



SOUTHERN RAILWAY

Headquarters Office,
Personnel Branch,
Chennai – 600 003
Dated 23.01.2023.

P(S)608/IV/DLC/GOC/LI/Vol.I

**DRM/P/MAS, TPJ, MDU, SA, PGT & TVC
WPO/GOC**

Sub: Selection for the post of Loco Inspector Training
(Instructor/Running) (Ex-cadre) in Pay Matrix
Level-7 at DTTC/GOC

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It is proposed to conduct a selection for filling up the “**Two**” vacancies of **Loco Inspector Training (Instructor/Running) (Ex-cadre Post)** in Pay Matrix Level-7 [Grade Pay Rs.4600] in Mechanical Department at DTTC/GOC by calling volunteers from Pay Matrix Level – 7 [Grade Pay Rs.4600] and Pay Matrix Level – 6 [Grade Pay Rs.4200] of **7th CPC Pay Matrix**

ELIGIBILITY CRITERIA

Educational Qualification	B.E./B.Tech/AMIE/ Diploma in Electrical/Electrical and Electronics/ Electronics and communication Engineering/ Electronics and Instrumentation/Mechanical Engineering.
Eligible running staff from Mechanical & Electrical Department to be called for	Loco Running Supervisor in Pay Matrix Level-7[Grade Pay Rs.4600] Loco Pilots (Mail/Express/Pass/Goods) (except Shunters) in Pay Matrix Level-6 (GP Rs.4200/-) Exchange of Posts. In the event of Loco Pilots (Mail/Express/Pass/Goods) in Pay Matrix Level -6 (GP Rs.4200/-) getting selected to work as Loco Inspector Training (Instructor/Running) Ex-cadre) in Pay Matrix Level-7 then the lower grade element of the cadre post of Loco Pilots (Mail/Express/Pass/Goods) in Pay Matrix Level-6 will be operated against the (Ex-cadre) post Loco Inspector Training (Instructor/Running) (Ex-cadre) in Pay Matrix Level-7 duly transferring the element of Loco Inspector Training (Instructor/Running) in Pay Matrix Level-7 to the concerned division in lieu thereof, until the tenure.
Experience	<u>Driving Experience</u> Minimum 5 years from Loco Pilot (Goods) onwards <u>Total Experience</u> 10 Years in running category including 3 years foot plat experience.
Age Limit	Not more than 55 years on the date of notification
Tenure	5 Years
Other condition	Employees already working in another Ex-cadre post need not apply or Employees who have not completed the mandatory cooling off period after repatriation from an Ex-cadre post as advised in PBC No.169/2001 & 72/2005 need not apply

2.0 SELECTION PROCEDURE

- i) The selection comprises of Written Examination with 100% objective type questions and negative marking as per the instructions in PBC No.264/2019. The written examination will be followed with a Class Room Trial in respect of qualified candidates in the Written Examination.
- ii) In terms of PBC No.263/2018 and 46/2019, the Written Examination shall comprise of 100% Objective Type multiple choice questions
- iii) In terms of PBC 264/2019 there shall be negative marking @1/3rd mark reduced for every wrong answer.
- iv) Selection will be based on merit as per the instructions contained in RBE No.4/2020 read with RBE No.39/2020.
- v) In the terms of Railway Boards letter No. Hindi/87/OL/1/10/3 dated 03/11/1988 there will be questions in Official Language policy & rules for at least 10% of the total marks prescribed which will be optional.

3.0 GENERAL INSTRUCTIONS :

- i) Applications should be submitted through online mode only from 03.02.2023 to 17.02.2023 <https://notifications.srhqpb.in> duly adhering to the procedures and instructions envisaged in PBC No.150/2022 dated 30.08.2022.
(a) **Application opening date** - **03.02.2023**
(b) **Application closing date** - **17.02.2023**
- ii) The link for the web portal will be made available from **03.02.2023** in the Personnel Department internet notification <https://notifications.srhqpb.in> and also, in the Railnet website of Southern Railway.
- iii) The employees willing to apply for the above selection have to submit their applications through the above mentioned website in online mode only. **Applications received from any other mode will be summarily rejected.**
- iv) The employees should upload the requisite documents in the above mentioned **website in PDF format as a single file only**
- v) After submission of the application by the employee, Cadre Personnel Officer will download the application and certify the correctness of the application and upload it for further processing at HQ.
- vi) The **'Syllabus'** for the selection is annexed herewith for information to the applicants.
- vii) If there are no volunteers for the proposed selection of Loco Inspector Training (Instructor/Running), then the Cadre Controlling Officer / Personnel Officer concerned shall send a **'NIL' report on or before 03.03.2023 through e. office certainly** to avoid delay in processing of the selections.
- viii) Wide publicity may be given to this letter, duly exhibiting in the office notice boards for information of all staff concerned.

SOORATHI KOTEESWARIAH
INDUSEKAR

Digitally signed by SOORATHI KOTEESWARIAH INDUSEKAR
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pseudonym=55f8de3f4401026af936f96d3535685e0cb95413fd010f965
3f4906c528, postalCode=600021, st=TAMIL NADU,
serialNumber=b755945a430b0affac20de556de81b9f33011774b9666d9e7
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Date: 2023.01.23 16:02:49 +05'30'

(S.K.Indusekar)

Asst. Personnel Officer/M&E
for Principal Chief Personnel Officer.

Copy to: PCME,CELE. CME/D(D&M) for kind information
CWM/GOC , Secy to PCME,
Sr.DME/DME/DSL/MAS,TPJ,MDU, SA & TVC.
Sr.DEE/DEE/OP/MAS,TPJ,MDU,TVC,PGT & SA

**SYLLABUS FOR THE SELECTION TO THE POST OF LOCO INSPECTOR (TRAINING)
IN PAY MATRIX – LEVEL – 7 (GP RS.4600) AT DTTC/GOC.**

1. General:

General idea on Railway Organization with special reference to the Zonal Railway, Driver's in shed and yard in working trains and on completion of the trip. Authorized means of grievances redressal, basic knowledge in computer.

2. Rules and Manuals:

General and Subsidiary Rules, operating standing orders, Power standing orders, block working manual, accident manual, working time table, Locomotive operating and maintenance manual and their appendices.

3. Signals:

Various types of Signals and their utilization, various rules connected to Signals.

4. Lights and Lamps:

Engine Headlight, Tail light, Loop and Traffic Yard, Light Engines, Headlight when crossing or giving precedence, tail board, tail lamp and Side Lamp, Loco Buffer Light etc.,

5. System of Working:

Various systems of working and rules connected to that.

6. Working of Trains:

Engineering restrictions, speed over facing points, method of ascertaining speed train pushing and tender foremost, exchange of signals and whistle code. Working of ballast/material trains, safety sidings, marshaling of Trains, Isolation, Interlocking, working on outline siding, working on hill sections etc., Special Protection and Rules on electrified section etc.,

7. Forms:

Details of various forms used, their function and their disposal.

8. Accidents:

Definition of accidents, Defective running of locomotives and/or tenders. Defective permanent way and explosion of track. Drivers duty for securing safety of the train and protection of trains of Single/Double/Multiple track when stopped in between sections. Trains parting in single and double line. Engine failed in section, stalling of goods trains on the bank. Fire in the train, assistance to disabled engine. Break down with hot axle rough riding and working of unbalanced engines. Definition of engine failure and time failure. Reception of trains in blocked line. Cases of derailment and examination of engine failure and time failure. Reception of trains in blocked line. Cases of derailment and examination of engine and rolling stock after the accident. Order of MRV and Break Down Specials, conducting of DAR enquiry.

9. Abnormal Working in Double and Single Line:

Single Line working in double line section (Right and wrong direction) wrong line working in quadruple and triple line section. Working of trains during failure of communication in double and single line.

10. Working Time Table:

General information about Division. Maximum permissible and booked speed, minimum time, speed of all cases of engines maximum load for different engines, banking load if any, permanent restriction and causes, grouping of engines on different sections and maximum speed for 8 coupled/restrictions and speed table. Vacuum on engine and Brake Van for goods and passenger trains. Active cylinders on level and gradient sections.

11. Safety:

Various ways to avoid accident by including safe habits and practices. Accidents of short cut methods. History of minor/serious accidents due to crew negligence. Classification of important safety items. Knowledge about Fire fighting and different types of fire extinguishers.

12. Mechanical:

Evolution of Diesel Engines, General working principles of I.C. Engines
Nomenclature of all major parts of locomotive, wheel and Traction Motor arrangements.

13. Data for Diesel Locomotives:

Different types of Locomotives/Engines, their salient features, working principles of various systems and sub systems, safety features and equipments of Diesel electric and HHP locos such as WDM2, WDM7, WDS6, WDM3A, WDM3D, WDG3A, WDP3A, WDM3D, WDG4, WDP4, DEMU and SPART.

14. Power pack:

Details of engine block, cylinder liners, connecting rods, cylinder heads crank shaft, camshaft, exhaust manifold and their functions. Types of engine governors and its functioning.

15. System of Locomotives:

Fuel oil system, Lube Oil system, cooling water system, checking of fuel oil level, lube oil level & water level.

16. Charged Air System:

Knowledge of Turbo Supercharger and its functioning. Checking of air intake filters like oil bath and cyclonic filters.

17. a) Air Brake System:

Compressed air system, Compressor governor, auto drain valve and safety valves of air system. Working of independence air brake, automatic brake and vigilance control devices.

b) Vacuum Brake System:

Maintenance of vacuum level in the locomotive and brake van, Efficiency/Leakage/Blockage Test various instructions on brake power.

18. Transmission:

Various types of transmission and their needs.

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19. Electrical:

Principal of electricity, principal of working of motor, generator and batteries. Knowledge of circuit for cranking wheel slip etc., Meaning of transmission and its importance.

20. Under Truck:

Arrangement of bogie, brake gear fittings, axle boxes, equalizing beam and springs.

21. Safety Devices:

Safety devices for locomotive such as low water switch, hot engine alarm, low tub oil, working of wheel slip relays, load meter, Location of Various emergency switches and duplicate circuit breakers.

22. Trouble Shooting:

For common loco troubles like engine shut down, load meter not responding wheel slip, power ground, M.R. Pressure drop, vacuum fluctuation, poor hauling power.

23. Components Involving Safety:

Knowledge of clearances maintained in between axle box and bogies, wheel profile, dynamic brakes. Inspection of T.M. Gear case, safety brackets for brake fittings etc., Feeling of axle boxes checking of suspension bearing oil, cardium compound. Working of headlight, flasher light, speed recorders, various types of speed recorders and their features, working of passenger alarm system, air flow gauge, twin pipe air brake system.

24. Others:

Working of multiple loco double header, banker locomotive. Movement of dead loco by vacuum and air brake train formation. Working of sanders and its importance, testing of brakes and brake power.

25. Types of Schedules and Testing Checking:

Knowledge of various types of schedules done on diesel locomotive like trip, monthly, quarterly, half yearly, yearly, 3 years and POH and checking, testing/while taking over of the locomotive from shed.

26. Monitoring of Loco Performance and Driving Skill:

Monitoring of loco performance of run. Booking of engine repairs in the English Repair Book. Improving driving skills to avoid train parting, train stalling and running at maximum speed to maintain punctuality.

27. Fuel Economy Measures:

Checking and recording of fuel oil levels. Causes of heavy fuel oil consumption and its possible remedial measures. Trip ration and factors affecting fuel economy on run. Driving skills for improving fuel economy on run.

28. Carriage and Wagons:

Sufficient knowledge about various types of coaching stock and freight train wagons running in the system.

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29. Electric Locomotive:

Salient features, working principle and safety/protective equipments of WAG5, WAG7, WAG9, WAG12, WAP4, WAP5 and WAP7 locomotives, conventional and 3 phase EMU/MEMU.

30. Break Downs:

Movement of Loco after derailment/cattle run over locked axles, flat tyre, securing of dead loco on gradient section.

31. Crew Booking:

Organization of Crew Booking Office, various Registers to be maintained and inspections, various documents maintained in Central Office, Role of Power Controller, knowledge of HOER, 10 Hours Rule, CTRs, Trip Sheet etc., Knowledge about CMS.

32. Links and Load Trials:

Engine Links, Crew Links, Road Factor, fixing of running time and load trails etc.,

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