

## WRITTEN EXAMINATION

Name of the Post: Written examination for the post of loco Inspector/Training in scale Rs.9300-34000

Date of Written Exam : 14.07.12

Time : 10.30 hrs.

Total Marks : 100

### Instructions to Candidates:

1. Candidates should follow strictly the instructions given in the Answer Book.
2. Since the candidates are permitted to keep the Question Paper with them, all answers should be written in the Answer Book only.
3. Candidates should strictly follow any other instructions that will be given by the Officer conducting the written exam.
4. Candidates should remain in their seats till such time they are permitted to leave by the Officer conducting the written exam.

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### Part:A

(Answer any of the FIVE Questions)

5x10 marks

1. Write Short notes on any two of the following
  - a. EPG
  - b. Fuel Oil system of WDM2 locos.
  - c. Various circuit breakers in WDM2 locos.
  - d. Cranking batteries in WDM2 locos.
  - e. Driving techniques to avoid stalling in Goods train.
2. How will you troubleshoot the following (Answer any 2)
  - a. Booster air pressure drops on run
  - b. Engine cranking but not firing (WDM2)
  - c. Power ground (WDM2)
  - d. Radiator fan not working.
3. What are the various shortcomings in the working of all Departments which are seen in the field which prevents the Drivers from achieving maximum possible punctuality of Express trains and the role of Loco Inspector in overcoming these shortcomings?
4. What are the actions that you will take in case the Express train you are foot plating derails in midsection with loco still on rails?
5.
  - a. List out various sections of a Working Time Table with salient information currently provided in the various sections of WTT. (7 marks)
  - b. Other information which will be of use to drivers that should be given in WTT but currently is not provided.(3 marks)
6. How is Fuel Economy measured? List out and explain the possible ways in which Fuel Economy can be improved in Shed as well as in open line and by Drivers.
7. What are the various incentives available for the employees for learning and using Rajbasha?

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### Part:B

I Fill in the Blanks

10x1 marks

1. Inter-cooler safety valve is set at \_\_\_\_\_
2. Feed pipe is charged by \_\_\_\_\_ valve
3. Gear case is secured by \_\_\_\_\_ vertical bolts.
4. Currently locomotive used \_\_\_\_\_ lubricating oil for the engine.
5. Brake cylinder pilot air supply pressure is limited to a maximum of \_\_\_\_\_
6. Generator field overload relay trips when alternative field current exceeds \_\_\_\_\_ A.
7. In WDM2 OSTA RPM is \_\_\_\_\_ to \_\_\_\_\_
8. During DB engine RPM get raised to \_\_\_\_\_(WDM2)
9. Expand: ACCR \_\_\_\_\_
10. LAM has \_\_\_\_\_ and \_\_\_\_\_ zones.

II: Say TRUE or FALSE

10X1 marks

1.	If ERR drops on run the engine will shut down	True/False
2.	If AUX generator fails on run, batteries will supply current	True/False
3.	If VRR wire terminals cut, batteries will discharge	True/False
4.	Dynamic breaking should not be used if load meter fails to indicate current during DB.	True/False
5.	Hybrid multiple unit were used for achieving fuel economy	True/False
6.	Cranking in WDM2 loco is done by exciter generator and auxiliary generator	True/False
7.	Breather valve reduces air pressure inside the expessor crank case	True/False
8.	The pinion bull gear ratio for WDG3A locos is 22:61	True/False
9.	VA1B valve that creates/maintains/destroys vacuum is available in under frame	True/False
10.	Suspension bearings are lubricated by cardium compound.	True/False

III: Pick the correct Answer

10x2 marks

- Governor oil pressure in wood word governor, is \_\_\_\_\_ KG per cm2  
a. 9.1.    b. 3    c.7    d. 5
- GE governor oil is pressurised by \_\_\_\_\_  
a. FPM    b. Tacho generator    c. ADA    d. CCEM
- EST has \_\_\_\_\_ Number of position in WDM3D  
a. 1    b. 2    c. 3    d. 4
- Engine speed signal is given by \_\_\_\_\_ in E type excitation loco  
a. ADA    b. Tachogen    c. EX.gen    d. Aux.gen
- DMR coil is connected in series with \_\_\_\_\_  
a. OPS    b. SAR    c. ERR    d. PCS
- Too fast notching up will lead to \_\_\_\_\_ smoke from engine exhaust  
a. Black    b. White    c. Bluish green    d. Green
- Fuel tank capacity of WDM3D loco is \_\_\_\_\_ litres  
a. 5000    b. 4100    c. 3200    d. 6000
- Maximum MR pressure is set at \_\_\_\_\_ KG per cm2  
a. 7    b. 8    c. 9    d. 10
- MU2B valve has \_\_\_\_\_ active ports  
a. 5    b. 7    c. 10.    d. 2
- In WDM3A lube oil system pressure relief valve setting is at \_\_\_\_\_ KG per cm2  
a. 4.2.    b. 1.4.    c. 7.5    d. 8.2

IV: Match the following

10x 1 marks

OSTA	WDM3D GETS
LWS	R1 and R2 defective
Water pump fail	TH not responding
TRD test	Wheel slip indication
Dead loco	Engine speed
ERF	Expansion tank
Alerter bye pass	Engine right side free end
PCS emergency switch	4 <sup>th</sup> notch
WSRR open circuited	MU2B in dead
ECP	Hot engine