



दक्षिण पश्चिम रेलवे
SOUTH WESTERN RAILWAY

मंडल कार्यालय / Divisional Office
कार्मिक शाखा/ Personnel Branch
मैसूरु / Mysuru

फाइलसं.No.Y/P. 608/IV/LI/Vol.V.(5019)

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CCRC/MYS, ASK, HRR, SKLR, JRU, SBHR,
CLI/MYS, ASK, HRR, SKLR, JRU, SBHR.

Selection for the post of Chief Loco Inspector in level-07 of the Pay Matrix of 7th
SUB: CPC in Electrical Department.
REF: This office notification no.Y/P. 608/IV/LI/Vol.V.(5019) dated 25.09.2025

Further to this office notification cited under reference for the selection of Chief Loco Inspector in level-07 of the Pay Matrix of 7th CPC, syllabus for the Centralized Computer Based Test (CCBT) is attached herewith in the annexure of this letter.

If any alteration in the syllabus for the selection to the post of Chief Loco Inspector will be advised from headquarters, the same will be communicate in due course.

Encl:Annexure

(Handwritten signature)

(एन. गोपालकृष्ण/N. GOPALAKRISHNA)
स.का.अधिकारी/मैसूरु /APO/II/MYS
कृतेवमंकाअधिकारी/मैसूरुfor Sr.DPO/MYS

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SYLLABUS FOR PANELLING OF LOCO INSPECTORS

1.KNOWLEDGE OF THE DIVISION:

Knowledge of location of stations, Layout of various stations classes of stations Ruling Gradient-catch sidings/slip sidings, Location of fueling points /RCDs-Location of TXR points

2. SAFETY RULES:

Knowledge of GR & SR, Accident Manual – Block working manuals – Station working Rules – Establishment rules-HOER-RSRC recommendations-First Aid.

3.KNOWLEDGE OF SIGNALS:

Knowledge of kinds of signals – Modern Signalling-Track circuit, Axle Counter, Panel Interlocking, Route relay Interlocking, Solid state Interlocking, Automatic signalling ,Auxillary warning system, Centralized traffic control Train Describers.

4. KNOWLEDGE OF POINTS AND CROSSING:

Knowledge of points and crossing-Turnout of 1 in 8 viz, 1 in 12 with straight /curved switches-Cross over of 1 in 8 Vs , 1 in 12 with straight/curved switches-Motor points-Facing and trailing points-point/Trap indicators-Standards of Interlocking- Non-Interlocking Rudiment Interlocking standard I, II, III interlocking – Isolations - Derailing switches — Speed over different points/crossings/Interlocks-knowledge of coaching stock restricted lines.

5.KNOWLEDGE OF TRAIN OPERATION IN NORMAL:

Knowledge of various systems of working –working time table-knowledge of max. Permissible speed of various locomotives/coaches/sections, knowledge of different engineering indicators-caution orders-Drivers equipments-Speed charts-Whistle codes-traffic authorities. Knowledge of precautions while shunting –shunting during receptions of trains-near level crossings –Shunting on gradients clearing of dead locos with MR/BC equalizing pipes coupled/not couples-Knowledge of moving disabled locomotives by trains knowledge of starting from un – signalled/common starter line-

Checking of train brake power-knowledge of Train Dynamics-Precautions of applying dynamic brakes-knowledge of ascending on Ghat with Banker In fear-Descending Ghat with banker in front-Double headed operation –Coasting /energy conservation.

6 .TRAIN OPERATION IN ABNORMAL

Protection of train in abnormal with flasher, Detonators, flare signals, Hand signals-knowledge of fire fighting- Types of fire extinguishers and their operation-knowledge of working of trains when different stop signals defective-poor brake power-Fire- Flood- Storm –Foggy –Jerk. Lurch Loco failure accidents Rail breakages –welding failure –Cattle run over –Passenger Injured -Alarm Chain pulling-Drivers incapacitated-Failure of communication-Temporary single line working in double line Action when noticed flasher at 'ON/bursting of detonators/burning of fuzee-Held upon first stop signal-Hot axle/locked axle in loco/load-Train working when head light /whistle/SPM failed – wheel skidded –knowledge of actions to be taken when accident taken place.

7. KNOWLEDGE OF WORKING TIME TABLE

Maximum permissible speed of various trains/locos/section-booked speed-Normal running time-Maximum running time permitted load tables for various locos/sections-loco/Traffic/Engineering allowances.

8. KNOWLEDGE OF TRACK

Types of rails-Parts of rail-Types of sleepers-Rail fastenings super elevations cant-degree of curvatures – Gradients SEJ- SWR- LWR- CWR Engineering caution indicators knowledge of track renewal/distressing/welding/deep screening –knowledge of rail breakages/rail buckling/weld failures.

9. KNOWLEDGE OF C&W

Types of coaches and their speed limits-Working principle of vacuum/air brake systems-knowledge of conventional and bogie mounted brake systems –knowledge of brake gear/other under gear fitments-charging oil vacuum/BP and FP –Brake power /Continuity certificates and their validity –calculation of brake power –Action when experienced poor brake power working of trains with Invalid/without BPC—continuity test, leakages test in vacuum/air brake trains-connection/disconnection/changing of vacuum/BP/FP hoses-changing of washer in BP/FP-Precaution during single pipe working bypassing of BP-Action not be taken on Brake binding-prevention of flat tyre in vacuum/air braked coaching stocks –clearing and detaching of Hot axle-Isolation of PEASD valves

10. TECHNICAL KNOWLEDGE (DIESEL LOCOMOTIVES)

Types of locomotives-WDM2/WDM3A/WDG3A/WDG4/WDP4/WDS6-Descriptions and differences among them parts of locomotives various inspections and schedules-descriptions and locations of various auxiliaries in various types of Diesel Locos-Engine/Governors-Electro-Hydraulic governor/wood ward/Electronic governor-locations of various cocks in various types of locos-locations and functions of various pneumatic valves and pressure setting –Electro-pneumatic contactors –Relays- fuel oil system –Lube oil system-/cooling water system Air intake system –MR/BP/FP pressure system Brake systems 2BLV-1/2BLAV-1-Battery circuit and its charging circuit starting circuit GF circuit/Throttle/DME circuit-Power switches knowledge of BY-pass switches and breakers.

Knowledge of GM locos

EM 2000 advances computer display diagnostic system, crew message list-crew message format Radar-AC, traction –HTSC, Dogle-Computer controlled brake system-procedures of changing control stands/operation end of MU

11. TROUBLE SHOOTING IN ALCO LOCOMOTIVES

Fuel oil pressure not building up-Engine is not cranking-Engine cranking but not starting-Engine cranking, starting but shutting down on release of start button-Engine shutting down due to OSTA tripping during cranking=Engine shutting down automatically-Engine shutting down on run.

Battery ammeter showing overcharging-DMR not picking up-Throttle not responding /Engine not responding to throttle-Engine returns to Idle during run-Engine RPM is erratic-Crank case exhaustor moto not working-Cyclone motor is not working –Engineer shunting-Load meter not responding –Load meter is not showing current –Power contactor not picking up GF contactor not picking up-Excessive 1st notch current –Power cutting off during parallel operation-Alarm bell ringing continuously-Hot engine alarm comes Radiator fan not working

Dynamic brakes are not working-excessive current in Big 'D' during dynamic braking-RTM blower not working –Power ground comes wheel slip Indicating coming- Hauling power poor-speedometer not working –Low water indicating coming-Transition not coming a all-First transition not picking up-second transition not picking up-Third transition not come lube oil pressure dropping/not building up-Locomotive moves in one direction only-sanders are not working- Booster air pressure is not building up Expresser brass spindle not projecting out –oil throwing with smoke through expresser exhaust –While smoke through crank case exhaust-smoke of different colours coming from chimney.

MR pressure not building up-MR safety valve blowing continuously-Brake pipe pressure not building up-Feed pipe pressure not building up-vacuum not creating-vacuum fluctuating-vacuum creation very quick-vacuum not dropping when applying A-9. Loco brake not acting when A-9 applied-Loco brake not releasing when A-9, SA-9 released- Loco brake causing wheel skidding- Head light not working – Flasher light not working – Axle box running hot.

TROUBLE SHOOTING GM LOCOMOTIVES

Engine not cranking-engine cranking but not holding high lube oil temperature-Oil throw from exhaust stack-Low lube oil pressure-TSC soak back failure-low water pressure –water level reducing-Hot engine-Engine comes to shut down without any indication-Lube oil traces in reducing-Hot engine-Engine comes to shut down without any indication-Lube oil traces in expansion tank –Low water alarm –Thick black smoke and poor hauling-Throttle not responding

12.INSPECTION

- 1.Knowledge of locomotive foot-plate inspections: Knowledge of Monitoring the performance of various types of locomotives Monitoring the crew for their engineman ship. Observations for any defects in respect to Loco, Crew, Signals, Track, Station staff and Gateman working follow-up of observations and rectifications
- 2.Knowledge of joint signal sighting inspection with TIs and SIs of the section/division for various visibility impairing knowledge of sighting distances for various types of signalling systems.
3. Running room inspection-Broad knowledge of various facilities to be provided as per the Running room improvement committee recommendations –Schedule of inspections by the Loco Inspectors-Knowledge of items to be checked during running room inspection –Knowledge of outsourcing of /running room activities
- 4.Inspection of Crew booking lobbies . Broad knowledge of various facilities to be provided as per the improvement committee recommendations. Schedule of inspections by the Loco Inspectors-Knowledge of items to be checked during Crew booking lobby inspection-Knowledge of duties of Crew Controllers-Knowledge of various records to be maintained in the Crew booking lobbies-Knowledge of computerised crew management systems and their applications in the lobbies-- Knowledge of revised alcohol policy.
- 5.Knowledge of various types of surprise night inspection as ordered by concerned officers Broad Knowledge of various items to be checked during night inspection.
- 6.Inspection of RCDs- Knowledge of safety precautions to be taken in RCDs-Broad knowledge of various items to be checked in the installations – Knowledge of fuel account tal- Knowledge at conducting fuel surveys- Knowledge of various testing procedures such as crackling tests, Hydrometer tests and water contamination tests- Knowledge of working of various machineries and equipments used in RCDs- Knowledge of checking of wastage, spillage, misuse of pilferages of oil in RCDs- Knowledge of schedule of inspections.
7. Knowledge of inspections of ARTs, MRVs and various types of Break down equipments-their schedule of inspections – Knowledge of operation of Break down specials- Knowledge of operation of Break Down specials – Knowledge of break down cranes of various capacities.

13.FIELD WORK

- 1.Knowledge of various Trials: Knowledge of conducting Load factor trials. Stop and start trials, Trip ration trials. Running time trials and conducting Brake power checking and calculations. Train management during VIP movements
- 2.Knowledge of co-ordinating and conducting safety and punctuality drives-Trouble shooting camps Counselling of drivers in sheds/lobbies/running rooms

3. Broad knowledge of theories of derailment Knowledge of C&W measurement-Knowledge of various types of speedometer charts-Knowledge of loco measurements-Knowledge of removing and analyzing of various types of speedometer charts-Knowledge of various aspects to be considered during preparation of joint reports-Knowledge of various types of ARTs, MRVs and different types of break down equipments-ordering of break down specials.

4. Broad knowledge of attending various loco failures-Knowledge of trouble shooting of different types of locomotives-Study of failures and rectification of defects -knowledge of preparation of detailed investigation reports.

5. Inspection of running staff for their elaborate knowledge of rules of train operation-counselling of running staff for their lack up knowledge and rectification of slack area-Effective monitoring of their performance during train operation-Knowledge of safety categorisation of running staff-Schedule of counselling and monitoring running staff-Checking drivers personal store of their of availability and intactness.

6. Broad knowledge of preparation of Loco Links and crew links Rationalisation of loco and crew links for optimum utilisation -Knowledge of power plans

14. GENERAL

1. Broad Knowledge of HOER rules and their application-10hrs rule and its effective implementation knowledge of various factors affecting the implementation of 10 hour rules Effective crew utilisation

2. Knowledge of Disciplinary and Appeal Rules -Knowledge of Railway service conduct rules 1966-Knowledge of conducting of DAR and other fact-finding enquiries

The following syllabus connected with Electric Traction

1) Knowledge of operation and troubleshooting of various classes of locomotives and MEMUs being operated.

2) SEC calculation for express and passenger, MEMU and freight trains-methods to improve SEC-Energy conservation measures in electric locos and MEMUs.

3) Functioning of crew management system.

4) working knowledge of AC Traction Manual, Accident Manual and Statistical Manual.

5) Knowledge about OHE, Traction Substation and Switching station with particular emphasis on points to be checked on OHE in case of PantographEntanglement.

6) Working knowledge on IE Rules, Electric Safety and rendering First Aid to electrocuted persons.

7) Knowledge about operation and maintenance of LHB Coaches.

8) Knowledge of :

a) Minimum Wages Act

b) Workmen Compensation Act

c) Leave Rules

d) General conditions of contract on works and services

Syllabus for the post of Chief Loco Inspector (Electrical Traction) in Pay Matrix of Level-07 of VII CPC

1. Knowledge of General and Subsidiary rules covering his work
2. Schedule and duties of Loco/Fuel Inspectors/Traction Loco Controllers/ Instructors etc,
3. Knowledge of rest rules pertaining to Running Staff
4. a) Knowledge of preventive maintenance scheduled of Locomotives/Particular of KMPH at which these schedules are carried out and major items to be attended in the schedules.
b) Knowledge of trouble shooting of various types of electric Locomotives
5. a) Knowledge of road/running time trails
b) Knowledge and preparation of engine/crew links, diagrams, knowledge of power requirement.
6. Knowledge of OHE traction, substation and switching station
7. Knowledge of Yardstick for all running staff and shed staff
8. Knowledge of control organisation and set up.
9. Procedure to be followed at the site of accident in case he happens to be the first official to arrive at the spot.
10. Knowledge in dealing with the disabled engine in enroutes.
11. Basic knowledge of engine statistics.
12. Knowledge of train working, section capacity, normal and minimum running time.
13. Knowledge of road and trails of locomotives
14. a) Steps to reduce the ineffective percentage of locos
b) Efficient utilisation of Electrical and Diesel locomotives
15. Basic knowledge of fire fighting
16. Knowledge of the following:
 - a) Discipline and Appeal Rules – Conducting enquiries etc.
 - b) Payment of Wages Act
 - c) Workmen Compensation Act
 - d) Hours of Employment Regulation Rules
 - e) Leave and Pass Rules
17. Knowledge of Electrical and safety rules and rendering First Aid to Electrocuted persons.
18. Knowledge about working of vacuum and air brake trains and their important Components.
19. Knowledge of Official Language policy.

Syllabus for the post of Chief Loco Inspector (Electrical Traction) In Pay Matrix of Level-07 of VII

CPC

1. Knowledge of General and Subsidiary rules covering his work
2. Schedule and duties of Loco/Fuel Inspectors/Power Loco Controllers/Instructors etc.,
3. Knowledge of rest rules pertaining to Running Staff
4. a) Knowledge of preventive maintenance scheduled of Locomotives/Particular of KMPH at which these schedules are carried out and major items to be attended in the schedules.
b) Knowledge of pump working and hydraulic data.
5. a) Knowledge of road/running time trails
b) Knowledge and preparation of engine/crew links, diagrams, knowledge of power requirement.
6. Knowledge of Yardstick for all running staff and shed staff
7. Knowledge of control organisation and set up.
8. Procedure to be followed at the site of accident in case he happens to be the first official to arrive at the spot.
9. Knowledge in dealing with the disabled engine in enroutes.
10. Basic knowledge of engine statistics, fuel statistics, statistics and consumption of fuel and lubricate oil and survey.
11. Knowledge of train working, section capacity, normal and minimum running time.
12. Knowledge of road and trails of locomotives
13. a) Steps to reduce the ineffective percentage of locos
Efficient utilisation of locomotives
14. Basic knowledge of fire fighting
15. Working of cranes and their supervision.
16. Knowledge of the following:
 - a) Discipline and Appeal Rules – Conducting enquiries etc.
 - b) Payment of Wages Act
 - c) Workmen Compensation Act
 - d) Hours of Employment Regulation Rules
 - e) Leave and Pass Rules
17. Knowledge of trouble shooting of various types of locomotives.
18. Knowledge of Official Language policy.