

TRAFFIC TRANSPORTATION & COMMERCIAL

(AOM & ACM EXAM PURPOSE)

TRAFFIC, TRAIN AND POWER CONTROL ORGANIZATION

Objective and set up of Control Offices.

Functions of Control Organization pertaining to Train Ordering, Punctuality, Maintenance of Operating Statistics, Wagon & Loco Stock Management, Blocks Management and Management during Accident & Unusual Situations/ Circumstances & Disaster Management.

Duties and responsibilities of Chief Controllers, Dy. Chief Controllers, Sections Controllers, TNCs, Recorders and their Coordination with Lobbies, Station & Yards.

Freight Train Operations (FTO) & Freight Train Ordering Principles with or without coordination with Crew Lobbies.

Special Instructions during abnormal conditions of working & during emergencies like Cyclone, Civil Disturbances, and Accidents etc.

Daily Performances Reporting from Stations/Yards/Sheds to Area Sub-control, Area Sub-control to Divisional Control Office and from Divisional Control Office to Zonal Control Office and from Zonal Control Office to Railway Board.

Basic and important Documents/Registers maintained in Control Office and their basis.

Periodical Performance Reporting and Analysis of Operating Performance along with compilation of Statistical Data.

Power Control Organization - Engine and Crew Scheduling.

Factors affecting Wagon & Engine utilization and methods of improvements.

Working pertaining to issue of Caution Orders from Nominated and Notice Stations.

Liaison / Co-ordination with Control Establishments of other Departments like Engineering, Traction Control, Signaling Control, Mechanical etc.

III. FREIGHT TRAIN OPERATIONS

Functioning of Crew & Guard Lobbies.

Integrated Lobbies.

Crew Management: Assessment of Crew Requirement

Running Room and its Management.

Engine Utilization aspects requiring special attention: -. v Engine Crew and Train Crew Schedule. v Rules regarding Outstation, Home Station Rest etc. to ensure observation of 10 Hour Rule or Rules applicable from time to time, Role of LI and Crew Control. v Power Plan: Assessment of Loco Requirement. v Movement of Dead Locomotives. v Management of Maintenance Schedule of Locomotives. v Shed and Traffic Outage of Locomotives. v Specific Fuel Consumption and Assessment of Fuel Requirement.

Shunting Operations in Yards or Road side Stations.

Working of Marshalling Yards & Transhipment Points.

Causes of Yard and Section Congestion and remedial strategies.

All India Marshalling Order and Railway-wise Marshalling Orders - Principles and Procedures.

Rules regarding Carriage of Explosive and other General Goods.

Preferential Traffic Schedule, Priority within same class and ODR.

Indent Allotment and Supply of Freight Stock at Stations, Premium Indents and procedure to place Premium Indents, Allotment of Rakes in case of Quota Restrictions.

Notified Stations.

Wagon Stock Management for Loading and Unloading Operations.

Imposition of Operating Restrictions on Wagon Loading and Acceptance of Wagon Indents, Cancellation and Withdrawal of Indents.

Observance of Civil ban and Carriage of Contraband Goods etc,

Important Documents/Registers maintained in Yards & at Stations.

Familiarity with G&SR, Accident Manual, Operating Manual, Block Working Manual, Red Tariff, IR Act, 1989 etc.

Wagon Turn Round Time (WTR) & Factors affecting Optimum Utilization of the Wagon Fleet and methods of improvement.

Running of Unit Trains and formation of Captive Rakes. Ø Block Train Operations. Ø Nominated Day Loading. Ø Rationalization Scheme of movement of Freight Traffic for avoiding congestion by specific routes. Ø Merry-Go-Round (MGR) System. Ø Engine on Load (EOL) System. Ø Mini/Two Point/Multi Point Rake System. Ø Container Train Operation, Hub and Spoke system.

Supervision and control over movement of Special type of Stock, ODC Consignments.

Maximum Moving Dimensions. Wagon Census.

IT applications: - ✓ Freight Operations Information System (FOIS): Rake Management System(RMS), Terminal Management System(TMS) ✓ ICMS and Coaching Operations Information System(COIS) ✓ COA ✓ CMS ✓ SATSANG ✓ RTIS

· Relevant Rules and important Policy guidelines.

C&W examination for STR, Intensive, Round Trips, Premium and Close Circuit Rakes.

Sicklines and TXR Repair Depots including POH & ROH Depots and their functions.

Supply of Coaches/Wagons to C&W shops for POH and special repairs, Cycle period of different Stocks and Workshop Feed Management.

Working of Travelling Traffic Cranes for handling heavy Consignments at Intermediate Stations.

Detaching of Sick Wagons at enroute Stations and their repair and clearance.

Interchange transactions - Junction returns of Inter Railway Inter change Traffic.

Weighment of Rakes, Electronic In-Motion Weighbridge, Automatic Pre Weighing System, Nominated and Alternative Weighbridges, Load Adjustment, Exempted Commodities, Maintenance of Weighbridges and Role of Weights and Measures Department, Metrological Department and other Railway Departments, Integration of Weighbridge with FOIS.

MIL RAIL.

Permissible Axle Loads, Heavy Haul and Long Haul Operations, factors affecting Axle Load, Rules regarding Heavy Haul and Long Haul Operations.

'Payload' to 'Tare' Ratio of Wagons; Factors affecting Payload and Tare Weight.

Concept of Convoy Trains.

Foreign Traffic and its components/pattern.

Operating Statistics

Definition, meaning and methods of compilation of the Primary, Fundamental and Derived units.

Engine Tickets and maintenance of Engine Tickets

Analysis of the Operating Statistics.

Important Operating Efficiency Indices, their meaning and uses, WTR, NTKM, GTKM, Average Speed etc.

Operating Ratio: Different types of Expenditures and Plan Heads, Revenue Earnings and Non-Revenue Earnings.

IV PASSENGER TRAINS OPERATIONS

General Principles and Methodology of Time Tabling of Passenger Trains.
Zero Based Time Tabling.

Platform and Pit Occupancy Planning and Preparing Charts.

Consultative Machinery for revision of Time Table at Divisional, Zonal and Railway Board levels.

Publication of Working Time Table, Public Time Table & Sheet Time Table, Components of WTT and PTT.

Punctuality of Passenger Carrying Trains.

Factors affecting Punctuality of Passenger carrying Trains and methods of improving the Punctuality, Monitoring of Asset Failures and Planning of blocks for Track, Signal and OHE maintenance. Corridor Blocks, Integrated Maintenance Blocks.

Augmentation of Train Loads for meeting Traffic requirements, Rules of Marshalling and Slip Coaches etc.

Running of Tourists Coaches, Special Carriages and Special Trains.

Planning & Running of Holiday Specials, Mela Specials, Tourist Specials, etc.

Introduction of new Trains, extension of Train runs, introduction of Through and Sectional Coaches.

Preparation of Engine Links, Driver/Guards Links & Rake Links.

Commuter Service Operations.

Vande Bharat Trains
High Speed Corridors and Trains.

V. WORKING OF TRAINS GENERALLY AND GENERAL AND SUBSIDIARY RULES

Responsibility and Function of Engine Crew before starting and while on run and during abnormal/unusual situations.

Responsibility and function of Guard before starting and while on run and during abnormal/unusual situations.

Role & Responsibility of Station Staff in Working of Trains.

Various Systems of Working of Trains and Conditions for Granting LC. Classification of Stations, Standards of Interlocking, Signaling Systems, Equipment & their working.

Station Working Rules and Block Working.

Level Crossings.

Line Capacity, Method of Calculating Line Capacity, Measures for augmenting it, Token less working, Centralized Traffic Control, Doubling, Automatic Block, IBS / IBH, Advanced Signaling and Interlocking.

Combined Train Report, Guard's Rough Journal Book, Vehicle Guidance, Driver's Ticket, Brake Power Certificate etc.

Rules regarding Marshalling of vehicles on Passenger, Mixed and Freight Trains.

Air Brake Systems along with Continuity Test.

Precautions to be taken on Ghat Sections.

VI. ACCIDENTS AND SAFETY ORGANIZATION

Accidents, Types and their Classification, Causes and their Prevention.

Functioning of Railway Safety Organization.

Chief Commissioner of Railway Safety Organization and his Functions.

Rules for reporting Accidents.

Accident Relief Medical Equipment (ARMEs) & Accident Relief Trains (ARTs).

Role & Responsibilities of various Officials and Departments during Accidents.

Responsibility of the Control Organization Station Masters and Traffic Staff on the affected Section.

Accidents Enquiries and DAR action against Staff held responsible for the Accidents, minimum recommended penalties in case of various Accidents.

Review and Analysis of Accidents for taking Corrective Measures.

Disaster Management on Indian Railways, Disaster Management Act, 2005, Disaster Management Plan, Role of NDMA and NDRF.

VII. ACCIDENTS PREVENTION

Aptitude Testing of Station Masters, Loco Pilots and Motor Men, Components of Aptitude Testing.

Psycho-Technical Analysis in case of Accidents attributed to Human Failures.
· SPAD and its Prevention.

Train Operation during Fog, Fog PASS.

Improved Technological Aids to prevent Human Errors like: o Improved Signaling and Inter-locking arrangement o SM's central and inter cabin control over route o Track circuit and Axle counters o Route Relay Inter-locking o Solid State Interlocking/Electronic Interlocking o Automatic Train Protection (ATP), KAVACH (TCAS - Train Collision Avoidance System) o Wheel Impact Load Detector (WILD) o End of Train Telemetry (EOTT) and its functions. o Centralised Traffic Control (CTC) o On Board Monitoring of Rolling Stock (OMRS).

Refresher Courses, Safety Camps, Safety Campaigns and Safety Drives.

Planning of PME and Refresher of Safety Category Staff.

VIII . PLANNING ON THE RAILWAYS

Set up & Functions of Planning Wing on IR.

Corporate Plan and Annual Plan, National Rail Plan, Mission 3000MT, National Logistics Policy.

Traffic Survey.

Calculation of Line Capacity.

Traffic Planning and Augmentation of Line Capacity Works.

Station Redevelopment. · Doubling, Bypass & Flyover Planning Works.

ESP, SIP, DPR, ROR etc

Container Rail Terminals.

Gati Shakti Terminals.

Minimum Essential Facilities at Goods Sheds and Stations.

B. TRAFFIC (COMMERCIAL)

I. General Organization and Functions of Commercial Department at Divisional, Zonal and Railway Board level.

II. Goods Traffic:

Booking of Goods Traffic - Forwarding Notes, Registration of Indents, Allotment, Rating and Routing of Traffic, Mis-declaration, RR, Weighment including Punitive Charges due to overloading, Classification of Goods, Loading and Unloading including Transshipment, Free Time for Loading and Unloading, Booking of Animals, Dangerous and Offensive Goods, Military Traffic, RMC, PCC of Wagons, Special Purpose Wagons, Standard Rake Sizes, Terminal Management System (TMS) etc.

Working of Goods sheds, Different charges like Demurrage, Wharfage, Penal Demurrage, Penal Wharfage, Stacking, Stabling, Terminal Access Charge, Terminal Charge. Through Distance Charging, Round the clock working of Goods Sheds, PPP mode development of Goods Sheds etc.

Container Traffic, Container Rail Terminals, Booking of Container Traffic, Haulage Charge, Container Class Rates, FAK Rates, Restricted and Open Commodities, Weighment of Container and Exemptions, Double Stack Dwarf Containers, Tank Containers.

Weighment, Rules of Levying of Punitive Charges for overloading, Electronic InMotion Weighbridge (EIMWB), Automatic Pre Weighbin System, Integration of Weighbridges with FOIS.

e-RD and e-TRR, e-Payment / Online Payment, Late Payment of Freight Charges, GST/e-Waybills.

Freight Incentive Schemes, Trainload Benefit, Quick Transit Service, Loadability of Wagons, Higher Capacity Routes. Various Wagons Investment Schemes like LSFTO, AFTO and GPWIS.

MGR and Ro-Ro Policies.

Out Agencies, City Booking Offices and other Ancillary Services.

Siding, Assisted and Private Siding Rules, Charges, Military Siding, Liberalized Siding Policy, Siding and Shunting Charges, GCT Policy.

Dedicated Freight Corridor.

Other recent Policy changes regarding Freight, Lump Sum Rates, Piece Meal Traffic, Freight Forwarder Scheme etc.

Sealing and Labelling of Wagons, Delay in Transit, Diversion of Wagon Load Traffic, Disposal of Seal Defective Wagons, Transport of Small Traffic.

Delivery of Consignment, Undercharges, Overcharges, Refund of Overcharges, Delivery of Consignment Short of Destination, Disposal of Consignments Over Carried, Disposal of Unclaimed and Unconnected Consignments, Open Delivery and Assessment Delivery, Missing Goods Report, Damage and Deficiency Report.

Dynamic Pricing, LTTC, TEFD, Station to Station Rates (STS) etc.

Various Private Siding Policy - Green Field PFT, Brown Field PFT etc.

Preferential Traffic Order (PTO), Rationalization Routes, Diversion and Rebooking of Goods Traffic.

Coordination of functions of various Consultative Committees at National, Zonal and Divisional Level.

Liability of Railways as Carriers of Goods and Animals.

III. Passenger Traffic:

The Railways Act chapters relating to Passenger Traffic and Traffic Facilities, Working of Railways, Responsibility of Railways as Carriers and Penalties and Offences.

PRS, Reservation and Refund Rules,
Break Journey Rules,
ARP (Advance Reservation Period),
PNR,
Concept of e-Tickets,
Tatkal Rules,
Tickets through ATMs,
Premium Trains/Dynamic Pricing,

Different types of Quotas and its allotment Block Booking,
Passenger Profile Management (PPM).

Unreserved Ticketing System (UTS),
UTS on Mobile,
Automatic Ticket Vending Machines (ATVM),
Jansadharan Ticket Booking Scheme (JTBS),
Rail Travel Service Agents (RTSA),
Station Ticket Booking Agent (STBA),
Yatri Ticket Suvidha Kendra (YTSK) etc.

Suvidha Trains,
Special Trains.

Various measures including Intensive Check Posts (ICPs) to Combat Ticketing
Frauds and Ticket less Travelling,
Hand Held Terminals (HHT),
TTE Lobby System,

Categorization of Railway Stations depending upon Passenger Earnings and/or
outward Passengers.

Passenger Amenities,
Model Stations-Minimum Essential Amenities Recommended and Desirable
Passenger Amenities depending upon classification of Station,
Works Programme etc.

Policy Guidelines for Halt Stations.

Integrated on-board Services, Bedroll distribution in AC Coaches, Cleanliness of
Coaches,
On Board Housekeeping Services (OBHS),
Clean Train Station (CTS),
National Green Tribunal (NGT),
Station Cleanliness and Role of EnHM Directorate etc.

Public-Private-Partnership (PPP) Schemes,
Pay and Use Toilets (Deluxe as well as Normal),
Retiring Rooms, Waiting Halls,
Beautification of Stations etc.

Train Enquiry System - National Train Enquiry System (NTES),

Integrated Train Enquiry System (ITES),
Call Centers,
RTIS etc.

Integrated Coach Management System(ICMS)

Customer Care Training- a more customer friendly attitude among the Frontline Staff, On the job training etc.

Passenger Service Committee,
Passenger Amenities Committee.

Vande Bharat Trains.

IV. Parcel Traffic

Parcel Business Scenario.

Rules regarding Parcel Booking, Marking, Labelling, Overloading etc.

Delivery of Parcels, Open Delivery and Assessment Delivery.

Leasing Policy for SLRs and VPUs, Parcel Cargo Express Trains (PCET), Kisan Rail, Rail Milk Tankers.

Advance Booking of Parcel Space.

Categorization of Parcel Classes, Procedure to change the Class.

Rating of Parcel Traffic.

Parcel Traffic in Container: Policy.

Disposal of Unconnected/Unclaimed Parcels.

Handling of Claims cases in case of Parcel Traffic.

Parcel Management System (PMS).

V. Other Sources of Revenue:

Non-Fare Revenue & its Sources, Importance of NFR, Scope of increase and Impediments in Increasing NFR.

Sundry Earnings.

Commercial Publicity-Policies and implementation on Zonal Railways.

Classification of Earnings, Earning Estimates.

Strategies to enhance Sundry Earnings, Parking Contracts, Lounges, Cyber Cafes, ATMs, various Kiosks etc.

Catering and Vending Services, Catering Policy, Book Stalls Policy, Multi Purpose Stall (MPS) Policy, One Station One Product (OSOP) Policy. BDU.

VI. Traffic Accounts:

Station Balance Sheet, Accountal of Earnings, Collection of Earnings and Rail Shakti Scheme.

Online Balance Sheet.

Commercial Inspections, Schedule of Inspections, Important factors to be observed during Commercial Inspection.

TIA Inspections

Station Out standings, Realization and their Clearance, Certified Over Charged Sheet.

Audit and its replies.

Disposal of old Records including Tickets. · Frauds and Embezzlements and their Prevention

VII. Misc:

IRCTC and its functions, FTR Trains booking.

Commercial Statistics-their usefulness.

Postal Traffic.

Traffic Survey.

Land Management Policy of IR. Claims Organization:

Claims and Claims Preventions, Claims Statistics.

Railway Claims Tribunal Act, RCT Organization and its functions.

Compensation in case of Untoward Incidents and Accidents, Ex-gratia payments.

Railway Tourism, Circular Tickets, Bharat Gaurav Trains.

Marketing and Sales activities at the level of Divisions and Headquarters.

Liability of Railways in case of Accident of a Passenger Carrying Train. ·
Customer Care, Courtesy and Public relations.

Public Grievance Redressal, Rail Madad, CPGRAM etc.

IT Applications – Freight Business Development Portal (FBDP)/ Rail Sugam Mobile App, Parcel Business Development Portal, ICMS, e-Auction, NTES, IRPSM, IREPS, PRIMES, UDM (User Depot Module), GeM, RBS (Rates Branch System), e-ACT & TPMS (Terminal Pipeline Management System) in FOIS.

National Rail Plan, Mission 3000MT.

National Logistics Policy.