

Objective question of Diesel trade theory MRT-5

1. Which type of locomotive will be a loco classified as WDM2.
a) Goods service b) passenger service c) shunting service d) none
2. Which type of locomotive will be a loco classified as WDG3A.
a) Goods service b) passenger service c) shunting service d) none
3. Which type of locomotive will be a loco classified as WDS6.
a) Goods service b) passenger service c) shunting service d) none
4. Which one is not an advantage of DEMU.
a) High acceleration b) face reversal not required c) more number of drive axles
d) environment friendly
5. What is full form of DEMU.
a) Diesel electrical multiple unit
b) Direct electric multiple unit
c) Dual electric mixed unit
d) None of above
6. What is full form of DPC.
a) Drive power car
b) Driving power cabinet
c) Diesel power car
d) None of above
7. Which one of above is not a purpose of providing fuel oil system in Alco locomotive
a) to ensure correct amount of fuel delivery
b) to ensure correct form of fuel delivery
c) to ensure correct time of fuel delivery
d) to maintain ratio of fuel to lube oil
8. What is purpose of providing a relief valve at outlet of fuel oil pump
a) to prevent fuel pump motor from overloading
b) to maintain fuel oil pressure in the system
c) to boost up the outlet fuel pressure
d) none of the above
9. How many filter assemblies are provided in the fuel oil system of Alco locomotives
a) one b) two c) four d) six
10. What is the pressure setting of fuel oil relief valves in Alco locomotives
a) 5.2 Kg/cm² b) 4 Kg/cm² c) 6.5 Kg/cm² d) none of above

11. What is the purpose of providing a regulating valve in fuel oil system
 - a) to maintain pressure in the system
 - b) to provide bypass passage to fuel
 - c) to remove dirt etc
 - d) none of the above

12. What is the pressure setting of fuel oil regulating valves in Alco locomotives
 - a) 3.5 Kg/cm² b) 3 Kg/cm² c) 4.0 Kg/cm² d) none

13. What is the media used inside the filter assembly for filtration of fuel
 - a) cotton b) glass wool c) paper d) wire mesh

14. At which location copper washers are used in fuel oil system of Alco locomotives
 - a) between FIP and injector
 - b) between banjo pipe and FIP
 - c) between Injector and HP tube
 - d) none of above

15. A snubber valve is provided at outlet of fuel injection pump to prevent
 - a) back flow of fuel oil
 - b) reduce outlet oil pressure
 - c) to reduce vibrations
 - d) none of the above

16. The full form of HP tube is
 - a) High power tube
 - b) Hollow passage tube
 - c) High potential tube
 - d) high pressure tube

17. The orifice test is carried out for which purpose
 - a) to ascertain the efficiency of fuel feed system
 - b) to check fuel oil consumption for a particular period
 - c) to check fuel pressure drop at load
 - d) none of the above

18. The features of a good injector nozzle don't contains
 - a) good atomization
 - b) correct spray pattern
 - c) no dribbling
 - d) no hunting

19. Which one is not a probable cause of nozzle dribbling
 - a) improper pressure setting
 - b) dirt stuck between valve and valve seat
 - c) valve sticking inside the body
 - d) excess fuel pressure

20. What is nozzle chattering
- a) cracking sound due to free movement of valve inside body
 - b) abnormal sound due to improper sprat pattern
 - c) sound due to turbulent flow of fuel inside nozzle
 - d) none of the above
21. Which one of the above is not a part of fuel efficient kit for Alco locomotives
- a) 17 mm FIP
 - b) modified cam shaft
 - c) large after cooler
 - d) e-beam power cables
22. The value of fuel oil pressure at full load will change as compared to at idle value
- a) increase
 - b) decrease
 - c) remain same
 - d) any of above
23. Which one in nor an advantage of supercharged engine
- a) more power with same engine dimension
 - b) carbon free components
 - c) better cooling of components
 - d) better adhesion ratio
24. Which is not a method of supercharging
- a) by means of roots blower
 - b) by using reciprocating compressor
 - c) by blower driven by exhaust gases
 - d) by inertial filters
25. The inlet casing of turbo chargers which is made up of heat resistant material is called
- a) gas inlet casing
 - b) suction strainer
 - c) accumulator
 - d) none
26. The middle portion which supports rotor assembly is called
- a) gas inlet casing
 - b) intermediate casing
 - c) middle casing
 - d) none
27. The portion which contains the blower assembly is known as
- a) blower casing
 - b) cool cage
 - c) diamond box
 - d) propeller
28. What is not a purpose of air cushioning
- a) prevent mixing of hot air with lube oil
 - b) prevent leakage of lube oil through oil seals
 - c) cooling of hot turbine disc
 - d) to ensure free movement of rotor assembly
29. What is the purpose of after cooler in a locomotive
- a) increase air density
 - b) cooling of water
 - c) cooling of lube oil
 - d) none

30. Which test is carried out to ensure free running of rotor assembly of a TSC.
a) run down test b) soap test c) dynamic balancing d) back lash
31. Which one is not a purpose of providing a lube oil system in Alco locomotive
a) cooling of components
b) protection of metal surfaces
c) keep the components clean
d) proper burning of fuel oil
32. What is the lube oil sump capacity in Alco locomotives
a) 1000 ltrs b) 1270 ltrs c) 950 ltrs d) 1550 ltrs
33. What is the grade of lube oil used in Alco locomotives
a) RR-520 b) RR-606 c) SP-150 d) RR-460
34. What is the purpose of relief valve in lube oil system of locomotives
a) to prevent lube oil pump from overloading
b) to maintain lube oil pressure in the system
c) to boost up the outlet lube oil pressure
d) none of the above
35. What is the pressure setting of lube oil relief valves in Alco locomotives
a) 8 Kg/cm² b) 7.4 Kg/cm² c) 6.0 Kg/cm² d) none of above
36. What is the purpose of providing a regulating valve in lube oil system
a) to maintain pressure in the system
b) to provide bypass passage to lube oil
c) to remove dirt etc
d) none of the above
37. What is the pressure setting of lube oil regulating valves in Alco locomotives
a) 5 Kg/cm² b) 6 Kg/cm² c) 4.0 Kg/cm² d) none
38. What is the media used inside the vertical strainer unit for filtration of lube oil
a) cotton b) glass wool c) paper d) wire mesh
39. What is the purpose of providing the Moatti filter at locomotives
a) filtration of lube oil b) filtration of fuel oil c) filtration of coolant water
d) air filtration
40. What is the role of Centrifugal filter fitted on locomotive
a) separate dirt particles from lube oil
b) separate metal particles mixed in lube oil
c) segregation of water mixed in lube oil
d) segregation of fuel oil mixed in lube oil

41. Which one of the above test is not carried out for lube oil during maintenance
a) viscosity check b) chattering test c) water contamination d) flash point
42. What is the supply type used in OHE in Indian railway.
a) 21 KV DC b) 25 KV 3 phase AC c) 25 KV single phase AC d) none
b)
43. Which type of traction motors are used in MEMU now a days
a) AC motor b) DC series motor c) synchronous motor d) None
44. What is the voltage generated inside power car for operation of compressor.
a) 220 VAC b) 415 VAC c) 115 VDC d) none
45. What is value of low voltage supply used for working of electric fittings in passenger car of EMU.
a) 110 VAC b) 220 VAC c) 72 VDC d) none
46. Where the driver indication panel is fitted in cab control unit of MEMU.
a) At left side b) at right side c) at door d) none
47. What is the full form of MMI
a) Master module interface
b) Man machine interface
c) Main module intersection
d) None
48. What is full form of PWM.
a) Power with module
b) Pulse width module
c) Power on wide medium
d) None
49. What is a DC link
a) A capacitor connected across output
b) DC power given to motor field
c) DC supply voltage
d) None
50. What is the percentage of traction in train-18 rake.
a) 25% b) 33% c) 50% d) none
51. What is the full form of SUCS
a) Stiffer unit cam shaft
b) Short unit control shaft
c) Sectional under control segment
d) None

52. Which one not an advantage of e-beam power cable.
- a) Reduced size
 - b) Long life
 - c) Oil resistant
 - d) Break free
53. Which one is not an advantage of 251 plus cylinder head.
- a) Lesser in weight
 - b) Reduce fire deck thickness
 - c) Frost plug
 - d) Shiny look
54. Which is not an advantage of high efficiency turbo charger
- a) Better efficiency
 - b) Long life
 - c) Less failures
 - d) Very less cost
55. How the ventilation fan of DEMU works
- a) Electrical drive
 - b) Gear drive
 - c) Hydraulic oil drive
 - d) None
56. How the radiator fan of DEMU gets drive
- a) Electrical drive
 - b) Gear drive
 - c) Hydraulic oil drive
 - d) None
57. How many number of traction motors are fitted in DPC of DEMU
- a) 06 no.
 - b) 04 no.
 - c) 02 no.
 - d) None
58. What is full form of APU
- a) Alternate power unit
 - b) Auxiliary power unit
 - c) Advanced power utilization
 - d) None
59. Which is not an advantage of Micro processor based control system?
- a) Fault log
 - b) Automatic Control
 - c) Digital feedback
 - d) High power consumption

60. Which types of signals are used as input by Micro processor based control system?
- a) Digital input
 - b) Analog input
 - c) Frequency input
 - d) RF input
61. How the electric power is generated for operating traction motors in DEMU.
- a) From diesel engine block
 - b) From overhead supply
 - c) From solar panel
 - d) None
62. What is an actuator unit.
- a) Fuel supply valve
 - b) Current operated valve
 - c) Air operated valve
 - d) None
63. What is full form of PT in case of PT pump used in DEMU.
- a) Proper timing
 - b) Pressure timing
 - c) Pulse triggered
 - d) None
64. How the compressor of DEMU gets drive.
- a) Belt driven
 - b) Gear driven
 - c) Electrically driven
 - d) None
65. Which type of coupler is used in DEMU.
- a) ABC coupler
 - b) CBC coupler
 - c) Shaku coupler
66. What is role of freewheeling diode in power circuit of EMU.
- a) To allow back flow of current
 - b) To avoid spark generation
 - c) To act as reactor
 - d) None
67. What is a full form of GTO?
- a) Gate turn off thyristor
 - b) Gate tuned operations
 - c) Gate turn on thyristor
 - d) None

68. What is full form of IGBT?

- a) Insulated gated bipolar transducer
- b) Insulated gate bipolar transistor
- c) Intersected gated bipolar trend
- d) None

69. Which one is not an advantage of IGBT?

- a) Isolated gate bipoar transistor
- b) Insulated gate bipolar transducer
- c) Isolated gate bipolar transistor
- d) Insulated gate bipolar transistor

70. Which one is not an advantage of 3 phase electric machines.

- a) Small size
- b) More efficient
- c) More smooth
- d) Very cheap in cost

71. Which one is not a feature implemented in Train-18.

- a) Aerodynamic design
- b) Underslung equipments
- c) More drive wheel
- d) Regenerative braking

72. What is full form of DPCS?

- a) DC power control system
- b) Direct power control system
- c) Distributed power control system
- d) none