.

TI/TP-3/11	EXAMINATION	Day	Hours
TI/TP-2/11.1	Paper – 1 (Transportation and Safety Management) Max Marks: 100 [Obj: 40 Marks; Descriptive: 60 Marks]	1	3
TI/TP-2/11.2	Paper – 2 (Commercial and Others) Max Marks: 100 [Obj: 40 Marks; Descriptive: 60 Marks]	2	3
TI/TP-2/11.3	Paper – 3 (Charting) Max Marks: 100	3	3

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Training Module for Jr Executive/OP&BD – Initial/Promotion

Department	Transportation
Course No.	TI/TP-5
Category	Jr Executive/OP&BD
Stage	Initial / Promotion
Duration	24 Working Days = 144 Hours

Module No.	Description	Hours	Days
TI/TP -5/1	Foundation Course	06	01
TI/TP -5/2	Transportation -1 (Lower Transportation)	66	11
TI/TP -5/3	Transportation -1 (Commercial)	06	01
TI/TP -5/4	Transportation - 4 (Other Department)	12	02
TI/TP -5/5	Safety Management	12	02
TI/TP -5/6	Information Technology	12	02
TI/TP -5/7	Ethical Leadership & Soft Skills	12	02
TI/TP -5/8	Field Training (2 Days x 6 Hours)	12	02
TI/TP -5/9	Examination	06	01
	TOTAL	144	24

TI/TP -5/1 FOUNDATION COURSE	
TI/TP -5/1.1	Admission formalities.
TI/TP -5/1.2	History and development of Indian Railways/DFCR. Organization of Indian Railways/DFCR. Various departments of Railways /DFCR , their functions, Various organizations working under Ministry of railways/ DFCR. Future strategies.
TI/TP -5/1.3	Operating department organization at various level, its functions and objectives etc. Safety in train operation, CRS and functions.
TI/TP -5/1.4	Establishment, Organization and functions. Leave rules, TA& DA rules, Main provisions of Service Conduct Rules, 1966, HWPR(HOER) and preliminary idea of D&AR, New pension scheme, RTI.

MECHANICAL							
TI/TP -5/4.2	Brief idea of braking system. Difference between Vacuum brake and Air Brake system, Advantages of Air Brake System. Working of Single Pipe and Double Pipe Air Brake System. Continuity test and its importance, Various components of vacuum brake system and air brake system.						
TI/TP -5/4.3	Brake Power and Brake Power Certificate, Alarm chain pulling – resetting/isolating, Causes of Brake Binding and its releasing, Flat tyre and its movement.						
TI/TP -5/4.4	Brief idea of new rolling coaching and goods stock including LHB coach, important under gear component and their use, different types of couplings, method and precaution of attaching/detaching of vehicle.						
TI/TP -5/5		SAFETY MANAGEMENT					
TI/TP -5/5.1	Accidents – <ul style="list-style-type: none"> • Definition, Classification • Consequential & other Train accidents • Indicative Accidents – Class F, G & H • Sounding of Hooter, Movement of Relief trains • Running of ART, ARME, RCRV Target Time • Protection of line, Preservation clues at the site • Fire on Trains, Hot Axle, Train Parting / Dividing 						
TI/TP -5/5.2	Disaster Management – Introduction, Golden Hour						
TI/TP -5/5.3	First Aid – (Theory & Practical) Aims and Objective of First Aid. Half day Hands on Practice.						
TI/TP -5/5.4	Fire Fighting – Theory & Demonstration, Types of fire, causes of fire in train and at station, types of fire extinguisher, upkeep/readiness and use of fire extinguisher, Hands on Practice.						
TI/TP -5/6		INFORMATION TECHNOLOGY					
TI/TP -5/6.1	Computerization in Indian Railways/DFCR						
TI/TP -5/6.2	Basic Knowledge of Computers (Word, Excel, Power Point), Means of Social Media and their uses						
TI/TP -5/6.3	Overview of various IT applications on Indian Railways/DFCR.						
TI/TP -5/6.4	Hands on Practice.						
TI/TP -5/7		ETHICAL LEADERSHIP & SOFT SKILL					
TI/TP -5/7.1	Ethics – Meaning, Role, Need, Value and Importance in public life.						
TI/TP -5/7.2	Leadership – Meaning, Role, Need, Value and Importance.						
TI/TP -5/7.3	Stress Management - Meaning, Causes, Symptoms, remedies importance in personal and professional life.						
TI/TP -5/7.4	Soft Skills - Meaning, Requirements and its importance in public life.						
TI/TP -5/7.5	Yoga, PT, Meditation and Shramdan.						
TI/TP -5/7.6	Sports						
TI/TP -5/8		FIELD TRAINING					
TI/TP -5/8.1	Study Tour during the Training Course at HHI (2 days)						
TI/TP -5/9		EXAMINATION					
TI/TP -5/9.1	Paper – 1 (Transportation) Max Marks: 100 [Obj: 40 Marks; Descriptive: 60 Marks] Model Room viva test		<table border="1"> <thead> <tr> <th>Day</th> <th>Hours</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3</td> </tr> </tbody> </table>	Day	Hours	1	3
Day	Hours						
1	3						

**Training Module for
 Jr. Manager/Sr. Executive/Executive & Jr Executive Train Operation
 (OP&BD)– Refresher**

Department	Transportation
Course No.	TR-1
Category	Jr. Manager/Sr. Executive/Executive & Jr Executive Train Operation
Stage	Refresher course
Duration	12 working Days = 72 Hours (+3 days Safety Camp at HHI)

Module No.	Description	Hours	Days
TR-1/1	Transportation -1 (Lower Transportation)	30	05
TR-1/2	Transportation -2 (Commercial)	06	01
TR-1/3	Transportation -4 (Other Department)	06	01
TR-1/4	Establishment and Stores	06	01
TR-1/5	Safety Management	06	01
TR-1/6	Information Technology	06	01
TR-1/7	Ethical Leadership & Stress Management	06	01
TR-1/8	Examination	06	01
	Total	72	12

TR-1/2 TRANSPORTATION -2	
TR-1/2.1	
TR-1/2.2	
TR-1/2.3	Registration, Indent and allotment of wagon, Cash Imp rest and its use, Withdrawal from station earning.
TR-1/2.4	
TR-1/2.5	Important sections of Railway Act
TR-1/2.6	Contract Management, Station Cleanliness Management
TR-1/2.7	
TR-1/2.8	Rules related to acceptance, booking and delivery of goods, parcel and luggage. Rebooking & diversion, Demurrage, wharfage and stacking.
TR-1/2.9	Discussion on latest circulars and policies.

TR-1/3 TRANSPORTATION -4	
MECHANICAL	
TR-1/3.1	Working of single and double pipe Air Brake System, BPC and its validity, GDR, Percentage of brake power required in trains. LHB coach and its trouble shooting. Alarm chain pulling – resetting/isolating, causes of brake binding and its releasing. Working of train having flat Tyre, Hot Axle.
ELECTRICAL	
TR-1/3.2	Brief idea of latest train lighting system and traction supply system (Electric), Power Block & Traffic Block, precaution during power block/Tfc. Block. Fault in OHE, Operation of Isolator switch in local power block.
ENGINEERING	
TR-1/3.3	Engineering Block, procedure, precaution during train working, Distressing work, duration of block in various conditions.
TR-1/3.4	Types of Track Machines, difference between them, productivity per hour, their working and stabling.

TR-1/4 ESTABLISHMENT & STORES	
Establishment	
TR-1/4.1	Leave, , various allowances, HOER, Conduct Rule, D&AR. Briefing about various Laws related to day to day working. Job analysis, Work Study
Store	
TR-1/4.2	Indenting procedure, e-procurement system, T&P, inventory control, returned stores. Station Imprest, Stock verification & Stock sheet.

TR-1/5 SAFETY MANAGEMENT	
TR-1/5.1	<p>Accidents – Definitions, Threshold Value, Classification, Reporting, Assistance Protocol.</p> <p>Accident case studies, Safety in train operation</p> <ul style="list-style-type: none"> • Consequential & other Train accidents • Indicative Accidents – Class F, G & H • Accident Management- Sounding of Hooter, Movement of Relief trains • Chain of command during accident, Running of ART/SPART, ARME/SPARME, RCRV Break down Special, Target Time, • Protection of line, Preservation of clues at the site • Various Accident Forms, • Duties of SM, Train Manager, LP, Controller and Supervisors of various department in case of Serious Accidents • Person falling out / knocked down by Trains – Duties of Guards(TM) & SM • Slack, Rough running reported by LPs / Guards(TM) • Fire on Trains, Hot Axle, Train Parting / Dividing • Prima-facie cause of accident, Reading and measurement at accident site by Supervisors and preparation of Joint Note • Ex-gratia payments • Causes of accidents and remedial measures • Accident enquiries, Levels of Enquiry • Sharing of experiences of Station Masters on the above subject
TR-1/5.2	<p>Disaster Management – Introduction, Various Organizations, Developments on DM at National level, Golden Hour, DM Plans – at Divisional/Corridor & Zonal/Corporate levels, Various Telephone Nos. of Authorities to be used in requirement of assistance.</p> <p>Working of trains during disasters (Floods, Cyclones and Earthquakes etc.)</p>
TR-1/5.3	<p>Guest lecture - by Divisional/Corridor or Corporate Officers / Supervisory Officials and Safety Counselors on "Accident Management"</p>
TR-1/5.4	<p>First Aid – (Theory & Practical) Aims and Objective of First Aid, Respiration, Fractures, Poisons, Injuries to internal Organs.</p> <p>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. Half day for Hands on Practice.</p>
TR-1/5.5	<p>Fire Fighting – Theory & Demonstration, Civil defense.</p> <p>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.</p> <p>Half day for Hands on Practice.</p>

TR-1/6 INFORMATION TECHNOLOGY	
TR-1/6.1	Computerization in Indian Railways & DFCR
TR-1/6.2	Basic Knowledge of Computers (Word, Excel, Power Point), Means of Social Media and their uses
TR-1/6.3	FOIS, RMS, TMS, COIS, ICMS, PAM, CMS, WILD, SIMRAN, SATSANG etc.- an overview
TR-1/6.4	Hands on Practice.

TR-1/7 ETHICAL LEADERSHIP & SOFT SKILL	
TR-1/7.1	Ethics – Meaning, Role, Need, Value and Importance in public life.
TR-1/7.2	Stress Management - Meaning, Causes, Symptoms, remedies importance in personal and professional life.
TR-1/7.3	Soft Skills - Meaning, Requirements and its importance in public life.
TR-1/7.4	Yoga, PT, Meditation and Shramdan.
TR-1/7.5	Sports
TR-1/8 SAFETY CAMP	
TR-1/8.1	General Rules , Block Working Manual & Operating Manuals
TR-1/8.2	Accident Manuals- Discussion over Current Unusual & Accident
TR-1/8.3	Disaster Management- Discussion on Major Disaster

TR-1/8 EXAMINATION		Day	Hours
TR-1/8.1	Paper – 1 (Transportation) = Max Marks: 100 Model Room	1	3

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## Training Module for Train Controller- Refresher

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

| <b>Module No.</b> | <b>Description</b>                        | <b>Hours</b> | <b>Days</b> |
|-------------------|-------------------------------------------|--------------|-------------|
| 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          |
|                   | <b>Total</b>                              | <b>36</b>    | <b>06</b>   |

| <b>TR-3/1</b> | <b>TRANSPORTATION -1</b>                                                                                                                                                                                                                                                                                                               |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TR-3/1.1      | Role and importance of Train Controller in Railway/DFCR 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. Long Haul Operation                                                                                                                               |
| TR-3/1.7      | Working of trains during abnormal conditions i.e. TSL, Train parting, Train Dividing, 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/ Train Manager, EOTT, 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.                                                                                                                |

| <b>TR-3/2</b> |                                                                                                                                                                                                              | <b>TRANSPORTATION - 2</b> |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| TR-3/2.1      | Registration, Indent and allotment of wagon, WRF, Priority schedule. Freight Incentive scheme.<br>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.                                                                                    |                           |

| <b>TR-3/3</b>      |                                                                                                                                                                                                                     | <b>TRANSPORTATION - 3</b> |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <b>MECHANICAL</b>  |                                                                                                                                                                                                                     |                           |
| 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.                                                                      |                           |
| <b>ELECTRICAL</b>  |                                                                                                                                                                                                                     |                           |
| 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.                                                                          |                           |
| <b>ENGINEERING</b> |                                                                                                                                                                                                                     |                           |
| 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.                                                                                                                 |                           |

| <b>TR- 3/4</b> |                                                                                                                                                                                                                                                                                                                          | <b>Safety Management</b> |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| TR-3/4.1       | <b>Accident</b> - Various important definition, classification of accident, Running of ART/ARME, Target time of ART/ARME, Hooters and Mock Drill, reporting of accidents.<br>Duties of Train Controller and CTNLS at the time of accident, causes and remedy of major accidents.                                         |                          |
| TR-3/4.2       | <b>Disaster Management</b> – Introduction, Various Organizations, Developments on DM at National level, Golden Hour, DM Plans – at Corridor & Corporate Level, Various Telephone Nos. of Authorities to be used in requirement of assistance.<br>Working of trains during disasters (Floods, Cyclones, Earthquakes etc.) |                          |
| TR-3/4.3       | <b>Fire Fighting</b> – Theory & Demonstration, Civil defense.<br>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.<br>Half day for Hands on Practice.                                                                |                          |

| <b>TR-3/5 INFORMATION TECHNOLOGY IN TRAIN OPERATION</b> |                                                                                                                                                                                   |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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) ,DFIS and advantage. |
| TR-3/5.2                                                | Applications of COA, use and reports generated through COA and ICMS, FOIS-COA integration.                                                                                        |

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

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

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Training Module for Jr. Executive/MTS- Refresher

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|------------|--|
| Department | Transportation |
| Course No. | TR-5 |
| Category | Jr Executive/MTS- Refresher |
| Stage | Refresher |
| Duration | 06 Working Days = 36 Hours (including Safety Camp) |

| Module No. | Description | Hours | Days |
|--------------|--|-----------|-----------|
| TR-5/1 | Transportation -1 (Lower Transportation) including examination | 18 | 03 |
| TR-5/2 | Safety Management | 06 | 01 |
| TR-5/3 | Safety Camp & Examination | 06/12 | 02 |
| Total | | 36 | 06 |

| TR-5/1 | TRANSPORTATION - 1 | |
|------------|---|-----------------------|
| TR-5/1.1 | Role and importance in Railway Transportation. Brief idea of Important definitions. | |
| TR-5/1.2 | Brief idea of various signals, detonating signal and its use, points in station/yard, permanent locked point, Non-interlocked points, clamping of points, | |
| TR-5/1.3 | Use of non-interlocked Points- crank handle, Electric Signal Repeater, Detector | |
| TR-5/1.4 | Use of hand signals, SLB & BSLB, Point and Trap Indicator. | |
| TR-5/1.5 | Working of trains during failure of signal, point, track circuit, axle counter, block instrument etc., Disconnection & Reconnection of S&T gear, Precaution during disconnection, issue of SER KEY . | |
| TR-5/1.6 | Essential of Absolute block system, condition for granting line clear and taking off signals at 'B' class station. Special attention on SWR, VTO and precaution during Foggy weather, shunting at station. | |
| TR-5/1.7 | Types and standards of interlocking, slotting, means of isolation. | |
| TR-5/1.8 | Procedure of reception and dispatch of trains at single line and double line station, bell code, clearance of fouling mark, reversal of point. | |
| TR-5/1.9 | Reception of train on obstructed/Non-signaled line and dispatch of trains from non-signaled line or line provided with common starter signal. | |
| TR-5/1.10 | Engine whistle code, Watching of train, exchange of signal with train staff, Running of train without brake van, stabling and Securing of vehicle, working of material train, material lorry and motor trolley. | |
| TR-5/1.11 | Action to be taken during abnormal conditions i.e. Fire in train, train parting, train divide, run away, train overdue, abnormal condition reported on track, hot axle, hanging part, material falling, train passing without Tail Lamp/Tail Board, TSL, dispatching of relief train in obstructed block section. | |
| TR-5/1.12 | LC Gate working - normal and abnormal | |
| TR-5/1.13 | Brake System: Difference between Vacuum Brake and Air Brake System, Advantage of Air- Brake system. Single and Twin pipe Air Brake system, releasing of brake. | |
| TR-5/1.14 | Abnormal working:
Alarm Chain pulling, resetting and isolating, Brake Binding, Hot Axle/hanging parts and Flat Tyre. | |
| *TR-5/1.15 | EXAMINATION | Max Marks: 100 |

| TR-5/2 SAFETY MANAGEMENT | |
|---------------------------------|---|
| TR-5/2.1 | Accident –
Common causes of yard accidents, their remedial measures and duties as a Railway men at the time of accident, Hooters, ART, ARME , RCRV and their turning out time.
Disaster Management – Case studies. |
| TR-5/2.2 | First Aid –
Principles of First Aid, Brief description of the structure and functions of the body.
Half day Hands on Practice. |
| TR-5/2.3 | Fire Fighting –
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 Hands on Practice. |

| TR-5/3 Safety Camp at HHI | | 2 Days |
|----------------------------------|---|---------------|
| TR-5/3.1 | Accident Manuals- Discussion over Current Unusual & Accident | |
| TR-5/3.2 | Disaster Management- Discussion on Major Disaster | |
| TR-5/1 & 2 | Examination – 100 Marks Written (Objective) & Viva-50 Marks | |

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## Training Module for Track Machine Supervisor/Operator

|                   |                                                                                   |
|-------------------|-----------------------------------------------------------------------------------|
| <b>Department</b> | <b>Engineering</b>                                                                |
| <b>Course No.</b> | <b>SI/SP-1</b>                                                                    |
| <b>Category</b>   | <b>Track Machine Supervisors / Operator Initial and Promotion</b>                 |
| <b>Stage</b>      | <b>Induction through Open Market / Promotion through Departmental Examination</b> |
| <b>Duration</b>   | <b>18 Working Days = 108 Hours</b>                                                |

| <b>Module No.</b> | <b>Description</b>                       | <b>Hours</b> | <b>Days</b> |
|-------------------|------------------------------------------|--------------|-------------|
| SI/SP-1/1         | Foundation course                        | 06           | 01          |
| SI/SP-1/2         | Transportation -1 (Lower Transportation) | 48           | 08          |
| SI/SP-1/3         | Safety Management                        | 18           | 03          |
| SI/SP-1/4         | Information technology                   | 18           | 03          |
| SI/SP-1/5         | Ethical Leadership & Soft Skill          | 12           | 02          |
| SI/SP-1/6         | Examination                              | 06           | 01          |
|                   | <b>TOTAL</b>                             | <b>108</b>   | <b>18</b>   |



| <b>SI/SP-1/1</b> | <b>FOUNDATION COURSE</b>                                                                                                                                                  |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SI/SP-1/1.1      | Admission formalities.                                                                                                                                                    |
| SI/SP-1/1.2      | History and development of Indian Railways/DFCR. Organization of Indian Railways/DFCR. Various organizations working under Ministry of railways. Future strategies.       |
| SI/SP-1/1.3      | Organization & functions of all departments, Functions of Operating department and Safety departments at various levels, CRS organization and functions & objectives etc. |

| <b>SI/SP-1/2</b> | <b>TRANSPORTATION -1</b>                                                                                                                                                                                                                                                                                                                          |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SI/SP-1/2.1      | General Introduction of Railway and Transportation branch. Introduction of HHI setup, Syllabus, Timing, Examination pattern and future prospects.                                                                                                                                                                                                 |
| SI/SP-1/2.2      | Responsibility of railway/DFCR employee in respect of their duties and safety.                                                                                                                                                                                                                                                                    |
| SI/SP-1/2.3      | Object of framing General and Subsidiary Rules, SWR & their necessity. General idea of WTT, Supply of Rules books, circulars to railway servants.                                                                                                                                                                                                 |
| SI/SP-1/2.4      | Important Definitions of G & SR Chapter No.1, Classification of stations.                                                                                                                                                                                                                                                                         |
| SI/SP-1/2.5      | Conduct of railway/DFCR servants while performing duty. (Chapter no. 2 of G&SR)                                                                                                                                                                                                                                                                   |
| SI/SP-1/2.6      | Different classes of stations and their working. Station layouts, Station limits, Station section Block section limits etc.                                                                                                                                                                                                                       |
| SI/SP-1/2.7      | Type of Signals (Fixed, Hand, Detonating & Warning flashing light), their importance, aspect and indications. Signals in Automatic Block Systems, their aspect & indications, various Boards, Indicators. Points, their functions and relations with the signals, Whistle code, Failure of points and signals – reception and dispatch of trains. |
| SI/SP-1/2.8      | Warning Boards (Goods, Shunting & Station), Shunting Limit Board, Block Section Limit Board, STOP Board, Caution & Termination Boards, etc.                                                                                                                                                                                                       |
| SI/SP-1/2.9      | Reception and Dispatch of Track Machine, reception and dispatch of trains on obstructed lines, non-signaled/non-running line etc.                                                                                                                                                                                                                 |
| SI/SP-1/2.10     | Track Machines, general rules applicable, essential equipment's, manning, competency certificate, Working of Track Machines at Station & in Block section, Break-down of Track Machine.                                                                                                                                                           |
| SI/SP-1/2.11     | Knowledge and use of various Operating Forms                                                                                                                                                                                                                                                                                                      |
| SI/SP-1/2.12     | Definition, Principles and standards of Interlocking, Modes of locking and securing of points, Definition and Type of Isolation. Use of inter locking and Isolation in train operation & during Shunting.                                                                                                                                         |
| SI/SP-1/2.13     | Essentials of Absolute Block System, Automatic Block System and other system of workings as applicable, Means of communication.                                                                                                                                                                                                                   |
| SI/SP-1/2.14     | Issuing of Caution order and responsibility of TTM/TW /Track machine operator regarding Caution Order, speed restrictions.                                                                                                                                                                                                                        |
| SI/SP-1/2.15     | SWR, Working Time Table, Head Light, Marker Light, Flasher Light, Blinker Light, Means of Communication.                                                                                                                                                                                                                                          |
| SI/SP-1/2.16     | Shunting and Stabling of Track Machine - Responsibility of Track Machine operator                                                                                                                                                                                                                                                                 |
| SI/SP-1/2.17     | Line block, Protection of Engineering works & Indicators.                                                                                                                                                                                                                                                                                         |

|              |                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SI/SP-1/2.18 | Precautions in case of – <ul style="list-style-type: none"> <li>• Track Machine unable to proceed for any reason between stations,</li> <li>• Hot Axle / hot roller bearing or damaged vehicle in Train,</li> <li>• Noticed any abnormality in train, track and other installations which may cause danger to train operation,</li> <li>• Flooding of track</li> </ul> |
| SI/SP-1/2.19 | Use of PCP/ECP Box                                                                                                                                                                                                                                                                                                                                                     |

| <b>SI/SP-1/3 SAFETY MANAGEMENT</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SI/SP-1/3.1                        | <b>Accidents –</b> <ul style="list-style-type: none"> <li>• Various Definitions, Classification,</li> <li>• Safety in train operation</li> <li>• Consequential &amp; other Train accidents</li> <li>• Indicative Accidents – Class F, G &amp; H</li> <li>• Accident Management- Sounding of Siren, Movement of Relief trains</li> <li>• Running of ART, ARME, RCRV Hooters, Target Time and Ex-gratia payments</li> <li>• Protection of line, Preservation clues at the site</li> <li>• Fire on Trains, Hot Axle, Train Parting / Dividing</li> <li>• Duties of Track Machine operators in case of accidents or obstruction</li> </ul> |
| SI/SP-1/3.2                        | <b>Disaster Management –</b> Introduction, Golden Hour                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| SI/SP-1/3.3                        | <b>First Aid –</b> (Theory & Practical) Aims and Objective of First Aid. Half Day Hands on Practice.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| SI/SP-1/3.4                        | <b>Fire Fighting –</b> Theory & Demonstration, Types of fire, causes of fire in train and at station, types of fire extinguisher, upkeep/readiness and use of fire extinguisher. Hands on Practice.                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| <b>SI/SP-1/4 INFORMATION TECHNOLOGY</b> |                                                                                              |
|-----------------------------------------|----------------------------------------------------------------------------------------------|
| SI/SP-1/4.1                             | Computerization in Indian Railways/DFCR                                                      |
| SI/SP-1/4.2                             | Basic Knowledge of Computers(Word, Excel, Power Point), Means of Social Media and their uses |
| SI/SP-1/4.3                             | FOIS, RMS,TMS, COIS, ICMS, PAM, CMS,DFIS etc.- an overview                                   |
| SI/SP-1/4.4                             | Hands on Practice.                                                                           |

| <b>SI/SP-1/5 ETHICAL LEADERSHIP &amp; SOFT SKILL</b> |                                                                                                                                  |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| SI/SP-1/5.1                                          | Ethics – Meaning, Role, Need, Value and Importance in public life.                                                               |
| SI/SP-1/5.2                                          | Leadership – Meaning, Role, Need, Value and Importance, Team building, Crowded/Mob Management.                                   |
| SI/SP-1/5.3                                          | Personality Development - Meaning, Need and Importance. Positive Attitude Development, Effective communication Skills, Patience. |
| SI/SP-1/5.4                                          | Stress Management - Meaning, Causes, Symptoms, remedies importance in personal and professional life.                            |
| SI/SP-1/5.6                                          | Soft Skills – Meaning, Requirements and its importance in public life.                                                           |
| SI/SP-1/5.7                                          | Yoga, PT, Meditation and Shramdan.                                                                                               |
| SI/SP-1/5.8                                          | Sports                                                                                                                           |

| <b>SI/SP-1/6 EXAMINATION</b> |                                                 | <b>Days</b> | <b>Hours</b> |
|------------------------------|-------------------------------------------------|-------------|--------------|
| SI/SP-1/6.1                  | <b>Paper – 1 (Transportation) – Marks = 100</b> | <b>1</b>    | <b>3</b>     |

### Training Module for Track Machine Supervisor / Operator Refresher

|                   |                                                           |
|-------------------|-----------------------------------------------------------|
| <b>Department</b> | <b>Engineering</b>                                        |
| <b>Course No.</b> | <b>SR-1</b>                                               |
| <b>Category</b>   | <b>Track Machine Supervisor / Operator</b>                |
| <b>Stage</b>      | <b>Refresher course</b>                                   |
| <b>Duration</b>   | <b>09 Working Days = 54 Hours (Excluding Safety Camp)</b> |

| <b>Module No.</b> | <b>Description</b>                       | <b>Hours</b> | <b>Days</b> |
|-------------------|------------------------------------------|--------------|-------------|
| SR-1/1            | Transportation -1 (Lower Transportation) | 30           | 05          |
| SR-1/2            | Safety Management                        | 12           | 02          |
| SR-1/3            | Ethical Leadership & Soft Skill          | 06           | 01          |
| SR-1/4            | Examination                              | 06           | 01          |
|                   | <b>Total</b>                             | <b>54</b>    | <b>09</b>   |

| SR-1/1    | TRANSPORTATION - 1                                                                                                                                                                                                                                                                                                                                                                             |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SR-1/1.1  | Admission formalities, General Introduction of Railway/DFCR and Transportation branch. Introduction of HHI setup, Syllabus, Timing, Examination pattern and future prospects.                                                                                                                                                                                                                  |
| SR-1/1.2  | Briefing about important definition, amendment slips.                                                                                                                                                                                                                                                                                                                                          |
| SR-1/1.3  | Different classes of stations and signals.                                                                                                                                                                                                                                                                                                                                                     |
| SR-1/1.4  | Type of Signals (Fixed, Hand, Detonating & Warning flashing light), their importance, aspect and indications. Signals in Automatic Block Systems, their aspect & indications, various Boards, Indicators. Points, their functions and relations with the signals. Defective Points and defective signals.                                                                                      |
| SR-1/1.5  | Reception and Dispatch of Track Machine, reception and dispatch of trains on obstructed lines, non-signaled/non-running line etc.                                                                                                                                                                                                                                                              |
| SR-1/1.6  | Various Operating Forms and their use                                                                                                                                                                                                                                                                                                                                                          |
| SR-1/1.7  | Definition, Principles and standards of Interlocking, Modes of locking and securing of points, Isolation, Use of inter locking and Isolation in train operation & during Shunting.                                                                                                                                                                                                             |
| SR-1/1.8  | Various Systems of working, Means of communication.                                                                                                                                                                                                                                                                                                                                            |
| SR-1/1.9  | Issuing of Caution order and responsibility of Track Machine operator regarding Caution Order, speed restrictions, Whistle code.                                                                                                                                                                                                                                                               |
| SR-1/1.10 | Shunting of Track Machine, Working at Station/in Block section and in Automatic Block system, Break-down of Track Machine.                                                                                                                                                                                                                                                                     |
| SR-1/1.11 | Track Machines, general rules applicable, essential equipment, manning, competency certificate,                                                                                                                                                                                                                                                                                                |
| SR-1/1.12 | SWR, Working Time Table, Head Light, Marker Light, Flasher Light, Blinker Light.                                                                                                                                                                                                                                                                                                               |
| SR-1/1.13 | Line block, Protection of Engineering works & Indicators.                                                                                                                                                                                                                                                                                                                                      |
| SR-1/1.14 | Precautions during – <ul style="list-style-type: none"> <li>• Fire,</li> <li>• In case of Track Machine unable to proceed for any reason between stations,</li> <li>• Hot Axle / hot roller bearing or damaged vehicle in Train,</li> <li>• Noticed any abnormality in train, track and other installations which may cause danger to train operation,</li> <li>• Flooding of track</li> </ul> |
| SR-1/1.14 | Precautions during – <ul style="list-style-type: none"> <li>• Fire,</li> <li>• In case of Track Machine unable to proceed for any reason between stations,</li> <li>• Hot Axle / hot roller bearing or damaged vehicle in Train,</li> <li>• Noticed any abnormality in train, track and other installations which may cause danger to train operation,</li> </ul> Flooding of track            |
| SR-1/1.15 | Use of PCP/ECP Box                                                                                                                                                                                                                                                                                                                                                                             |

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| <b>SR-1/2 SAFETY MANAGEMENT</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SR-1/2.1                        | <b>Accidents –</b> <ul style="list-style-type: none"> <li>• Various Definitions, Classification,</li> <li>• Safety in train operation</li> <li>• Consequential &amp; other Train accidents</li> <li>• Indicative Accidents – Class F, G &amp; H</li> <li>• Accident Management- Sounding of Siren, Movement of Relief trains</li> <li>• Running of ART, ARME, RCRV Hooters, Target Time and Ex-gratia payments</li> <li>• Protection of line, Preservation clues at the site</li> <li>• Fire on Trains, Hot Axle, Train Parting / Dividing</li> <li>• Duties of Track Machine operators in case of accidents or obstruction</li> </ul> |
| SR-1/2.2                        | <b>Disaster Management –</b> Introduction, Golden Hour                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| SR-1/2.3                        | <b>First Aid –</b> (Theory & Practical) Aims and Objective of First Aid. Half Day Hands on Practice.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| SR-1/2.4                        | <b>Fire Fighting –</b> Theory & Demonstration, Types of fire, causes of fire in train and at station, types of fire extinguisher, upkeep/readiness and use of fire extinguisher. Hands on Practice.                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| <b>SR-1/3 ETHICAL LEADERSHIP &amp; SOFT SKILL</b> |                                                                                                                                  |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| SR-1/3.1                                          | Ethics – Meaning, Role, Need, Value and Importance in public life.                                                               |
| SR-1/3.2                                          | Leadership – Meaning, Role, Need, Value and Importance, Team building,                                                           |
| SR-1/3.3                                          | Personality Development - Meaning, Need and Importance. Positive Attitude Development, Effective communication Skills, Patience. |
| SR-1/3.4                                          | Stress Management - Meaning, Causes, Symptoms, remedies importance in personal and professional life.                            |
| SR-1/3.5                                          | Soft Skills - Meaning, Requirements and its importance in public life.                                                           |
| SR-1/3.6                                          | Yoga, PT, Meditation and Shramdan.                                                                                               |
| SR-1/3.7                                          | Sports                                                                                                                           |

| <b>SR-1/4</b> | <b>EXAMINATION</b>                                                      | <b>Day</b> | <b>Hours</b> |
|---------------|-------------------------------------------------------------------------|------------|--------------|
| SR-1/4.1      | <b>Paper – 1 (Transportation) =</b> Max Marks: 100<br><b>Model Room</b> | 1          | 3            |