SOUTH CENTRAL RAILWAY
Office of the Sr.Divl. Mech. Engineer
Diesel Loco shed, Kazipet-506003- Ph&Fax No.08702576154

No. C/M/DSL/KZJ/DTTC/9/2024 Date: 27.12.2024

Sr. DPO/SC

Sub: Syllabus and sample questions for filling up of the post of STI (Mechanical wing) at DTTC/KZJ of Mechanical Department- Secundrabad Division

Ref:-Sr.DPO/SC Lr.No.SCR/P-SC/210(a)/CTI/EM/126812-dated.10.12.24

With reference to the above subject, herewith enclosed syllabus and sample question bank consisting of multiple choice questions with answers as in Annexure-I & II respectively for filling up of the post of STi Mechanical wing at DTTC/KZJ.

Encl:- Annexure -I : Syllabus

Annexure -II : Sample question bank

for Principal/DTTC/KZJ

Fax & Phone No.0870-82400(Rly). Email: srdmedslkzj@gmail.com

Annexure-I

Syllabus for Selection of STI –(Mechanical wing) at DTTC/KZJ

1. Knowledge of basic principles and terminology of Mechanical equipment of all types of Diesel locomotives, DEMUs and Diesel units maintained by Shed.
2. Knowledge of Alco and HHP locomotives, DEMUs and Diesel Units maintained by shed - Constructional details, working and functioning. Preventive maintenance schedules, Testing & troubleshooting.
3. Functioning, maintenance & testing of following equipments- Alco & HHP locomotives.
   - (i) Power Pack
   - (ii) Under Truck
   - (iii) Compressor
   - (iv) Brake systems
   - (v) Hydraulic system
   - (vi) Turbo Super Charger of various types
   - (vii) Turbo Clutch assembly
   - (viii) Heat Exchangers
   - (ix) Cylinder Heads
   - (x) FIP
   - (xi) Water Pump
   - (xii) Lube Oil Pump
   - (xiii) After Cooler
   - (xiv) RTTM/FTTM Blower
   - (xv) EPD
   - (xvi) Hot Oil Detector
   - (xvii) MUI
   - (xviii) Radiators
   - (xix) Governors
4. Knowledge of reading various drawings related to mechanical systems.
5. Knowledge of Fuel Oil system, Lube oil system, Cooling water system, Air Intake system, compressor- Maintenance, troubleshooting, rectification in Alco & HHP locomotives.
6. Knowledge of Latest developments like long life lube oil filters, Plate Type Lube Oil Coolers, Lube Oil Centrifuge, Air dryers, high horse power turbo super chargers, VCD, APU, DPCS etc. (applicable only those maintained by shed).
7. Under Truck – Alco & HHP locomotives-Over hauling of bogies, Roller Bearings, checking of Axle box bearings and clearances. Checks conducted on important clearances, testing of springs, dampers, equalizing beams, compensating beams, knowledge of 'wheel gauge widening' and measurement of wheel profile. Knowledge of design features of high adhesion bogies, Tri mount cast bogies, equalizer less bogies. Knowledge of Radial bogies used in HHP

locomotives (applicable only those maintained by shed) & HTSC bogies.

8. Safety – Knowledge of various safety items fitted in the engine & locomotive.
9. Safety checks to be conducted on locomotive (including fire safety), before despatch.
10. Knowledge of Air brake system – Alco & HHP locomotives- IRAB, CCB brake system (CCB 1.5 & CCB 2.0). Overhauling procedure of all air brake valves, operational procedure of multiple unit operation. Knowledge of troubleshooting in air brake system. Conducting Air brake self test & MU setup for HHP locos.
11. Knowledge of various tools and precision instruments required for maintenance of mechanical equipment.
    (i) Power wrenches
    (ii) Torque multipliers
    (iii) Vernier calliper
    (iv) Wheel profile gauges
    (v) Temperature measurement gauges etc.
12. Knowledge of locomotive working in multiple units.
13. Safety precautions to be taken at work place & OHE safety precautions.
14. Fire prevention measures and fire fighting to be followed in the locomotive as well as in the shed.
15. General stores procedures – Indenting Stock & Non- Stock items and stocking procedure.
16. Knowledge of Establishment rules like HOER, WCA, Leave rules, Pass rules, D&A rules, Conduct rules and Official Language policy.
17. Knowledge of various Preventive maintenance schedules (Trip, Monthly, M-4/M-12/M-24 for Alco, 30D, 90D, 180D, Y1, Y2, Y3, Y4, Y5, Y6 schedules for HHP locomotives) and important jobs done in each schedule.
18. Knowledge of Quality Standards (i) ISO 9001:2015, (ii) ISO 14001:2015, (iii) OHSAS 18001:2007 (iv) 5S
19. Knowledge on computer working.

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SYLLABUS FOR STI (Mechanical wing) at DTTC/KZJ.

A. AC TRACTION

1. General Electricity & Electronics

Fundamentals of electricity - voltage - current - Resistance and their Measuring units & instruments to measure them

Ohms law – calculation of V, I, R in the circuit – Energy – watt – Electrical unit

Electrical symbols, Kirchhoff current & voltage laws, Effects of electric current

Basic properties of electrical materials – conductors – semiconductors – insulators

Electronic devices such as Diodes, application of diode, transistors, thyristor, GTOs, IGBT. Handling of electronic cards

Basic principle and characteristics of DC motors and 3-ph. Induction motors.

TRD – Power supply systems

Basic knowledge on OHE power supply arrangements and equipment at Traction Substations, switching stations. (Sectioning and paralleling posts, sub sectioning Post) Remote control and communication facilities in electrified section.

Type of Neutral sections, Overlap type, section insulator type and PTFE type neutral Section.

Working of traction power control – power blocks and permit to work, protection Measures for power blocks, safety precautions in electrified section, movement of O.D.0 in electrified section, stagger of OHE, ATD, cantilever assembly parts.

2.Electric locomotives (Conventional and 3 phase):

Types of electric locos – technical data – maintenance schedules – periodicity of all Types of locos.

Working principle & maintenance of various types of relays – EP contactors – reversers - Inverses - switches – interlocks – tap changer – vacuum circuit breaker - transformer – smoothing reactor – master controller etc.

New generation equipment in loco – static converter (SIV) – microprocessor control and diagnostic system (MPFDCS) – energy cum speed monitoring systems (ESMON/SPM), common device (VCD)-working and maintenance procedures – common defects noticed and troubleshooting techniques – data downloading – analysis of downloaded data, knowledge of AC loco feeding circuits, its parts and purpose of each equipment

Rectification of AC to DC, dc Traction Motors – current ratings, reversers- purpose of reversers. Isolation of defective traction motors – procedure. Various safety relays such as Earth Fault relay QOP, over current relay QLM etc- functioning – Isolation

Special features & advantages of 3 phase locomotives over conventional locomotives

3 phase locomotives power and Auxiliary circuits.

Various equipment in Machine room and under frame. Traction converter (SR) – auxiliary converter (BUR)- vehicle control Unit (VCU)- transformer – MCBs – various electronic cards and their functions, detection of defects – trouble shooting tips. 3 phase Traction motors and name plate parameters. E – 70 brake systems,

4. Power and control circuits of electric locos

5. Pneumatic circuits

Knowledge of pneumatic brake system -- Equipments and their purpose – cut Out cocks and drain – their purpose and location. Pneumatic equipment: Air Brake system working – handling and maintenance of A9, SA9, C2 relay valves C3W or distributor! Valves etc. Air flow measuring valve, safety valve, Air dryers, Pantograph – trouble shooting techniques etc. E70 brake system, CCB pneumatic Brake system in 3 phase locomotives.

6. Bogies:

Bogie of different locos – construction, suspension arrangement, Brake, wheel & axle boxes – maintenance practices – ultra sonic testing of axles – TM shafts etc – cattle guards – CBC and its parts – maintenance practices. Transmission of BE & TE – Function of dampers, springs, side bearer, traction Links etc. – Motor suspension arrangement – Negative point system for co-co Tri-mount bogie

7. TRS organization

Rolling stock organization and works carried out in different sections, organization Set up. Standard layout of loco- shed for holding 100 Locos and 200 locos suggested by RDSO.

8. Trouble shooting

Knowledge of defects on conventional & 3 phase electric AC locos – procedure of trouble shooting – Method of identifying the trouble – reason and remedy of each trouble.

9. Vocabulary and abilities

Fluency to speak in English, using appropriate technical words to express the correct meaning - knowledge of other local languages like Telugu, Hindi to educate the TRS maintenance and running staff of less literacy - Knowledge to draw electrical, pneumatic circuits and mechanical diagrams on black boards preparation of important circuits. Working knowledge of computers.

DTTC/KZJ/SCR
Multiple Choice Question Bank

1) The axle load of WDG6G locomotive (d)
a) 22 T b) 22.5 T
b) 21.5 T d) 23 T

2) Maximum Tractive Effort of WDG6G is (c)
a) 544 KN b) 541 KN c) 570 KN d) 52.1 T

3) Maximum Tractive Effort of WDG4G is (b)
a) 270 KN b) 544 KN c) 28.1 T d) 29.15 T

4) Gear ratio of WDG 4G is (a)

a)85:18 b) 85:16 c)77:17 d) 90:17

5) No of Vertical & horizontal dumpers in WDG 6G is (b)

a) 8 &4 b) 12 &4 c) 8&6 d) 12& 6

6) Location of CA-9 (b)

a) Aux Cab b) Rad Cab c) Blower Cab d) Engine Cab

7) How to reset the VCD penalty brakes in GE locos (c)
a)Bring TH to idle, Reverser-F/R b)Reset after 34 sec-after Extinguishing of LED
c)Both a and b d)None

8) In WDG4G locomotive while EOT, L/T switch should be kept in (a)
a) Lead b) Trail c) Helper d) Test

9) Number of Brake blocks in WDG4G locomotive (c)
a) 4 b) 8 c) 12 d) 24

10) Max braking effort(KN) in WDG6G (a)

a)285 b) 272 c) 240 d) 200

11) Loco Model of WDG6G (b)

a) 710G3B b) GEVO 16 c) GEVO 12 d) Both A & C

12) Coolant capacity (Liters) in WDG6G (a)

a) 1468 b) 1249 c) 1045 d) 1210

13) Air Dryer CB is in (c)

a) 1st row b)2nd row c)3rd row d)4th row

14) Sander cock and valve provided near (d)
a) Operator cab b) Aux Cab c) Blower Cab d) Eng Cab

15) Radiator fan is getting supply from (b)

a) Mechanical drive b) Separate Motor c) A &B d) None

16) Location of BKS in WDG6G (a)

a) Operator Cab b) Aux Cab c) Loco left side d) Rad cab

17) Engine should not be cranked if it is shut down for more than (d)
a) 24 hrs. b) 36 hrs. c) 48 hrs. d) None.

18) In WDG6G locomotive parking brake apply on wheel no (c)

a) 1,3,5,6 b)2,5,4,8 c)1,5,8,12 d) 2,5,8,12

19) The parking brake holding force will be sufficient to hold ____gradeint (c)
a) 1:47 b)1:57 c) 1:37 d)1:67

20) The parking Brake can be released by (c)

a) Push button on ECP b) By manually pulling c) Both d)None

21) In WDG6G Generator Field breaker provides power and circuit protection to (a)
a)Master control circuit b) TA output c)Both a b d)None

22) Location of AESS switch inWDG6G Loco (d)

a) CA-2 b)CA-3 c) Rad Cab d) CA-1

23) In WDG4G ,location of sander valve& cock (a)
a)Cab front door back side
b) cab back door back door
c) both a, b d)Rad Cab

24) Location of battery switch in WDG6G loco (c)

a)Aux Cab b)A side c)Below engine control panel d)B side

25) Ensure breaker off before opening BS (a)
a) BCCB b)MAB c)GF breaker d)LCCB

26) Location of Maintenance Battery Disconnect (MBD) InWDG6G (a)

a) A-side Aux Cab b) B- side Aux Cab c) Rad Cab d) Cab-1,EC panel

27) Location of air brake compartment (POU) inWDG6G (a)

a)A side Rad Cab b)B side Rad Cab c) A side Aux Cab d) B side Aux Cab

28) Sand capacity in WDG6G in lits (a)
a) 630 b) 340 c) 85 d) 105

29) If both HVAC and Hot plate ON , result (d)

a) HVAC fails b) Hot plate fails c)Both A & B d) !50 A breaker trips

30) In WDP4/WDG4 Loco when lube oil temperature exceeds 124°C (d)
a)Hot oil detector operates b)LLOB operates c)OSTA trips d)Both a and b

31) In WDP4/WDG4 loco if water pressure is less (d)
a)LLOB trips b)Low water pressure button will trip
c)Crank case pressure button will trip d)Both a and b

32) In WDP4/WDG4 loco when PCS is knocked out (a)
a)MAB breaker should be recycled b)TCC breaker should be recycled
c)Air drier breaker d)Both a and b

33) In WDP4 /WDG4 loco before conducting air brake self test (a)
a)Recycle MAB b)Recycle TCC1 and TCC2
c)Recycle Air drier breaker. d)Both a & b

34) In WDP4/WDG4 loco engine should not be cranked when (b)
a)Low water button is tripped b)crank case pressure button is tripped
c)LLOB is in tripped d)OSTA is tripped

35) In WDP4/WDG4 loco load meter will not respond if (c)
a) GFB trips b) AGFB trips c) Both a & b d) MAB trips

36) In WDP4/WDG4 when continuous wheel slip is experienced due to locked axle (c)
a)Isolate the defective TM b)Isolate the defective speed sensor
c)Fail the loco immediately d)Isolate the defective truck

37) In WDP4/WDG4 loco while conducting BP leakage test L/T switch should be kept in (d)
a)Lead b)Trail c)Helper d)Test

38) Location of Battery Knife Switch in WDG4 Loco is (d)
a)Nose Compartment b)In Accessories room
c)In LP's cab d)Loco Left Side Foot Plate

39) In WDP4/WDG4 loco while conducting air brake self test in working control stand (c)
a)Auto Brake handle should be kept in RUN b)Direct Brake should be kept in Full Application c)Both a and b d)LT switch in Trail

40) In WDP4/WDG4 loco while opening BP COC, position of L/T switch should be kept in (c)
a)Lead position b)Trail position c)Test position d)Helper

41) If FOP is dropping due to secondary filter choked (d)
a)By pass secondary filter b) By pass primary filter
c) Both a & B d) fail the loco

42) In Alco loco fuel pump motor is located in (c)
a) Nose compartment b) Radiator room c) Compressor room d) Engine room

43) Control air pressure is adjusted by (d)
a) A9 Feed valve b)F1 selector valve c)NS 16 governor d) Limiting valve

44) If inlet valve of HP cylinder is struck up in closed position (b)
a)MR safety valve will blow b)Inter cooler safety valve will blow
c)Auto drain valve will blow d)Both a and b

45) LWS emergency switch should be switched 'ON' if (b)
a)"Water level is less than 1 inch b)"Float is punctured
c)Continuous hot engine alarm d)Both a and b

46) Dynamic brakes should not be used when (d)
a)FPC is packed b)Working with manual transition
c)GF emergency switch is put 'ON' d)GFC is packed

47) While working twin pipe air brake train if BP metallic pipe is damaged (a)
a)By passing to be done b) Work with FP alone
c) Detach the coach after clearing section d)Both b and c

48) In Air brake passenger train if FP metal pipe is damaged (a)
a) Work with single pipe b)Work further bypassing the coach
c)Both a and b d)Work with FP alone

49) Sensitivity of DV is (a)
a)"0.6 kg/cm2 in 6 secs b)0.3 kg/cm2 in 60 secs
c)0.6 kg/cm2 in 60 secs d)0.5 kg/cm2 in 60 secs

50) Insensitivity of DV is (b)
a) 0.6 kg/cm2 in 6 secs b) 0.3 kg/cm2 in 60 secs
c) 0.6 kg/cm2 in 60 secs d) 0.5 kg/cm2 in 60 secs

51) In M.U operation in Air brake loco, conjunction working in leading loco will takes place through (b)
a)28 VB b)C3W DV c) A1 differential valve d) F1 selector valve

52) If A9 coc is closed in both control stands (a)
a)BP will not create b)BP will destroy only in emergency
c)Loco brakes will not release d)BP will not destroy

53) In MU operation during A9 application, trail loco brakes get applied through(b)
a)C3W DV b)F1 selector c)Additional C2 relay valve d)Both a & c.

54) While working an air brake train if engine shuts down on run (c)
a)The train brakes will apply automatically
b)Apply A9 and release after train comes to stop
c) Keep A9 in Emergency position until the trouble is rectified.
d)Apply loco brakes alone

55) In IRAB-1 brake system conjunction working of loco brakes takes place through (b)
a)28 VB valve b)C3WDV c)A1 differential valve d)VA1B control valve

56) In MU trailing loco if 3/4" coc alone is kept in open position (d)
a)BP will not destroy b)BP will not create up to 5.0 kg/cm2
c)Loco brakes will not apply d)BP will destroy only in emergency

57) If SA9 COC is closed in working control stand (a)
a) loco brakes will not apply b) conjunction brake will not apply
c) loco brakes will apply d)Bp will not create

58) Location of C3W DV in IRAB brake system is (b)
a) B- control stand b) Nose compartment c) Under truck d) A-control stand

59) If brake system coc is kept in closed position. (c)
a)BP pressure will not create b)FP pressure will not create
c)Both a and d d)MR pressure will not indicate

60) In IRAB1 brake system conjunction brake pressure is (b)

a) 1.6kg/cm2 b)1.8kg/cm2 c)Both a&b d)None

61) In ALCO locos turbo super charger, turbine is rotated by (c)
a)Gears b)Motor c)Exhaust gas d)Clutch

62) Main reservoir safety valve is set at _____KG/cm2 (a)
a)10.5 b)8 c)9 d)9.5

63) Bogie configuration of WDG4 Locomotive is (a)
a) CO-CO b) Bo1 Bo 1 c)BO-BO d)BU-BU

64) Axle Load of WDG4 Locomotive is (a)
a) 20.5 T b)22.5T c)25T d)19.5T

65) Axle Load of WDP4 Locomotive is (d)
a) 20.5 T b)22.5T c)25T d)19.5T

66) In WDG4 loco Hand brake is applied on Wheel Nos._____ (c)
a) L4,L5 b)L2,R2 c) R4,R5 d)R2,R3

67) Primary stage suspension in WDG4 is accomplished by _____ (b)
a)Shock absorber b)helical coil spring c)Damper d)Load pads

68) Secondary stage suspension is accomplished by_____ (a)
a)Load pads b)Damper c)rubber compression springs d)helical coil spring

69) To avoid separation of the truck/bogie assembly from the locomotive in case of derailment and to provide a means of lifting the truck/bogie assembly along with the car body is accomplished by (b)
a)Hooks b)Safety links c)Lateral shock absorber d)Springs

70) In WDG4 soft primary suspension is made up of ____ No of coil journal springs (d)
a)24 b)6 c)8 d)12

71) The un sprung weight of the locomotive car body is transferred directly to the truck/bogie frame through _____ (b)
a)Four Helical springs b)four rubber compression spring assemblies.
c)Four Shock absorber d)Four coil springs

72) Traction Motor gear ratio for GT46MAC is (c)
a)17:77 b)18:90 c)17:90
d)16:90

73) WDG4 Loco is provided with_____ type of bogie (a)
a) three-axle bolster-less bogie b)Tri mount c) Fabricated d)Flexi coil

74) Reduction in BP pressure causes __ (c)
a) Brakes release b)Brakes slow release
c) Brakes application d)MR pressure increasing

75) How many kinds of Brakes are provided on Diesel locomotive? (a)
a) 5 b) 10 c) 11 d) 9

76) "_____ is the main power supply of CCB for the CCB system." (b)
a) DCU b)VCU c)PCU d)DVR

77) In WDG4 loco max. Brake cylinder pressure is ___Kg/Cm2 (d)
a)3.8 b)3.2 c)2.2 d)5.2

78) CCB fault code for Brake Pipe Leakage Failure _____ (c)
a) 6A b)6C c)6B d)6D

79) Emergency brake application is accomplished by___ valve provided at the lower left of each console (a)
a)D 1 emergency valve b) Independent brake valve
c)Direct Brake valve d)companion emergency brake

80) EPA 1 is a printed circuit board(PCB) Controls (d)
a)Brake Cylinder b) BP pressure
c)Direct brake controls d)Auto brake application(EQ Reservoir)

81) EPA 2 is a printed circuit board(PCB) Controls (a)
a)Brake Cylinder b)BP pressure c) EQ. Reservoir d)MR pressure

82) EPA 3 is a printed circuit board(PCB) Controls (c)
a)Brake Cylinder b)BP pressure c)Direct brake controls d)MR pressure

83) MRPT-Main Reservoir Pressure Transducer reads pressure ____ between (b)
a)MR1&MR2 b)MR1 pressure c)MR2 pressure d)FP pressure

84) The air brake system, trips locomotive control system whenever _____relay initiates a safety control or emergency air brake application. (a)
a)PCR b)DMR c)WSR d)SR

85) The dead engine cutout cock, mounted on the air brake rack at the front of the locomotive, limits air braking effort on a locomotive being hauled dead in a train. When the cutout cock is set for a dead locomotive, the pressure regulator Charges (c)
a)MR2 to 5kg/cm2.
b)Brake cylinder
c) MR2 at 1.76kg/cm2 from the brake pipe

d) limiting brake cylinder pressure to 1.76kg/cm2

86) The EM2000 reads main reservoir air pressure from _____ transducer. (d)
a)BPT b)BCT c)ERT d)MRPT

87) What is the code for Brake pipe control failure in self test ? (b)
a)8A b)6A c)10A d)22A

88) What is the code for Brake pipe leakage failure in self test? (a)
a)6B b)10B c)6F d)6S

89) What is the function of KE valve in CCB system in WDPG4 locomotive? (a)
a)Provides pneumatic back Up b) Creation of BP c)Creation of FP
d)Emergency application

90) In HHP locos, why Maximum of 5.2kg/cm2 brake cylinder pressure is used in place of 3.5kg/cm2 as in conventional locos ? (c)
a)High horse power loco b)Speed is more c)A single shoe system is used
d)To have effective brake power

91) After cooler cooled air in air inlet casing is also called as (d)
a)Control Air Pressure b)Vacuum Control Air Pressure c)HS4 pressure
d)Booster Air Pressure

92) N 1 Reducing valve/Limiting valve is located in (c)
a)Radiator room b) Compressor room c)Nose compartment d)Rear compartment

93) The exhaust manifold is connected to _____part of the TSC. (a)
a)Gas Inlet Casing b)Intermediate Casing c)Turbine Casing d)Blower Casing

94) Where the booster air pressure stored in Two stroke engine? (a)
a) Air Box b) Manifold c) Tank d) MR

95) De-Energizing of MV-CC means (c)
a) Unloading/unloading of compressor b) Unloading of compressor
c)Loading of compressor d) Tripping of Micro Air breaker

96) Loading and unloading of compressor is controlled by _____ in WDG4/P4 (a)
a)MVCC b)EPG c) RGCP d)None of the above

97) MR1 & MR2 are equipped bottom mounted automatic drain blow down valve. These are used to remove condensate from the main reservoirs. The valves are normally air actuated, and gets operated each time the _____ (a)
a)the compressor is unloading. b)When penalty brake applied c)the compressor is loading. d)Micro Air breaker trips

98) After cranking, allow a minimum of _____minutes for starter motor cooling before attempting another engine start. (c)
a)20 b)10 c)2 d)5

99) Do not crank engine for more than _____ with starting motors in HHP (d)
a) 30seconds b) 1minutes c) 10seconds d) 20 seconds

100) The dN value represents _____ (d)
a)The amount of speed b)The amount of load c)The amount of tourque
d)the amount of wheel slip the system will permit

101) Capacity of Lube oil system of WDP4 class Locomotive is _____ liters (a)
a)1457 b)900 c)1050 d)1150

102) 8th notch speed of WDP4 Engine_____ RPM (c)
a)1050 b)1000 c)954 d)915

103) Buffer Height of WDP1 --------- (b)
a)1105 mm to 1000 mm b)1105 mm to 1030 mm c)1105 mm to 1090 mm
d)1125 mm to 1030 mm

104) Chemical added in loco coolant water ------ (d)
a) Indion 1345 b) Indion 1244 c) Indion 1245 d) HP power cool

105) FTTM driven with (c)
a) Electric motor. b)Belts. c) Gear d)Hydraulic pressure

106) Gear ratio of WDG3A is: (a)
a)18:65 b)17:77 c)18:90 d)22:80

107) How many No. of batteries in WDP4 Locomotive (b)
a)8 b)10 c)4 d)6

108) HP of WDM3A is: (d)
a) 1400 b)1800 c)2400 d)3100

109) Latest modified lube oil cooler is of _____type in WDM3A (b)
a) Drum b) plate c) Paper d)Roll

110) Low idle RPM of WDP4 engine is _____ (b)
a) 210 b)200 c)220 d)215

111) Lube Oil capacity of Compressor in WDP4 is _____ liters (c)
a) 9 b) 8 c) 10 d) 12

112) Maximum continuous current of Traction Alternator is_____ Amperes (b)
a)1200 b)1250 c)1150 d)1050

113) Maximum speed of WDP4 class Loco motive is ____ kmph (c)
a)140 b)150 c)160 d)180

114) Maximum rectified output voltage of Auxiliary Alternator is_____ volts (a)
A) 74 b)75 c)72 d)70

115) Maximum rectified output voltage of Companion Alternator is_____ volts (b)
a) 250 b)230 c)200 d)110

116) Maximum rectified output voltage of Traction Alternator is_____ volts (d)
a)2400 b)2500 c)2700 d)2600

117) Minimum continuous speed at Maximum tractive effort of WDP4 Locomotive is _____ kmph (d)
a)15.5 b)20 c)10.0 d)22.5

118) N1 reducing valve/Limiting is used to control _____ pressure (c)
a)BP pressure b)FP pressure c)Control Air Pressure d)BC pressure

119) HP of WDP4 Loco motive is _____ HP (a)
a)4500 b)3900 c)3950 d)3939

120) Normal idle RPM of WDP4 Engine is _____ (b)
a)290 b)269 c)250 d)296

121) Rail Guard height of WDP1 is _____ (d)
A)120mm b)90mm c)30mm d)101mm

122) The coupling between right angle gear box and radiator fan is (a)
a) Universal Coupling b) love-joy coupling c) CBC coupling d) Cam gear

123) In Alco loco Turbo supercharger is driven by (b)
a)Cam gear b)Exhaust gasses c)Crank shaft d)AC motor

124) Type of Water Pump in WDP4 _____ (c)
a)AC motor pump b)Air driven pump c)Centrifugal Pump d)Gear pump

125) WDP1 loco transmission is _____ (b)
a) DC b)Electrical c)Mechanical d)Both B&C

126) WDP4 OSTA tripping rpm is: (c)
a) 1155 ± 20 b) 1125 ± 20 c) 1045 ± 20 d) 1100 ± 20

127) What is the minimum clearance required for wheel to brake block during release (a)
a)10mm b)8mm c)6mm d)4mm

128) What is the piston travel of brake cylinder in WDM3A loco? (c)
a)60 to 85 cm b)85 to 95 cm c) 95 to 105 cm d)90 to 100 cm

129) In WDG3A locomotives 3/4" coc (BP coc) is located in/at (a)
a)Nose compartment b)Driver cab c)Short hood control stand d)None of the above

130) One of the following is the equipment in Nose compartment (c)
a)MR1 b)MR2 c)Control air pressure reservoir d)All the above

131) "D" solenoid in the Governor is also called_____ (a)
a) Shutdown solenoid b) Cranking solenoid c)Tripping solenoid d)Safety solenoid

132) _____ circuit breaker establishes local control with power from Locomotive battery or Auxiliary generator to operate heavy duty switch gear, magnet valves, contactor, blower and miscellaneous relays (d)
a)AGFB b)MCB c)GF d) Local control

133) In WDG4 loco, Current rating of Starting fuse_____ (d)
a)600 amps b)1000 amps c)500 amps d)800 amps

134) How many position does PRIME/START switch has_____ (a)
a)3 b)2 c)1 d)4

135) if the LR % is _____, EM2000 is reducing power output because the engine's capabilities are less than the load being requested. (b)
a)less than 200 b)less than 100 c)More than 100 d)less than 500

136) Maximum starting effort of WDG4 is_____ (b)
a)120T b) 54T c)22T d)44T B

137) Purpose of BWR (brake warning relay) is to (a)
a)To cut out Dynamic brake in case of Over current
b)Protect Dynamic brake grid
c)Ensure working of Dyn braking
d)All the above

138) Purpose of TEL (Tractive effort limit)Relay in WDG4 Locos is (d)
a)To limit tractive effort to 200KN or 20T b)To limit tractive effort to 250KN or 25T
c)To limit tractive effort to 150KN or 15T d)To limit tractive effort to 294KN or 29.4T

139) Shutting down of all diesel engines in a consist is accomplished ___ relay(c)
a)DMR b)GCR c)SDR d)FLR

140) The functioning of VCU is _____ (b)
a)to reduces 73.5 V DC to filtered 25 V DC to CRU b)to reduces 73.5 V DC to

filtered 24 V DC to CRU c)to reduces 72 V DC to filtered 25 V DC to CRU d)to reduces 110 V DC to filtered 25 V DC to CRU

141) The main functions of EM2000 computer is (d)
a) Logic b) Excitation c) Display d)All of the above

142) The part of the ground relay system and connected to the companion alternator output, as well as the AC input to FCF (Firing Control Feedback) module is protected by__ (a)

a)AC control b) Companion Alternator output c)Fan circuits d)Radar circuits

143) In WDG4 loco Tractive effort is transferred from to TM to wheel is through __ (d)
a)Load pads b)side bearers c)coil springs d)Traction rods

144) How Crank case vacuum is maintained in WDG4/WDP4 engines(EMD) ? (c)
a)Blower b)Crank case exhauster c) Eductor d)No vacuum creation

145) Fuel oil primary filter is located at____ (d)
a)Generator Room b)Engine room c)Radiator Room d)Equipment rake

146) If the pressure across the primary filter element exceeds ___, a bypass valve begins to open, bypassing the primary fuel filter. (c)
a)10 PSI b)20PSI c)30PSI d)40PSI

147) When fuel oil pressure at the spin-on filters input rises _____PSI, the spin-on filters bypass valve opens fully and fuel bypasses the engine and return to fuel tank. (d)
a)50 PSI b)40PSI c)80PSI d)70PSI

148) In ALCO Locos Fuel oil crossover flexible pipe is located in (c)
a)Radiator room b)Nose compartment c)Power takeoff end d)Free end

149) What is the Fuel oil tank capacity in WDP1 locomotive in liters (c)
a)4000 b)5000 c)3000 d)2000

150) Fuel pump motor is not working though the all circuit breakers are switched ON, the immediate reason could be_____ (d)
a)ERF not closed b)R1 and R2 not picked up
c) GFC not picked up d)FPC not picked up

151) If white smoke is emitting from exhaust chimney, what could be the reason? (a)
a)Water mixed with fuel oil b)Governor oil mixed with fuel oil
c) Lube oil mixed with fuel oil d)None of these

152) What is the Fuel oil tank capacity in WDP4D locomotive in litres. (b)
a)6000 b)5000 c)3000 d)5500

153) How many Power Contactors are available in WDG4 Locomotive? (d)
a)7 b)9 c)8 d)0

154) _____ Number of brake blocks are provided on WDM2 (b)
a)16 b)24 c)32 d)22

155) The number of Brake cylinders provided on WDM2 locomotive (b)
a)6 b)8 c)10 d)12

156) WDG4 Engine idle RPM (c)
a)469 b)369 c)269 d)360

157) What is the maximum permissible speed of (designed for) WDG4 locomotives (b)
a)150 kmph b) 120 kmph c) 100 kmph d) 75 kmph

158) H ow many Lube oil pumps available in EMD engine? (d)
a) 5 b) 7 c) 9 d) 4

159) In HHP Locos lube oil filter drum is located at _____ (b)
a) Generator Room b)Equipment rake c)Engine roomd)Radiator Room

160) LOPS setting of WDG4 loco in 8^{th} Notch is (a)
a)25-29 psi b)8-12 psi c)12-20 PSI d)20- 30PSI

161) LOPS setting of WDG4 loco in idle is (b)
a)10 - 12 PSI b)8-12 psi c)12-20 PSI d)20- 30PSI

162) Pre lubrication is required if an engine that has been shut down for more than--- hours (a)
a) 48 b)24 c)12 d)8

163) The purpose of Turbo lube pump in WDP4 Locomotive before cranking is (c)
a) To lubricate the Turbo b)To remove the residual heatc)To lubricate turbo bearing d)To lubricate crank shaft

164) Turbo lube pump should be running for ____minutes after engine is shutdown if engine was running at 5th notch and higher for 60minutes prior to engine shut down.(b)
a)15 b)35 c)20 d)45

165) Lube oil dipstick gauge of WDG3A is having _____ liters capacity. (c)
a)400 b)380 c)600 d)500

166) _____ Number of brake blocks are provided on WDG4 (b)
a) 16 b)12 c)32 d)22

167) What is the Lube oil capacity (in liters) in WDG4 locomotives? (d)
a)760 b)910 c)1100 d)1457

168) In Alco Locos Lube oil Cooler is located in_____ (a)
a)Radiator room b) Compressor room c) Generator room d)Under truck

169) Lube oil dip stick gauge capacity in WDG4 locos is _____.liters. (c)
a)400 b)550 c) 625 d)700

170) In ALCO Locos Lube oil Filter drum is located in_____ (d)
a)Nose compartment b)Generator room c)Engine block d)Radiator room

171) What is the Safety Device provided in the Lube oil system ? (c)
a) GFOLR b) OSTA c) LLOB d)LWS

172) When LLOB trips, the engine will_____ (b)
a) Raise b) Shutdown c) Comes to Idle d) Hunting

173) Electro Pneumatic Governor (EPG) is located in (d)
a) Compressor room b)Radiator room c)Nose compartment d)Rear compartment

174) From where the control air pressure will get air pressure (b)
a)MR2 b)MR1 c)BKTs d)J filter

175) Main Reservoir (compressed air pressure) Unloading will takes place at_kg /cm2 (c)
a)8 b)9 c)10 d)11

176) MR Cooling coils in WDG4 is located at (c)
a)Under truck b)Engine block c)Radiator room d)Compressor room

177) MR safety valve is set at_____ Kg/Cm2 pressure. (c)
a) 8 b)9 c)10.5 d)9.5

178) The compressed air enters to MR1 tank through (c)
a)MR Safety valve b)MR2 c) Cooling Coil d)3 / 4" cutout cock

179) Manual sander will be working when the unit speed is up to (b)
a)30.6kmph b)19.5kmph c)30kmph d)25kmph

180) Manual Sanding is cutout when the locomotive is operating in power/wheel creep mode, and moving at speeds above (c)
a)30kmph b)10kmph c)19.5 km/h d)15kmph

181) Maximum Stall Tractive Effort of WDG4 Locomotive is (a)
a) 540KN b) 400KN c) 200KN d) 250KN

182) A pressure cap, which is located on the water tank filler pipe, opens at approximately. (d)
a)25 PSI b)15 PSI c)20 PSI d)7 PSI

183) Cooling Water capacity in WDM2 locomotive is_____ liters. (d)
a)900 b)910 c)1300 d)1210

184) How many water pumps available in EMD locomotive engine? (d)
a)1 b)4 c)3 d)2

185) If the coolant temperature reaches ____degree C, the locomotive will go to throttle six limit. (a)
a) 95 b) 92 c) 85 d) 100

186) In WDM2 engine, the Water pump is driven by (c)
a) Motor b) Pulley c) Gear d) Belts

187) EPD is Located at _____ (a)
a) Engine Accessories Room b) Engine room c) Radiator Room d) Equipment rake

188) The EM2000 will consider a temperature probe failed if it reads _____ (b)
a)less than -155 degrees C or greater than 150 degrees C b)less than -55 degrees C or greater than 150 degrees C c)more than -55 degrees C or greater than 150 degrees C d)less than -55 degrees C or greater than 250 degrees C

189) In HHP loco the system maintains the coolant temperature within a predetermined range from (a)
a)79° C to 85° C b) 85 to 95° C c) 92 to 100 ° C d) 72 to 80 ° C

190) Water leaking continuously from water telltale pipe (b)
a) Dummy it and work further b) Fail the loco duly observing the water level
c) Do fast pumping d) Work on lower notches

191) What is the indication for blown radiator fan fuse? (c)
a)LED b)Buzzer c)Fuse blown out Indicator will project out d)Message

192) Hot engine alarm (HEA) will come at _____°Cin WDG3A locos (c)
a) 60 b) 70 c) 90 d) 80

193) During one of the following occasions Hot engine alarm indication will get (c)
a) Continuous 8th notch working b) Excess load
c) Water pump not working d) Full water in expansion tank

194) LWS is connected to (b)
a) Water left side return header b) Water expansion tank
c) Water right side return header d) All the above

195) _____will be switched on automatically in loco, during accidents (b)
a) Head light b) Auto flasher light c) Marker light d) Doom light

196) FP pressure in loco shall be _____ and in BV _____ kg/Sq.cm. (c)
a) 5.0, 4.8 b) 5.0, 4.7 c) 6.0, 5.8 d) 6.0, 5.7

197) What is the color code for the BP pressure pipe? (c)
a) Black b) Red c) Green d)Yellow

198) DV isolating handle in _____position indicates DV is in isolated position. (b)
a) Vertical b) Horizontal c) 60 degrees d) None of these

199) DV isolating handle in_____position indicates DV is in working position. (b)
a) Horizontal b) Vertical c) 45 degrees d) None of these

200) When a Train engine is disabled in mid section, Driver should ask for relief engine if he expects that the train engine cannot be put in working order within ___minutes. (a)
a) 05 b) 10 c) 15 d) None of the above

201) When the speedometer of a running train engine becomes defective (b)
a) Fail the locomotive b) Work the train by reducing 10% speed from Booked speed c) Work further with 50 kmph d) Ask for the relief engine

202) The speed restriction that has to be observed by a LP when headlight of engine fails on BG is _____ kmph. (c)
a) 50kmph b) 30kmph c) 40kmph d) MPS

203) Whenever stopped on gradient for any reason it is essential to apply the _____ brakes (c)
a) SA.9 b) A.9 c) A9 & SA9 d) Hand brake

204) How much pressure should be ensured in the engine and BV before staring air brake train ? (c)
a) 6cm2kg,4.9 kg/cm2 b) 5.2kg/cm2, 4.7 kg/cm2
c) 5kgcm2, 4.8 kg/cm2 d) 4.8kg/cm2, 5kg/cm2

205) For any reason, a train is stalled on gradient, the hand brakes of Locomotive and formation shall be applied if stoppage is more than (d)
a) 5 minutes b) 10 minutes c) 20 minutes d) none

206) How the notching up is to be done in Undulating terrain? (c)
a) Repeatedly changing the notches b) without notching up
c)Constant notches to be maintained D)none of the above

207) How would you work the train, if the loco wheel develops skid mark more than 50 mm length in section? (b)

a) Fail the loco at site b) Clear the section with less than 30 KMPH & inform PRC
c) Work with 40 KMPH d) None

208) Identify the problem in brake power ? (d)
a)A9 coc in both control stand in open condition b)MU2B in Lead position & 3/4" coc in open in Rear loco c)For loaded rake the Load/empty device handle in empty direction d)All the above

209) If MU locos get parted through which valve brake will apply in rear loco? (c)
a) SA-9 b)A-9 c) F1 Selector d) N1 Reducing

210) The effective Brake Power in case of Mail/Express at the originating station should be____% and enroute can be not less than _____% (c)
a) 100, 85 b) 100, 100 c) 100, 90 D) 100, 95

211) The following shall not be used for extinguishing fires on electrical equipment. (c)
a) Dry chemical powder b) foam c) water d)none of these

212) What acts LP/ALP should not do while approaching /passing signals /stations to avoid SPAD ? (d)
a)Calling out signals
b) Taking exchange signals with station staff/ Guard
c) Writing Log book, memo books, packing their belongings and attending CUG/walkie talkie
d) b & c

213) what are the present VCD cyclic timings? (a)
a)60, 8 and 8 seconds b)60,17 and 17 seconds c)170, 17 and 17 seconds
d)65,8 and 8 seconds A

214) What combination of trains are Permitted for running long haul train? (d)
a)Empty/Empty b)loaded/Empty c)Loaded/Loaded d)All the above

215) What condition is to be observed in loco by LP to avoid stalling? (c)
a)COC's b)Lube oil pressure c)Load meter over shooting
d)Conjunctional brake working

216) What is the position of ¾ coc's in both loco while carrying dead locos? (b)
a)close/close b)open/close c)Both open d)none of the above

217) What is the position of C3W/DV in both locos while carrying dead loco? (a)
a)open/open b)close/open c)Both close d)open/close

218) What is the position of MU2B & BP isolation COC in banker loco? (a)
a)Lead & close b)Trail & open c)Trail & close d)None

219) What is to be done by LP whenever the train engine is changed? (d)
a)Air brake continuity b)feel test c)Brake power d)All

220) What is to done by LP, if he feels the brake power of his train is poor ? (d)
a)Re validation of BPC b)Air continuity c)Stop the train at next station & give all concern message d)Stop the train next station, check the brake power % age & act accordingly

221) What precaution should be taken for conducting Air brake self test in GM locos? (d)
a) Secure loco
b)Secure formation
c)Detach loco and secure
d)Secure both, close BP & FP COC of loco towards formation.

222) What should be done first for changing console in WDG 4 / WDP 4 locos ? (a)
a)Disable working control stand & enable non working control stand
b)Enable working control stand & disable non working control stand
c)As per convenience
d)None of the above

223) What should be the position of BP & FP angle cocks in an DV isolated coach/wagon of an air brake train ? (a)
a) Open b)Close c)None d)BP close & FP open

224) What should be the position of Lead /Trail switch in trailing loco of WDG4/WDP4 MU ? (a)
a) Trail b) Lead c) Both d) Off

225) What Test should be done by Crew for Passenger Train detained more than 30 minutes? (b)
a) Air brake Self Test b) Air Continuity test c)Brake feel test d)Brake Power test.

226) What will happen when isolation handles of 20 no. DVs in a formation of 58wagons are in isolation condition ? (c)
a)No change in brake power b)load will be reduced
c)Poor brake power d)increase the brake power

227) When flasher light become defective speed of the train shall not exceed ____.(d)
a) 20Kmph b) 30Kmph c) 40kmph d) fail the loco

228) Which coc's should be ensured in open condition in both control stand before perform shunting in WDM2? (b)
a) A-9 b) SA-9 c) Both A9 & SA 9 d)None of the above

229) While carrying dead loco----------to be ensured (d)
A)Conjunctional brake application in rear loco b)conjunctional brake application in leading loco c)Conjunctional brake in both loco's d)All the above

230) While taken over charge of Loco, if Flasher light glows but does not flash/blink, what action would you take? (a)
a) Fail the loco b) Will work to nearest shed
c) Inform PRC & work further. d) Work normally

231) During engine starting if engine is cranking, Firing, Over speeding, OSTA Tripping and Engine shutting down the reason may be (b)
a)Main Generator failure b) Taco Generator failure
c)Exciter Generator failure d) Auxiliary Generator failure

232) A goods train having 56 wagons, the FP pressure in engine shall be ___ and in BV _____ kg/sq.cm. (d)
a)5.0, 4.6 b)5.0, 4.8 c)4.8, 5.0 d)6.0, 5.8

233) A goods train having 58 wagons, the BP pressure in loco shall be ____and in BV_____ kg/Sq.cm. (d)
a)5.0, 4.5 b)6.0, 5.8 c)5.0, 4.0 d)5.0, 4.7

234) A Railway servant directly connected with train passing duties shall not consume alcoholic drinks within _____hours before commencement of duty. (c)
a)2 b)5 c)8 d)10

235) Loco pilot should exchange alright signals with the station staff to ensure____(d)
a)To make the station staff alert b)To tell the station staff that train crew are alert
c)To ensure the availability of station staff d)To ensure the train passing safely

236) By applying A-9 formation brakes are not applying, Reason might be___ (a)
a)A-9 COC in working control stand is in closed condition
b)Bogie COCs are in closed condition
c)Train running at excess speed
d)Last vehicle rear BP angle cock is in open condition

237) On run if Air Flow Indictor overshoots with jerk indicates_____ (d)
a)Air brake failure b)Loco failure c)Air flow indicator defective d)Train Parting

238) While working LE's Loco Pilot should _____ to Stop the Locomotive. (b)
a) apply A-9 brake b) apply SA-9 and Dynamic Brakes c) apply Hand brakes
d) close the throttle to zero.

239) Locos provided with Cast Iron brake blocks requires _____than the Locos provided with Composite brake blocks (a)

a)More braking distance b)Less braking distance c)frequent change of brake blocks d)BC pressure 3.8 kg/cm2

240) If train stopped in mid section on account of Loco Failure Loco pilot should do _____immediately (b)
a)Inform TLC/PCOR b)Put on Flasher Light, Apply A-9,SA-9, wooden wedges and secure formation. c)Ask for relief Loco d)Attend the Locomotive

241) Revised VCD cyclic timings are_____ (a)
a)60, 8 and 8 seconds b) 60,17 and 17 seconds c)170, 17 and 17 seconds d)65,8 and 8 seconds

242) While working LE's Loco pilot should check and ensure _____ before starting.(c)
a)Head light b)Flasher Light c)Brake Power physically and not moving of Loco up to 2nd Notch on application of SA-9 d)Marker Lights

243) Use of Dynamic Brake is_____ To raise the engine RPM (a)
a)To control the train and to maintain constant speed at PSR ,TSR and Loop lines
b)To nullify the conjunctional brakes c)To stop the train d) none

244) When LE loco brakes are not applying check (d)
a)SA9 COC b)MU2B c)BC COC & Pressure d)All

245) When loco working as banker the position of MU2B & BP isolation COC (a)
a)Lead & close b)Trail & open c)All d)None

246) Immediate action when BP is not destroying with A9 during controlling of train(b)
a)Open A9 COC in Non-working cont. standb)Apply D1 Emergency
c)Change the Control stand d)Adjust BP pressure

247) Important test should be done before leaving station for a train (c)
a)Brake feel test b)Brake power test c)Air continuity test d)All

248) What test must be done by LP while leaving station with what speed (a)
a)Brake feel test, 15 KMPH b)Brake power test, MPS c)Working of DB, 15 KMPH d)None

249) If an Air Brake train stopped on a gradient of 1/400 & above due to any reason, which brakes should be apply. (c)
a)SA 9 only b)A9 only c)SA 9 & A 9 d)Hand brake

250) After detaching Loco from formation which safety aspect should be checked before working LE. (c)
a)Continuity test b)Traction test c)Loco Brake power test d)leakage test

251) While TOC of Loco, If Flasher light glows but does no blink, what action would you take. (a)
a) Fail the loco b)Will work to nearest shed c)Change the bulb d)Work normally

252) How would you work the train if the loco wheel develops skid mark more than 50 mm between section? (c)

a) Fail the loco at site b)Work with 40 KMPH
c)Clear section below 30 KMPH d)None

253) After which check/restriction, non derailed vehicles of a train involved in accident be allowed for on-ward journey (b)

a) Without check b) After certified by TXR c)With 10% less speed d)80 KMPH

254) What immediate action would you take on noticing sudden drop of BP pressure on run ? (c)

a) Stop the train b) Contact Guard on VHF c) Switch on Flasher light
d)Inform PRC

255) When Head light becomes defective speed of the train shall not exceed ? (c)

a) 20 kmph b) 30 kmph c) 40 kmph d) 50 kmph

256) What should be done by LP for releasing proportional loco brakes during A9 application? (c)

a) Pressing BKIV foot pedal b) Application of DB c) Either A or B d) None

257) The lead /Trail switch position in console of WDG4/WDP4 working as MU trailing is (a)

a) Trail b) Lead c) Both d) None

258) If BP & FP pipes are wrongly connected ---- will fail. (b)

a) Loco is failed b) Formation Brakes c) Loco brakes d)All

259) What action should be taken by LP when loco fails on run in section? (c)

a) Clear section and stop b) Trouble shoot first c) Stop & secure first d) Inform PRC

260) In case of Brake binding in air brake wagon, what additional action would you take other than releasing of brake ? (a)

a) Isolate DV b) Isolate BC c) Isolate TP cock d) Close BP angle coc

261) What is the initial charging time approximately of a single pipe air brake train ? (c)

a) 10-15 minutes b) 15-20 minutes c) 20-25 minutes d) 25-30 minutes

262) What is the initial charging time approximately of a twin pipe air brake train ? (a)

a) 10-15 minutes b) 15-20 minutes c) 20-25 minutes d) 25-30 minutes

263) Are BP & FP angle cocks to be kept OPEN always in an isolated coach/wagon (a) of an air brake train ?
a) Yes b) No c) None of two above d) Above all

264) What would you understand if needle of air flow indicator comes down of a goods train in yard ? (c)
a) Full brake application by LP. b) Side angle coc closed
c) Loco side angle coc closed d) Brake application by GD

265) What precaution should be taken for conducting Air brake self test in GM locos?(d)
a) Secure loco b) Secure formation c) Detach loco and secure d) Secure both & don't detach from formation.

266) What should be done first for changing consol in WDG 4 / WDP 4 locos? (a)
a) Disable working control stand & enable non working control stand
b) Enable working control stand & disable non working control stand
c) As per convenience
d)None

267) If hot oil detector operates _____ (b)
a) Engine comes to Idle b) Engine will Shut down c) Load meter zero
d) No effect

268) Bail off is provided to release (b)
a) Direct brake application b) Conjunctional brake application c) Formation brakes
d) Both B and C

269) If battery ammeter is showing over charging, what may be the reason? (c)
a) BS open b) MB1 tripped c) Battery defective d) AGFB tripped

270) If BA shows over charging due to defective battery, the following action is to be taken? (a)
a) BS to be open b) Shut down the engine
c) Engine to be brought to idle d) No action required

271) If battery ammeter shows over charging, what may be the reason? (c)
a) BS open b) MB1 tripped c) VRP defective d) AGFB tripped

272) If BA shows over charging due to defective VRP, the following action is to be taken? (a)
a) AGFB off b) Shutdown the Engine c) Idle d) No action required

273) What is the purpose of VRP? (c)
a) To safeguard battery b) To safeguard control circuit

c) To maintain 72 V irrespective of engine speed d) To safeguard driver

274) If battery ammeter shows discharging, what may be the reason? (d)
a) AGFB Tripped b) VRP Fuse Blown out c) Cards Slack(BX ,BN) d) All

275) If battery ammeter shows discharging what should be checked on VRP? (b)
a) AGFB b) Fuse c) MB1 d) Battery Knife Switch

276) If Battery ammeter shows discharging and not rectified what is the action to be taken? (d)
a) Work for 4 Hours b) Do not Shut down c) Do not allow for Automatic Shut Down.
d)All of the above

277) What is the reason for battery ammeter showing ZERO? (a)
a) Battery Switch Open b) AGFB Tripped c) VRP Defective
d) AUX. GEN. Defective

278) If engine is not cranking what is the switches to be checked? (d)
a) Battery Knife Switch b) Engine Control Switch c) MUSD Switch d)All

279) If engine is not cranking which switch is to be checked in nose compartment?(a)
a) Battery Knife Switch b) Engine Control Switch c) MUSD Switch d) Start Switch

280) If engine is not cranking which switch is to be checked on the front panel? (c)
a) Battery Switch b) MUSD c) ECS d) GF Switch

281) If engine is not cranking which contactors are to be checked? (d)
a) FPC Contactor b) CK1 Contactor c) CK2 Contactor d) All the above

282) For engine cranking what should be MUSD & ECS position? (b)
a) RUN, RUN b) RUN, IDLEc) STOP, RUN d) STOP,IDLE

283) What should be checked if engine shutdown with over speed? (a)
a) OSTA b) SAR c) Governor Am phenol plug d) Fuel pump motor

284) What should be checked if engine shutdown on run with indication? (b)
a) OSTA b) LWS c) SAR d) Governor Am phenol plug

285) What happens if Amphenol plug is slack on run in WW governor loco? (a)
a) Engine Idle, Load meter zero b) Only Load meter zero c) Only engine idle d) Engine shutdown

286) When does AFL System operate? (d)
a) Fireman emergency b) ACP c) Guard application d) All the above

287) What is the effect of AFL operation? (d)
a) Engine comes to idle b) AFL Indication c) Buzzer d) All the above

288) What is the effect if A9 is applied in emergency position? (b)
a) AFL Operates b)Engine idle with full brakes c)Only loco brakes get applied
d)No effect

289) Which item is used to reset AFL? (a)
a) SW1 & SW2 b) SP1 & SP2 c) MCB1 & MCB2 d) MFPB1 & MFPB2

290) To reset only Buzzer what is the action required by the Driver? (c)
a) SW1 &SW2 b) SP1 &SP2
c) Switch On normal flasher light and SW1&SW2 Off d) All the above

291) To get quick charging of BP which should be operated? (b)
a) SW1 &SW2 b) SP1 & SP2 c) MCB1 & MCB2 d) MFPB1 & MFPB2

292) If AFL Malfunctions, what is the action to be taken? (b)
a) Tampering of pressure switches b) 171 Wire disconnection c) Pack DMR
d) Fail the loco

293) What should be the control air pressure? (a)
a) 5Kg/Cm² b) 6Kg.Cm² c) 8.5Kg/Cm² d)9.5Kg/Cm²

294) How do you adjust control air pressure? (c)
a) A9 Feed valve b) SA9 Feed valve c) Limiting Valve d) HS4 Valve

295) Improper control air pressure leads to (d)
a) Power Contactors fluttering b) Flash Over c) Power Ground
d) All the above

296) If Head light fails what is the action to be taken by the Drivers? (b)
a) Fail the loco b) Follow G&SR Rules
c) Work with classification lights d) Work normally

297) If engine shuts down with hot engine alarm which safety device operates? (b)
a) ETS b) LWS c) SAR d) OPS B

298) If engine is running with Hot engine alarm which safety device is operated?(c)
a) LWS b) OPS c) ETS d) SAR

299) BP pressure in Alco locomotive is _____ kg/cm² (b)

a) 3.5 b) 5 c) 6 d) 8

300) FP pressure in Alco locomotive is _____ kg/cm² (c)

a) 3.5 b) 5 c) 6 d) 8

301) Fuel oil relief valve is set at _____kg/cm² in Alco locomotive (b)

a) 4.5 b) 5 c) 6 d) 8

394. Tappet clearance in ALCO is _____ (c)

a) 0.010" b) 0.024" c) 0.034" d) 0.040"

302) Main Bearing elongation is _____ (d)

a) 0.010" b) 0.020" c) 0.030" d) 0.040"

303) Cylinder head torque is _____ ft-lb (c)

a)400 c) 500 c) 550 d) 600

304) Maximum Brake cylinder pressure with SA9 in WDG4 (d)

a) 4 kg/cm² b) 3.5 kg/cm² c) 1.8 kg/cm² d) 5.2 kg/cm²

305) Maximum Brake cylinder pressure with A9 (c)

a) 5 kg/cm² b) 3.5 kg/cm² c) 1.8 kg/cm² d) 5.2 kg/cm²

306) Horse power of WDG3A loco is _____ (c)

a)2600 b) 3600 c) 3100 d) 4000

307) Horse power of WDG4 loco is _____ (b)

a)2600 b) 4500 c) 3100 d) 4000

308) Horse power of WDM2 loco is _____ (a)

a) 2600 b) 4500 c) 3100 d) 4000

309) Control air pressure in Alco loco _____ kg/cm² (c)

a)3.5 b) 4 c) 5 d) 6

310) Number of Main bearings in WDG3A locomotive (c)

a)7 b) 8 c) 9 d) 10

311) Fuel tank capacity in WDG3A loco is _____ liters. (c)

a)5000 b) 5500 c) 6000 d) 4000

312) Pinion to Bull gear ratio in WDM2 loco is _____ (b)

a)18:74 b) 18:65 c) 17:77 d) 17:90

313) Pinion to Bull gear ratio in WDG3A loco is _____ (a)

a)18:74 b) 18:65 c) 17:77 d) 17:90

314) Pinion to Bull gear ratio in WDP4 loco is _____ (c)

a) 18:74 b) 18:65 c) 17:77 d) 17:90

315) Pinion to Bull gear ratio in WDG4 loco is _____ (d)

a)18:74 b) 18:65 c) 17:77 d) 17:90

316) WDM3A loco is having ____ no. of brake blocks (b)

a)12 b) 24 c) 36 d) 16

317) Pinion to Bull gear ratio in WDM3A loco is _____ (b)

a)18:74 b) 18:65 c) 17:77 d) 17:90

318) In WDM3A loco FTTM is driven with _____ (b)

a)Belts b) Gear c) Hydraulic pressure d) Electric motor

319) In WDM3A loco RTTM is driven with _____ (a)

a)Belts b) Gear c) Hydraulic pressure d) Electric motor

320) Type of transmission in WDM3A loco (b)

a)DC-AC b) AC-DC c) DC-DC d) AC-AC

321) Type of transmission in WDG3A loco (b)

a)DC-AC b) AC-DC c) DC-DC d) AC-AC

322) Type of transmission in WDG4 loco (d)

a)DC-AC b) AC-DC c) DC-DC d) AC-AC

323) Type of transmission in WDP4 loco (d)

a)DC-AC b) AC-DC c) DC-DC d) AC-AC

324) In Alco loco LWS is located in _____ (c)

a) Nose Compartment b) Driven cabin c) Compressor Compartment

(d) Radiator room

325) No. of positions in A9 valve (d)

a)2 b) 3 c) 4 d) 5

326) In Alco locomotive Battery knife switch is located in _____ (a)

a) Nose Compartment b) Driven cabin

c) Compressor Compartment d) Radiator room

327) Type of engine in Alco loco (c)

a)2 Stroke b) SI c) 4 Stroke d) None

328. Torque value of water jumper in Alco loco (in ft-lb) (b)

a)50 b) 75 c) 100 d) 125

329. No. of positions in SA9 valve (b)

a)5 b) 2 c) 3 d) 4

330. In Alco loco fuel oil regulating valve is set at ____ kg/cm² (b)

a)3 b) 4 c) 5 d) 6

331. In Alco loco lube oil relief valve is set at ____ kg/cm² (d)

a)6 b) 7 c) 8 d) 9

332. In WDG3A loco max. exhaust gas temperature is _____ ºC (b)

a)500 b) 525 c) 600 d) 625

333. In Alco loco compressor is cooled by _____ (c)

a)Oil b) Water c) Air d) None

334. In WDG3A loco compression ratio is _____ (c)

a)12.5:1 b) 15:1 c) 11.75:1 d) 16:1

335. VCD penalty takes place after _____ sec. (b)

a)86 b) 76 c) 96 d) 68

336. MR safety valve is set at _____ kg/cm² (d)

a)8 b) 8.5 c) 10 d) 10.5

337. In Alco loco EPG is located in _____ (c)

a)Driver cab b) Nose compartment c) Compressor compartment d) Radiator room

338. In AC-DC locomotives engine is cranked by (d)

a)Main Generator b) Auxiliary Generator c) Exciter Generator d) Auxiliary & Exciter Generator

339. In Alco Traction Motor gear case is having ___ no. of bolts (c)

a)5 b) 6 c) 7 d) 8

340. To find out BP leakage in the formation _____ is provided (b)

a)BP gauge b) Air Flow Indicator c) FP gauge d) Spy glass

341. In Alco loco, if water level comes down below 1" from bottom of tank ____ safety device will operate (c)

a) PCS b) OSTA c) LWS d) LLOB

342. Wheel numbers to which brake blocks get applied when hand brake is applied in WDG3A loco (b)

a)L1,L2 b) R1,R2 c) L1,R1 d) L2,R2

343. Dust exhaust motors are available for _____ type of filters (b)

a)Car body b) Cyclonic c) Air maize d) None

344. The safety device provided in brake system is _____ (b)

a)LLOB b) PCS c) LWS d) OSTA

345. In Alco loco Sanders are operated through ____ pressure (a)

a) MR1 b) MR2 c) FP d) None

346. Rectifier converts (a)

a)AC to DC b) DC to AC c) DC to DC d) AC to AC

347. Inverter converts (b)

a)AC to DC b) DC to AC c) DC to DC d) AC to AC

348. Idle RPM of WDG3A locomotive is (b)

a)350 b) 400 c) 450 d) 500

349. 8th RPM of WDG3A locomotive is (d)

a)400 b) 950 c) 1000 d) 1050

350. Low Idle RPM of WDG3A locomotive is (a)

a)350 b) 400 c) 450 d) 500

351. Fabricated bogie is available in _____ locomotive (c)

a)WDM3A b) WDG4 c) WDG3A d) WDP4

352. Type of bogie available in Alco loco locomotive (b)

a)BO-BO b) CO-CO c) BO1-1BO d) HTSC

353. Horse power of WDM3D locomotive is (c)

a)2600 b) 3100 c) 3300 d) 4000

354. In HHP locomotive engine cylinders are cooled by (c)

a) Water b) Oil & water c) Super charged air & Water d) None

355. Type of bogie available in WDG4 locomotive is (c)

a)Tri mount b) Fabricated c) HTSC d) None

356. Number of brake cylinders in WDM3A locomotive is (b)

a)4 b) 8 c) 10 d) 12

357. Reduction in BP pressure causes (c)

a)Brakes release b) Brakes slow release

c) Brakes application d) MR pressure increasing

358. WDM3A loco is having ____ no. of brake blocks (b)

a)12 b) 24 c) 36 d) 16

359. Pinion to Bull gear ratio in WDM3A loco is _____ (b)

a)18:74 b) 18:65 c) 17:77 d) 17:90

360. In Alco loco fuel oil relief valve is set at ____ kg/cm² (a)

a) 5 b) 2 c) 3 d) 4

361. In Alco loco fuel oil regulating valve is set at ____ kg/cm² (b)

a) 3 b) 4 c) 5 d) 6

362. VCD penalty takes place after _____ sec. (b)

a) 86 b) 76 c) 96 d) 68

363. MR safety valve is set at _____ kg/cm² (d)

a) 8 b) 8.5 c) 10 d) 10.5

364. In Alco loco EPG is located in _____ (c)

a) Driver cab b) Nose compartment

c) Compressor compartment d) Radiator room

365. In AC-DC locomotives engine is cranked by (d)

a) Main Generator b) Auxiliary Generator c) Exciter Generator

d) Auxiliary & Exciter Generator

366. In Alco Traction Motor gear case is having ___ no. of bolts (c)

a)5 b) 6 c) 7 d) 8

367. To find out BP leakage in the formation _____ is provided (b)

a)BP gauge b) Air Flow Indicator c) FP gauge d) Spy glass

368. In Alco loco, if water level comes down below 1" from bottom of tank _____ safety device will operate (c)

a)PCS b) OSTA c) LWS d) LLOB

369. Wheel numbers to which brake blocks get applied when hand brake is applied in WDG3A loco (b)

a)L1,L2 b) R1,R2 c) L1,R1 d) L2,R2

370. Dust exhaust motors are available for _____ type of filters (b)

a)Car body b)Cyclonic c) Air maize d) None

371. The safety device provided in brake system is _____ (b)

a)LLOB b) PCS c) LWS d) OSTA

372. In Alco loco Sanders are operated through ____ pressure (a)

a)MR1 b) MR2 c) FP d) None

373. Rectifier converts (a)

a)AC to DC b) DC to AC c) DC to DC d) AC to AC

374. Inverter converts (b)

a)AC to DC b) DC to AC c) DC to DC d) AC to AC

375. Idle RPM of WDG3A locomotive is (b)

a)350 b) 400 c) 450 d) 500

376. 8th RPM of WDG3A locomotive is (d)

a)400 b) 950 c) 1000 d) 1050

377. Low Idle RPM of WDG3A locomotive is (a)

a)350 b) 400 c) 450 d) 500

378. Fabricated bogie is available in _____ locomotive (c)

a)WDM3A b) WDG4 c) WDG3A d) WDP4

379. Compressor lube oil pump is driven by (a)

a) Chain b) Gear c) Belt d) Motor

380. The exhaust manifold is connected to the _____ part of TSC (a)

a)Gas Inlet casing b) Intermediate casing c) Turbine casing

d)Blower casing

381. If white smoke is emitting from exhaust chimney, what could be the reason (a)

a) Water mixed with fuel oil b) Governor oil mixed with fuel oil

c) Lube oil mixed with fuel oil d) none of these

382. What is the Rundown test timing (in seconds) of Napier Turbo? (b)

a)120 to 200 b) 25 to 65 c) 90 to 180 d) 200 to 280

383. Water leaking continuously from water telltale pipe (b)

a) Dummy it work b) fail the loco

c) Do fast pumping d) work on lower notches

384. The rundown test of Napier is to be conducted on ____ notch (a)

a)Idle b) 4 c) 6 d) 8

385. Hot Engine Alarm will come at _____ °C in WDG3A locos (c)

a)60 b) 70 c) 90 d) 80

386. Electro Pneumatic Governor is located in (a)

a)Compressor room b) Radiator room c) Nose compartment d) none

387. During MR efficiency test in WDG3A loco, ____ kg/cm² MR pressure should be created within _____ minutes. (c)

a)7, 5 b) 8, 4 c) 10, 3 d) 5, 5

388. No. of Brake cylinders in Alco loco (b)

a)4 b) 8 c) 12 d) 10

389. In Alco loco Lube oil filter drum is located in (a)

a) Radiator Room b) Generator room

c) Nose compartment d) Engine room

390. How many kinds of Brakes are provided in WDG3A/WDG4 loco (b)

a) 2 b) 5 c) 4 d) 6

391. LWS is connected to (b)

a)Water left side return header b) Water expansion tank

c)Water right side return header d) All the above

392. MR pressure unloading takes place at _____ kg/cm² (a)

a)10 b) 8 c) 12 d) 10.5

393. From where the control air pressure gets charged (a)

a) MR1 b) MR2 c) FP d) BP

394. Lube oil dipstick gauge of WDG3A is having _____ liters capacity (c)

a)400 b) 380 c) 600 d) 500

395. Fuel pump motor is not working though all circuit breakers are switched 'ON', the reason may could be _____. (d)

a) ERF not closed b) R1 & R2 not picked up

c) GFC not picked up d) FPC not picked up

396. On what notch the run down test of ABB turbo is to be conducted (b)

a) Idle b) 4 c) 6 d) 8

397. Reduction in BP pressure causes _____ (c)

a) Brakes release b) Brakes slow release

c) Brakes application c) MR pressure increasing

398. In nomenclature of DE locomotives, the last two digits denote (b)

a) Weight of loco b) Horse Power c) LOP d) FOP

399. Fuel oil crossover flexible pipe is located in (c)

a) Nose compartment b) Radiator room

c) Engine Power take off end d) Engine Free end

400. After cooler cooled air in 'V' channel is called as _____ (d)

a)Control air pressure b) HS4 pressure

c)Conjunction pressure d) Booster air pressure

401. The compressed air enters to MR1 tank through (c)

a) MRSV b) MR2 c) MR cooling coil d) Air dryer

402. Compressor Inter cooler safety valve is set at _____ PSI (c)

a)100 b) 80 c) 60 d) 40

403. In WDG3A loco ¾" coc (BP coc) is located in (b)

a) LP cab b) Nose compartment c) S/H Control stand d) None

404. ABB Turbo effective Rundown time is _____ seconds (b)

a)100 to 180 b) 120 to 200 c) 25 to 65 d) 90 to 180

405. In WDG3A high adhesion bogie the loc body weight is supported on bogie frame through (a)

a) 4 load pads b) Centre pivot c) Centre pivot & side bearers d) side springs

406. In WDG3A loco on each truck ____ no. of hydraulic dampers are provided (d)

a) 5 b) 2 c) 8 d) 6

407. _____ is provided on WDG3A bogie to avoid run out of bogie from chassis (c)

a)Centre pivot b) side bearers c) D shackles d) side stoppers

408. On WDG3A each truck is fitted with _____ arrangement of traction motors (d)

a)LLL b) LRR c) LRL d) LLL & RRR

409. In WDG3A loco when A9 is brought to Emergency position, action takes place in Auto Flasher system is (a)

a) DMR de-energize b) BKT will come to braking

c) GFOLR will trip d) Flasher light will glow

410. Power contactors fluttering is due to (c)

a) Less magnetism b) Load meter defective

c) Less control air pressure d) Week batteries

411. The following may be used for fast charging of BP in WDG3A (c)

a) Release position of A9 b) Foot pedal c) SP1 d) SW1

412. In WDG3A loco whenever BP drops below ____ kg/cm² Other than A9 operation Auto flasher will come (b)

a)4.2 b) 4.4 c) 4.3 d) 4.0

413. In Twin beam head lights __ volts halogen lamps are used (c)

a)72 b) 32 c) 24 d) 20

414. In twin beam head light system in DC-DC converter if one unit is defective the stand by unit can be brought into function by (a)

a)Operating change over switch on DC-DC converter

b)By changing to other control stand

c) By replacing bulb d) none

415. In MCBG loco Actuator/Sensor unit is located at (d)

a) Compressor compartment b) Excitation Panel

c) LP cab d) Existing location of Governor

416. In MCBG loco when shut down occurs due to over speed initiated by MCBG, it should be acknowledged by (a)

a) Resetting push button b) OST test key switch

c) Power switch d) GFOLR reset button

417. The conventional Electronic type excitation system is replaced with _____ (a)

a) Microprocessor b) Static type c) Shunt type Self Excitation

418. Breather valve is provided on (c)

a) Governor b) LP Cab c) Compressor d) Main generator

419. In MU trailing loco during parting, trail position changes to Lead position in brake system through (d)

a) D1 pilot air valve b) MU2B c) C2 relay valve d) F1 selector valve

420. FP pressure is charged from (a)

a) MR1 b) MR2 c) MR Equalizing d) None

421. MREq pressure is charged from (a)

a) MR1 b) MR2 c) MR Equalizing d) None

422. Sanders are operated from (a)

a) MR1 b) MR2 c) MR Equalizing d) None

423. Horns are operated from (a)

a) MR1 b) MR2 c) MR Equalizing d) None

424. Wipers are operated from (a)

a) MR1 b) MR2 c) MR Equalizing d) None

425. Sensitivity of DV is (a)

a)0.6 kg/cm² in 6 sec b) 0.6 kg/cm² in 60 sec

c)0.3 kg/cm² in 60 sec d) None

426. In banker loco 3/4th cock should be in _____ position (b)

a)Open b) close c) 'a' or 'b' d) None

427. Maximum BC pressure in kg/cm² with SA9 in Alco loco (a)

a) 3.5 b) 1.8 c) 5.0 d) 5.2

428. Maximum BC pressure in kg/cm² with A9 in Alco loco (b)

a) 3.5 b) 1.8 c) 5.0 d) 5.2

429. Purpose of F2 feed valve is to charge (b)

a) BP b) FP c) MREQ d) BCEQ

430. In Alco loco IRAB1 brake system to nullify conjunction brake temporarily _____ is used (d)

a)SA9 release b) SP1 c) SW1 d) Foot pedal

431. In Alco loco SP1 is provided for (b)

a)Over charging b) Quick charging c) resetting AFL d) resetting VCD

432. In Alco loco MV27 switch is provided for (a)

a) Over charging b) Quick charging c) resetting AFL d) resetting VCD

433. In IRAB1 system, conjunction brakes will come due to ____ valve (b)

a)C2 Relay valve b) Distributor valve c) MU2B d) None

434. In MU lead loco MU2B position should be (a)

a) Lead b) Trail c) Dead d) None

435. In MU trail loco MU2B position should be (b)

a) Lead b) Trail c) both a & b d) None

436. In Alco locomotive MR cut in pressure (in kg/cm²) (c)

a)5 b) 10 c) 8 d) 6

437. In Alco locomotive MR cut out pressure (in kg/cm²) (b)

a)5 b) 10 c) 8 d) 6

438. No. of lube oil filters in lube oil filter drum of WDM3A loco (b)

a)4 b) 8 c) 10 d) 12

439. In Alco loco lube oil cooler is located in (c)

a) Nose compartment b) Engine room c) Radiator compartment d) None

440. Number of belts in RTTM blower pulley (b)

a)4 b) 6 c) 8 d) 2

441. In Alco loco lube oil pump is driven by (a)

a) Extension shaft gear b) Electrical motor c) Belt d) none

442. Cam gears are lubricated by (b)

a) Main header b) Auxiliary header c) both a & b d) None

443. In Wood ward governor loco LLOB tripping is set at

_____ kg/cm² in Idle (a)

a) 1.3 b) 2.5 c) 3.5 d) 5.0

444. In Wood ward governor Loco LLOB tripping is set at

_____ kg/cm² in 8th notch (c)

a)1.3 b) 2.5 c) 3.5 d) 5.0

445. Air flow indicator gives indication to LP about (b)

a) FP leakage b) BP leakage c) MR leakage d) None

446. _____ safety device is provided to prevent

traction motors from damages (c)

a) ESR b) SR c)WSR d) GFOLR

447. L5 HP pipe line is cracked (b)

a) Fail the loco b) Lock rack of L5 c) lock left side racks d) Ignore

448. When GF contactor is packed loco can be worked in ____ (c)

a) by manual transition b) only in parallel

c) series parallel d) normal

449. During dynamic braking ____ valve avoids loco brake to apply (c)

a) C2 relay valve b) Additional C2 relay valve c) BKIV d) SA9

450. In IRAB1 brake system PCS2 picks & drops at (d)

a)4.0 & 4.5 kg/cm² b) 1.3 & 1.6 kg/cm²

c)2.5 & 3.0 kg/cm² d) 4.0 & 2.8 kg/cm²

451. If electrolyte leaks from battery, ____ will happen (a)

a) Starting ground b) battery discharging

c) Non-explosive power ground d) engine shut down

452. If explosion door burst, _____ (a)

a) Fail the loco b) wait for second time

c) Work on 4th notch d) work up to destination

453. Engine having 5 kg/cm² and BV having 4.0 kg/cm² of BP (d)

then ____ test to be conducted

a) Efficiency b) Continuity c)Blockage d) Leakage

454. _____ test is to be conducted while clearing stabled loads (c)

a) Blockage b) Leakage c) BP continuity d) Efficiency

455. To find out leakage in the formation ____ is provided (a)

a) Air flow indicator b) Main Reservoir c) BP gauge d) Spy glass

456. In WDG3A, if Hand brake is applied, brakes will apply to ____ wheels (b)

a)L1,L2 b) R1,R2 c) L3,L4 d) R3,R4

457. In expansion tank, if water level comes below 1" from bottom of tank _____ safety device will operate (c)

a)LLOB b) PCS c) LWS d) OSTA

458. When train parting on run ____ will operate to bring engine speed to Idle (a)

a) PCS2 b) P1 c) P2 d) Both b & c

459. In short hood control stand _____ duplicate breaker is provided (d)

a) MCB b) MFPB c) AGFB d) ERF

460. The safety device provided in brake system is (b)

a)LLOB b) PCS2 c) OSTA d) LWS

461. Dust exhaust motor is available for _____ (b)

a) Car body filters b) Cyclonic filters c) Air maize filters d) all of the above

462. If radiator room door remain open position ___ will be experienced (b)

a) Engine shut down b) Hot Engine c) Load meter not responding d) None

463. Control air pressure is controlled by _____ (b)

a) F2 feed valve b) Limiting valve c) MU2B valve d) F1 selector valve

464. The traction motor gear case is having ____ no. of bolts (a)

a) 7 b) 5 c) 4 d) 8

465. In WDM3A loco LLOB prevents engine damages due to lack of (b)

a) water a)cooling b) lubrication c) governor oil supply d) None of these

466. ¾" COC is between _____ & _____. (a)

a) Additional C2 relay valve & BP pipe

b) MR2 & Additional C2 relay valve

c) C2 relay valve & Brake cylinder

d) None of these

467. In WDG3A LWS located in _____ (b)

a) Engine room b) compressor room c) Radiator room d) Generator room

468. N1 reducing valve/Limiting valve is provided in (b)

a) Engine room b) Nose compartment c) Radiator room d) Generator room

469. In WDM3A axle boxes are lubricated by _____ (c)

a) Lube oil b) Cardium compound c) soft grease d) hard grease

470. N1 reducing valve/Limiting valve is used to control ____ pressure (c)

a) BP pressure b) FP pressure c) Control air pressure d) Mr pressure

471. Malfunctioning of LWS leads engine to _____ (c)

a) Idle RPM b) 4^{th} notch RPM c) Shut down d) None of these

472. Number of Brake cylinder COCs on WDM3A locomotive (a)

a) 2 b) 4 c) 6 d) 8

473. One the reason for MR pressure not building up is (b)

a) Safety valve dummied b) Inter cooler tubes burst

c) ABD valve not working d) engine hunting

474. Position of EPG switch on control stand in rear loco of MU is set __ (c)

a)Neutral b) ON c) OFF d) Close

475. Auto flasher light comes into action if ____ (c)

a) A9 applied b) SA9 applied

c) Unauthorized drop in BP due to ACP, train parting etc.

d) Dynamic brake applied

476. Flat tyre happen _____ (d)

a) If hand brake in applied condition

b) If SA9 is applied instead of A9 on run

c) Wheel is not rotating due to TM bearing seize or obstruction in gear case

d) All the above

477. Problem in brake power is due to _____ (d)

a) A9 COC in both control stands in open condition

b) A9 COC in both control stands in closed condition

c) For loaded rake load/empty device is in empty direction

d) All the above

478. AFL gets operated during _____ (d)

a) D1 emergency b) ACP c) Guard application d) all the above

479. Control air pressure in loco (a)

a) 5 kg/cm² b) 6 kg/cm² c) 8 kg/cm² d) 10 kg/cm²

480. In AC-DC locomotives engine is cranked by (b)

a) Main Generator b) Auxiliary generator & Exciter generator

c) Auxiliary generator d) Exciter generator

481. Whenever cattle run over takes place, if BP dropped due to front side BP angle COC is broken, LP has to close ___ COC to maintain BP (c)

a)BC COC b) A9 COC c) front side additional BP angle COC d) ¾" COC

482. ____ type of bogie is provided in WDM3A locomotive (a)

a) CO-CO tri mount bogie

b) CO-CO tetra mount high adhesion bogie

c) CO-CO flexi coil bogie

d) BO-BO tri mount bogie

483. ____ type of bogie is provided in WDG3A locomotive (b)

a) CO-CO tri mount bogie

b) CO-CO tetra mount high adhesion bogie

c) CO-CO flexi coil bogie

d) BO-BO tri mount bogie

484. When A9 is applied, maximum ____ kg/cm² pressure will enter into loco brake cylinders (c)

a)1.5 b) 2.0 c) 1.8 d) 3.5

485. VCD acknowledgement is done by operating ____ once in every 60 seconds (d)

a) A9 application b) operation of horns

c) Increase or decrease of Throttle d) any of the above

486. In conventional locos, when VCD is acted (d)

a) Engine comes to Idle b) BP drops

c) Brakes will apply d) all the above

487. For resetting VCD wait for ____ seconds (b)

a) 30 b) 35 c) 60 d) 20

488. In IRAB1 system BP pressure is adjusted by keeping A9 feed valve handle in ____ position (b)

a) Full service b) Release c) Over reduction d) Emergency

489. In Alco locos non-working control stand A9 handle position is (b)

a) Full service b) Release c) Over reduction d) Emergency

490. When BP drops below 4.4 kg/cm² without A9 application ___ starts functioning (c)

a) APU b) VCD c) AFL d) all the above

491. Additional C2 relay valve is meant for ___ pressure creation, Maintenance & destruction (b)

a)FP b) BP c) BC d) all the above

492. In MU locos, MU2B position in leading loco is ___ & in trailing loco is _____ (a)

a) Lead, Trail b) Trail, Trail c) Trail, Lead d) Lead, Lead

493. ___ brake only can be applied in stabled dead loco when pneumatic pressure is zero in main reservoir (c)

a)A9 b) SA9 c) Hand Brake d) No brake can be applied

494. Position of A9 COCs in the loco shall be ____ (c)

a) Open in both control stands

b) Close in working control stand & Open in Non-working control stand

c) Open in working control stand & Close in Non-working control stand

d) None of the above

495. Position of SA9 COCs in the loco shall be ____ (a)

a) Open in both control stands

b) Close in working control stand & Open in Non-working control stand

c) Open in working control stand & Close in Non-working control stand

d) None of the above

496. In IRAB1 system A9 feed valve has __ no. of positions (b)

a) 2 b) 5 c) 4 d) 3

497. In IRAB1 system SA9 feed valve has __ no. of positions (a)

a) 2 b) 5 c) 4 d) 3

498. During A9 Emergency position BP becomes ___ kg/cm² and BC becomes ____ kg/cm² (a)

a) 0 & 1.8 b) 5 & 3.5 c) 2.5 & 0 d) 0 & 0

499. If emergency applied ___ operates and engine comes to Idle (c)

a) AFL b) VCD c) PCS2 d) P1

500. If C3W distributor valve G/P handle is placed wrongly in passenger formation (a)

a) Loco brakes will apply lately

b) Loco brakes will not apply

c) Formation brakes will not apply

d) None

501. Decolourization of lube oil to grey brown or milky colour is evidence ___ in the lube oil (a)
a) water b) fuel oil c) carbon d) None

502. EPG will maintain MR pressure between ___kg/cm² to ___ kg/cm² (c)
a)5 , 10 b) 10, 12 c) 8, 10 d) 10, 10.5

503. If ETS is operated, engine RPM will _____ (c)
a) Increase b) decrease c) not be effected d) None

504. If LWS is operated _____ indication is displayed (c)
a) Wheel slip b) PCS c) Hot engine d) none

505. To avoid separation of chassis & bogie ___ are provided in WDM3A locomotive (a)
a) Collar pins & U bracket
b) D shackles
c) Both a & b
d) None of the above

506. To avoid separation of chassis & bogie ___ are provided in WDG3A locomotive (b)
a) Collar pins & U bracket
b) D shackles
c) Both a & b
d) None of the above

507. WDG3A loco super structure load is carried by (b)
a) Centre pivot b) load pads c) coil springs d) both a & b

508. WDM3A loco super structure load is carried by (d)
a) Centre pivot b) side bearers c) coil springs d) both a & b

509. In WDG3A loco FTTM blower cools ____ traction motors (a)
a)1,2,3 b) 4,5,6 c) 1,3,5 d) 2,4,6

510. In WDG3A loco RTTM blower cools ____ traction motors (b)
a)1,2,3 b) 4,5,6 c) 1,3,5 d) 2,4,6

511. In engine crank case, if positive pressure increases more than its limit _____ gets operated (c)
a) b) OSTA c) Explosion door d) PCS

512. Horse Power of WDM3D is (b)
a)3100 b) 3300 c) 2600 d) 4000

513. In WDM3A radiator fan rotates at ___ different speeds (a)
a) 2 b) 3 c) 4 d) 5

514. Air dryer is provided between (b)
a)MR Cooling coil & MR1 b) MR1 & MR2
c)Compressor & MR cooling coil d) Inter cooler & After cooler

515. Gear case of Alco locomotive is lubricated by (d)
a) Lube oil b) soft grease c) hard grease d) Cardium compound

516. Number of transitions in AC-DC locomotive (a)
a) 1 b) 2 c) 3 d) 4

517. ___ type of fire extinguisher is provided in DE locomotives (b)
a) Foam b) DCP c) water d) CO2

518. Sufficient notches to be opened before releasing loco brakes while starting the train on ____ gradient (c)
a)Level b) steep descending c) steep ascending d) None

519. ECC (Edddy Current Clutch) is located in (b)
a) Compressor room b) Radiator room
c) Engine room d) Generator room

520. LLOB is provided in ___ governor (a)
a)Woodward b) GE c) MCBG d) EP

521. If OSTA trips, engine will come to (b)
a) Idle b) Shut down c) 2nd notch RPM d) none

522. If ECC is short circuited ___ breaker will trip (a)
a) FPB b) MFPB c) MCB d) MPCB

523. If there is no control air pressure ___ will not pick up (d)
a) Power contactors b) Breaking contactors
c) Reverser contactors d) all of the above

524. Sanders test on WDG3A to be conducted by keeping reverser handle in ___ position (d)
a) Neutral b) Forward c) Reverse d) 'b' or 'c'

525. Compressor efficiency test is conducted by using ___ mm test orifice (b)
a)5 b) 7.5 c) 8 d) 10

526. In AC-DC loco if CK3 N/C interlock is defective ___ contactor will not pick up (a)
a) GF b) FPC c) CK1 d) CK2

527. Starting ground occurs due to earth fault in ____ circuit (a)
a) Control b) power c) both a & b d) None

528. COS (Centrifugal Oil Separator) is provided in ___ system (b)
a)Fuel oil b) lube oil c) air intake system d) none

529. Lube oil pump is driven by (a)
a) gear b) chain c) electric motor d) none

530. Water pump is driven by (a)
a) gear b) chain c) electric motor d) none

531. In Alco loco Wood ward governor is located at (b)
a) Engine left side power take off end
b) Engine right side power takeoff end
c) Engine left side free end
d) Engine right side free end

532. Fuel oil tank capacity in WDG3A locomotive (in liters) (b)
a) 5000 b) 6000 c) 3000 d) 4000

533. In WDM3A fuel oil primary filter is located in (a)
b) Compressor room b) Engine room
c) Radiator room d) under truck

534. In WDM3A fuel pump motor is located in (a)
a) Compressor room b) Engine room
c) Radiator room d) under truck

535. Working of compressor lube oil pump is indicated by (c)
a) Breather valve b) Spy glass
c) Projection of brass spindle d) Sight glass

536. Compressor crank case vacuum is maintained by (a)
a) Breather valve b) spy glass
c) Brass spindle unit d) CCEM

537. If MCBG power breaker is tripped on run engine will (a)
a) Shut down b) come to Idle c) none

538. In Alco loco BKBL is located in (c)
a) Engine room b) Compressor room
c) Nose compartment d) Radiator room

539. BKBL gets current from (c)
a)Battery b) Auxiliary generator
c)Current developed by TM during DB d) Main generator

540. In air brake train when BP is dropped ____ will connect to brake cylinder for brake application (b)
a) Control reservoir b) Auxiliary reservoir
c) Main reservoir d) none

541. Feed pipe is getting charged by _____ valve (c)
a) C2w relay b) F1 selector c) C2N d) C2W DV

542. The super charged air in the air manifold is called (a)
a) BAP b) CAP c) FP d) BP

543. What is the effect if A9 is applied in emergency position? (b)
a) Only AFL operates
b) AFL operates, Engine comes to Idle with full brakes
c)Only loco brakes get applied
d) No effect

544. In WDG4 locomotive Compression ratio is _____ (d)
a) 12:1 b) 12.5: c) 11.75:1 d) 16:1

545. BP pressure WDG4 locomotive is _____ kg/cm² (c)
a) 3.5 b) 5 c) 5.2 d) 8

546. Horse Power of WDG4D locomotive (d)
a) 3000 HP b) 4000 HP c) 3500 HP d) 4500 HP

547. Type of diesel engine in WDG4 locomotive (b)
a)4 stroke b) 2 stroke c) 3 stroke d) SI

548. Pinion to Bull gear ratio in WDG4 locomotive (d)
a)18:65 b) 17:77 c) 18:74 d) 17:90

549. Pinion to Bull gear ratio in WDP4 locomotive (b)
a)18:65 b) 17:77 c) 18:74 d) 17:90

550. Maximum speed of WDG4 locomotive (a)
a) 100 b) 150 c) 160 d) 180

551. Maximum speed of WDP4 locomotive (c)
a) 120 b) 150 c) 160 d) 180

552. Transmission in WDG4 locomotive is (b)
a)DC-DC b) AC-AC c) DC-AC d) AC-DC

553. Fuel tank capacity in WDG4 locomotive (c)
a)4000 b) 5000 c) 6000 d) 7000

554. Type of diesel engine fitted WDG4 locomotive (c)
a) Alco-251 b) GT46PAC c) 710G3B d) GT46MAC

555. Number of power contactors in HHP locomotive (a)
a) 0 b) 6 c) 9 d) 10

556. Number of cylinders in WDG4 locomotive (b)
a)12 b) 16 c) 18 d) 20

557. Type of traction motors in HHP locomotive (a)
a)AC motors b) DC motors c) both A & B d) None

558. _____ type of speedometer is available in HHP locomotive (b)
a)Mechanical b) Radar sensor
c) Electrical d) Electronic

559. In WDG4 locomotive compressor is cooled by (b)
a) Air b) Water c) Oil d) Nature

560. Number of positions of Auto brake in WDG4 locomotive (c)
a)2 b) 4 c) 5 d) 3

561. In WDG4 locomotive hot oil detector is set at _____ °C (b)
a)100 b) 126 c) 150 d) 180

562. Blended brake is available in _____ locomotive (b)
a)WDG4 b) WDP4 c) WDG3A d) WDM3A

563. Lube oil sump capacity in WDG4 locomotive (in liters) (d)
a)1000 b) 1100 c) 910 d) 1457

564. Full RPM of WDG4 locomotive (c)
a)1000 b) 1050 c) 954 d) 1100

565. Idle RPM of WDG4 locomotive (b)
a)200 b) 269 c) 350 d) 400

566. Low Idle RPM of WDG4 locomotive (a)
a) 200 b) 269 c) 350 d) 400

567. Coolant water capacity in HHP locomotive (c)
a)1000 b) 1100 c) 1045 d) 1145

568. Minimum continuous speed of WDG4 locomotive (in Kmph) (b)
a)21.5 b) 22.5 c) 20.5 d) 23.5

569. Type of bogie in WDG4 locomotive (b)
a)Single suspension b) Double suspension
c) Triple suspension d)None

570. In HHP loco fuel oil system which type of injectors are provided (a)
a) Unit Injectors b) Injector with HP line c) Injector with cam d)None

571. In HHP locomotive cylinder head of engine is equipped with (c)
a) Inlet & Exhaust Valves b) Only Inlet valves
c) Only Exhaust valves d)None

572. In HHP locomotive Turbo charger is driven by (c)
a) Exhaust Gas b) Gear Train
c) Gear Train & Exhaust Gas d)None

573. Number of Lube oil pumps in HHP locomotive (d)
a) One b) Two c) Three d) Four

574. In HHP locomotive air compressor lube oil sump capacity(in Ltrs) (a)
a) 10 b) 12 c) 15 d) 20

575. Type of bogie used in HHP locomotive (c)
a) Fabricated b) Cast steel c) HTSC d) None

576. Type of Air brake system in HHP locomotive (c)
a)28LAV1 b) 28LV1 c) CCB-Knorr d) None

577. In HHP locomotive if water pressure is less (c)
a) LLOB trips b) Low water pressure button will trip
c) Both a & b d) None

578. In HHP locomotive, while conducting Air brake self test working control stand L/T switch should be kept in _____ position (c)
a) Test b) HLPR c) Lead d) Trail

579. In HHP locomotive, while conducting BP leakage test L/T switch should be kept in _____ position (a)
a) Test b) HLPR c) Lead d) Trail

580. In WDG4 banker loco working control stand Auto brake handle should be kept in _____ position (c)
a) Release b) Run c) FS d) Emergency

581. In WDG4 banker loco working control stand L/T switch should be kept in _____ position (c)
a) Lead b) Trail c) HLPR d) Test

582. In HHP locomotive, oil visibility in bypass sight glass indicates (b)
a) Primary filter choked b) Spin on filter choked
c) Lube oil filter choked d) Lube oil strainer choked

583. In HHP loco, choking of fuel oil primary filter is indicated by (a)
a) Filter condition gauge b) oil visibility in bypass sight glass
c) Both A & B d) None

584. In WDG4 MU trailing loco, L/T switches in both control stand should be kept in (d)
a) Test b) HLPR c) Lead d) Trail

585. Oil lubricated TM gear case is provided in (c)
a) WDM2 b) WDM3A c) WDG4 d) WDG3A

586. Firing order of HHP locomotive (a)
a)1,8,9,16,3,6,11,14,4,5,12,13,2,7,10,15
b)1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16
c)1,3,5,7,7,11,13,15,16,2,4,6,8,10,12,14
d) None

587. Loco model of WDG4 (b)
a) GT46PAC b) GT46MAC c) Both A & B d) None

588. Loco model of WDP4 (a)
a) GT46PAC b) GT46MAC c) Both A & B d) None

589. Number of cylinders of air compressor in WDG4 loco (b)
a) 2 b) 3 c) 4 d) 6

590. Number of batteries in WDG4 loco (c)
a) 02 b) 10 c) 08 d) 6

591. Number of batteries in WDP4 loco (b)
a) 02 b) 10 c) 08 d) 6

592. Number of axles in WDP4 loco (b)
a) 04 b) 06 c) 08 d) 10

593. Number of positions in Direct Brake of WDG4 loco (a)
a) 02 b) 04 c) 05 d) 06

594. In WDG4 loco exhaust gas temperature reaches up to (a)
a) 538ºC b) 438ºC c) 338ºC d) None

595. Number of radiator fans in HHP locomotive (a)
a) 02 b) 01 c) 03 d) 04

596. Number of water pumps in HHP locomotive (a)
a) 02 b) 01 c) 03 d) 04

597. Number of brake blocks in HHP locomotive (c)
a) 08 b) 10 c) 12 d) 24

598. Brake cylinder pressure in HHP locomotive (in Kg/cm^2) (b)
a) 5.0 b) 5.2 c) 3.5 d) 3.0

599. In HHP locomotive hand brake applies on wheels (a)
a) R4,R5 b) R4,L4 c) R4,R6 d) L4,L5

600. Diameter of new wheel in HHP locomotive (in mm) (b)
a) 1090 b) 1092 c) 1080 d) 1100

601. To check engine sump oil level, engine should be in ____ condition (b)
a) Shut down b) Idle c) 4th Notch d) 2ndNothch

602. Number of after coolers in HHP locomotive (a)
a) 02 b) 01 c) 03 d) 04

603. Number of water expansion tanks in HHP locomotive (b)
a) 02 b) 01 c) 03 d) 04

604. Which type of Traction Motors fitted in HHP locomotive (a)
a) 3-Phase AC Motors b) DC Series Motors c) Both A & B d)None

605. Which type of Main Generator fitted in HHP locomotive (b)
a) DC Generator b) 3 Phase Alternator c) Both A & B d) None

606. Function of Traction Inverters in HHP locomotive (a)
a) To control 3-Phase AC Motors b) To control 3 phase Alternator
b) Both A & B d) None

607. No. of Traction Inverters in HHP loco (In Medha make Traction system)
a) 6 b) 5 c) 4 d) 3 (a)

608. No. of Traction Inverters in HHP loco (In EMD/Siemens Traction system)
a) 6 b) 2 c) 4 d) 3 (b)

609. Current rating of Head Light circuit breaker in HHP locomotive (d)
a) 10 AMP b) 15 AMP c) 20 AMP d) 35 AMP

610. Number of DC link switch gears in HHP loco (a)
a) 6 b) 5 c) 4 d) 3

611. In HHP loco, During DB TCC converts (b)
a) DC into 3 Phase AC b) 3 Phase into DC c) Both A & B d) None

612. In HHP loco, ECC-2 is located in (b)
a) Driver Cab b) Under Truck
c) Near Compressor Room d) None

613. In HHP loco, STA, ST contactors are located in (b)
a) ECC-1 b) ECC-2 c) ECC-3 d) ECC-4

614. In HHP loco, ECC-1 is located in (a)
a) Driver Cab b) Under Truck
c) Near Compressor Room d) None

615. In HHP loco, ECC-3 is located in (c)
a) Driver Cab b) Under Truck
c) Near Compressor Room d) None

616. In HHP loco, Power contactors are replaced with (d)
a) FS contactors b) only relays c) BKT/REV d) DC Link

617. In HHP loco, if LLOB is in tripped position during cranking engine will (d)
a) Crank b) not Fire c) not Hold d) not Crank

618. In WDG4 loco, location of Battery Knife Switch is (b)
a) In Accessories room b) On foot plate c) Driver cab d) ECC-3

619. In HHP loco, if AGFB tripped (c)
a) Battery will discharge b) Load meter will not respond
c) Both a & b d) Engine will shut down

620. In WDG4 loco Traction Motor is …… (a)
a) Force air ventilated cooled b) oil cooled
c) Water cooled d) None

621. Total no. of Batteries in WDG4 loco (c)
a) 01 b) 02 c) 08 d) None

622. Total no. of Cells of batteries in WDG4 loco (a)
a) 32 b) 50 c) 64 d) None

623. Total no. of Cells of batteries in WDP4 loco (b)
a) 32 b) 50 c) 64 d) None

624. Total no. of Batteries in WDP4 loco (a)
a) 10 b) 02 c) 08 d) None

625. In HHP loco engine starting switch is located in (a)
a) ECP b) Engine room
c) Control stand d) None

626. No. of Grid blower motors in WDG4 loco (b)
a) 04 b) 02 c) 03 d) None

627. In WDG4 loco Brake warning indication indicates (b)
a) Excessive Main Alternator current b) Excessive current in DB
c) Excessive Air Braking d) None

628. In WDG4 loco Battery charger rectifies AC to DC of (a)
a) Aux Generator output b) Companion Alternator output
c) Main Alternator output d) none

629. In WDG4 loco, if on run GR trips then the engine … (b)
a) Will shut down b) comes to Idle
c) No effect on engine d) No effect on loco

630. In WDG4 loco the companion Alternator runs at the same speed as (a)
a) Engine RPM b) Aux Gen RPM c) Turbo RPM d) Loco RPM

631. In WDG4 loco, Radiator fan controlled by (a)
a) EM2000 b) TCC c) Both A & B d) None

632. In WDG4 loco HP input to Traction motors is (b)
a) 4000 b) 3726 c) 3100 d) 3900

633. In WDG4 loco compressor is cooled by (d)
a) Nature b) Air c) Oil d) Water

634. In WDG4 loco turbo is cooled by (c)
a) Nature b) Air c) Oil d) Water

635. In WDG4 loco power contactors are replaced with (d)
a)FS contactors b) relays c) BKT/REV d) DC Link

636. In WDG4 (ECS) isolation switch is having ____ no. of positions(b)
a) 1 b) 2 c) 3 d) 4

637. While on run if airflow indicator shoots up with jerk, it indicates(b)
a) AFI defect b) parting taken place
c) spring broken d) moisture in air

638. For quick charging of BP in WDG4 loco, _____ is used. (d)
a) SP1/SP2 b) SW1/SW2 c) Foot pedal d) Auto Brake Release

639. _____ brake available only in WDP4. (c)
a) Computer brake b) Vigilance brake
c) Blended brake d) Tread brake

640. Blended Brake is a mixture of (b)
a) Vacuum + Air b) Formation + Dynamic + Loco
c) Formation + Loco d) Dynamic + Loco

641. In WDP4 loco when loco is moving in opposite direction to the reverser position_____ will happen soon the speed increases to 5 kmph. (a)
a) Dynamic brake comes into action
b) Alerter will come into function
c) Power ground will take place
d) loco will shut down

642. When wheel is floated speed is restricted to _____ kmph. (b)
a) 25 b) 30 c) 35 d) 40

643. Excess brake cylinder pressure can cause (c)
a) Quick speed dropping b) Train brakes not required
c) Wheel skidding d) Dynamic brake not necessary

644. In fuel oil system ____ type of filters are used (d)
a) Socks type b) Foam type c) Mesh type d) Paper type

645. While EOT (Engine on Train) L/T switch should be in ___ position (d)
a) Lead b) Trail c) Helper d) Test

646. Bail off ring is operated to nullify _____ brake (d)
a) Loco b) Formation c) blended d) conjunction

647. In HHP loco Dead engine coc is located in (c)
a) Control stand b) under truck
c) Brake bay rack d) compressor room

648. In HHP loco conjunction brake pressure is ____ kg/cm² (b)
a)3.5 b) 1.8 c) 5.0 d) 5.2

649. In WDG4/WDP4 loco Radar magnet valve is located in (c)
a) Nose compartment b) Compressor compartment
c) Clean air compartment d) Radiator compartment

650. In HHP loco MVCC is connected in ____ line (b)
a) MR2 b) MR1 c) BP d) FP

651. MREQ pressure is charged from (a)
a) MR1 b) MR2 c) control air d) FP

652. Sanders are operated from (a)
a) MR1 b) MR2 c) MREQ d) BCEQ

653. Horns are operated from (a)
a) MR1 b) MR2 c) MREQ d) BCEQ

654. Sanders are operated from (a)
a) MR1 b) MR2 c) MREQ d) BCEQ

655. Swept volume of one cylinder in WDG4/WDP4 loco (in cu. Inch)(b)
a) 657 b) 710 c) 954 d)1000

656. No. of engine cylinders in HHP loco (c)
a) 8 b) 12 c) 16 d) 20

657. In WDG4/WDP4 loco crank case vacuum is maintained by (b)
a) CCEM b) Eductor c) Breather valve d) vacuum pump

658. In HHP loco MRPT is located in (d)
a) Nose compartment b) ECC1
c) ECC2 d) ECC3

659. In HHP loco MVCC is located in (b)
a) Nose compartment b) Compressor room
c) Radiator room d) Under Truck

660. Main components of CCB 1.5 brake system are (d)
a) BVC b) VCU & CRU c) PCU & KE valve d) all of the above

661. Total no. of keys in EM2000 display panel are (d)
a) 8 b) 10 c) 12 d) 16

662. No. of radiator fans in WDG4 loco (b)
a) 01 b) 02 c) 03 d) 4

663. No. of grid blower motors in WDG4 loco (b)
a) 01 b) 02 c) 03 d) 4

664. When computer controlled breaker is recycled the disabled speed sensor
a) Remained disabled (d)
b) gets enabled but not to be disabled again
c) Remained disabled but to be enabled
d) get enabled & has to be disabled

665. Break warning indication (b)
a) Excessive main alternator current
b) Excessive breaking current in DB
c) Excessive air braking
d) None

666. When reverser is thrown in forward direction sanders of (d)
a)No 3 & 6 only work
b) all sanders work
c) Sanders work irrespective of reverser
d) No 1 & 4 only work

667. Battery charger rectifies AC to DC of (a)
a) Aux. generator output b) companion alternator output
c) Main alternator output d) None

668. BP continuity not getting to train from a working WDG4 loco (d)
a) Additional BP coc closed in train end
b) BP angle coc defective
c) in train end no BP pressure in loco
d) All the above

669. Type of lubrication system used in diesel loco (b)
a) Splash lubrication b) Force feed lubrication
c) Force feed & splash d) Capillary lubrication

670. To check lube oil level in engine sump, engine should be in (c)
a)Shut down b) 4th notch c) Idle d) 2nd notch

671. Each traction motor is provided with (b)
a) One speed sensor b) one speed sensor & one temperature sensor
c) One temperature sensor d) Two speed sensors

672. Diameter of new wheel in WDG4 loco (in mm) (b)
a) 1090 b) 1092 c) 1100 d) 1080

673. When there is communication link failure and micro air breaker is active, the loco will work (b)
a) as lead in b) only in trail mode
c) in both modes d) in Helper mode

674. To recover PCS, it is compulsory to keep (d)
a) Both throttle handle in Idle
b) any one throttle handle in idle
c) Leading c/s throttle handle in idle
d) Leading throttle handle in idle & reverser in Neutral

675. The companion alternator runs at the same speed as Engine rpm (a)
a) Engine rpm b) Aux gen rpm c) Turbo rpm d) loco rpm

676. MR pressure dropping on run due to (d)
a) Air dryer defective b) Auto drain vale malfunctioning
c) BC pipe damaged d) all the above

677. In WDG4/WDP4 locos Hand brake applies on wheels (a)
a)R4, R5 b) R4, L4 c) R5, R6 d) L4, L5

678. Brake cylinder pressure (in kg/cm²) in WDG4/WDP4 loco (a)
a) 5.2 b) 4.8 c) 3.8 d) 3.5

679. MR pressure not building up due to (d)
a) MREq coc in open condition
b) EBT valve defective
c) Defective MVCC
d) All the above

680. Type of bogie in WDG4 locomotive (b)
a) BO-BO b) CO-CO c) BO1-1BO d) fabricated

681. Location of lube oil cooler in HHP locomotive (a)
a) Equipment Rack b) Radiator room
c) Compressor room d) Engine room

682. Location of lube oil filter in HHP locomotive (a)
a) Equipment Rack b) Radiator room
c) Compressor room d) Engine room

683. Location of fuel oil primary filter in HHP locomotive (a)
a) Equipment Rack b) Radiator room
c) Compressor room d) Engine room

684. Location of water expansion tank in HHP locomotive (a)
a) Equipment Rack b) Radiator room
c) Compressor room d) Engine room

685. LCC, ECP, Event recorder are located in (c)
a) ECC3 b) ECC2 c) ECC1 d) None

686. In CCB 1.5 fault code will be displayed in (c)
a)VCU b) PCU c) CRU d) BVC

687. In computer controlled brake system, operation of bail off ring will nullify
a) Loco brake b) Formation brake (d)
c) Dynamic brake d) Conjunction brake

688. In HHP loco MU STOP button is located in (b)
a) ECC1 b) Control console 2 c) ECC2 d) ECC3

689. In HHP loco Control & FP switch is located in (b)
a) ECC1 b) Control console 2 c) ECC2 d) ECC3

690. In HHP loco driver back up valve is located in (c)
a) Nose compartment b) Compressor compartment
c) Driver cabin d) Radiator room

691. In HHP loco braking contactors are located in (c)
a) ECC3 b) ECC2 c) ECC1 d) None

692. In HHP loco baggie type fiber glass filters are located in (c)
a) Compressor compartment b) Radiator compartment
c) Clean air compartment d) Equipment rack

693. In HHP loco IPR (Inverter Protection Resistor) is located in (c)
a) Compressor compartment b) Radiator compartment
c) Clean air compartment d) Equipment rack

694. In HHP loco, dust bin blower motor is located in (c)
a) Compressor compartment b) Radiator compartment
c) Clean air compartment d) Equipment rack

695. In HHP loco Lube oil cooler is located in (d)
a) Engine room b) Compressor room
c) Radiator room d) Equipment rack

696. In HHP loco Lube oil filter is located in (d)
a) Engine room b) Compressor room
c) Radiator room d) Equipment rack

697. In HHP loco water expansion tank is located in (d)
a) Engine room b) Compressor room
c) Radiator room d) Equipment rack

698. In HHP loco fuel oil primary filter is located in (d)
a) Engine room b) Compressor room
c) Radiator room d) Equipment rack

699. To reset VCD Reverser should be in ____ position (d)
a) Neutral b) Forward c) Reverse d) b or c

700. Purpose of APU is to save (a)
a) Fuel b) Lube oil c) crew d) all of the above

701. If engine is cranking but not firing with indication what may be the reason
a) LWS Operated b) OSTA Tripped (a)
c) SAR Defective d) All the above

702. If engine is cranking but not firing while starting what may be the reason
a) FPM not working b) Fuel Booster Pump defective (d)
c) Love joy coupling defective d) All the above

703. What is the reason if engine is cranking but not firing? (d)
a) Governor booster pump defective b) Love joy coupling defective
c) No Governor oil in tank d) All the above

704. What is the reason if engine is cranking, firing but not holding? (d)
a) SAR Inter lock defective b) OPS Defective
c) Lube oil system defective (Below1.6Kg/Cm2) d) All the above

705. What should be checked if engine shutdown with over speed? (a)
a) OSTA b) SAR c) Governor Amphenol plug d) Fuel pump motor

706. What should be checked if engine shutdown on run with indication (b)
a) OSTA b) LWS c) SAR d) Governor Amphenol plug

707. What happens if Amphenol plug is slack on run in WW governor loco? (a)
a) Engine Idle, Load meter zero b) Only Load meter zero
c) Only engine idle d) Engine shutdown

708. Which item is used to reset AFL? (a)
a) SW1 & SW2 b) SP1 & SP2
c) MCB1 & MCB2 d) MFPB1 & MFPB2

709. To get quick charging of BP which should be operated? (b)
a) SW1 &SW2 b) SP1 & SP2
c) MCB1 & MCB2 d) MFPB1 & MFPB2

710. If AFL Malfunctions Driver must observe (a)
a) BP For 5Kg/Cm² b) MR For 9.5Kg/Cm²
c) Control air pressure for5Kg/Cm² d) FP For 6Kg/Cm²

711. The Procedure for isolation of AFL, when AFL is malfunctioning (d)
a) If isolation switch available switch Off b) If not disconnect171 wire
c) Pack DMR d) All the above

712. How do you adjust control air pressure? (c)
a) A9 Feed valve b) SA9 Feed valve
c) Limiting valve d) HS4 Valve

713. Improper control air pressure leads to (d)
a) Power Contactors fluttering b) Flash over
c) Power Ground d) All the above

714. If Head light fails what is the action to be taken by the Drivers? (b)
a) Fail the loco b) Follow G&SR Rules
c) Work with classification lights d) Work normally

715. If engine shuts down with hot engine alarm which safety device operates?
a) ETS b) LWS c) SAR d) OPS (b)

716. If engine is running with Hot engine alarm which safety device is operated?
a) LWS b) OPS c) ETS d) SAR (c)

717. What is the effect of GR tripping? (d)
a) Load meter zero b) Engine comes to idle
c) GR Indication with bell d) All the above

718. What is the effect of WSR? (d)
a) LM gradually drops to zero b) Sanders operate
c) Wheel slip indication with buzzer d) All the above

719. In AC/DC Locomotives engine is cranked by (b)
a) Main Generator b) Aux. & Exc. Generators
c) Auxiliary Generator d) Exciter Generator

720. If C3W distributor valve G/P handle is placed wrongly in goods formation (a)
a) Wheel skidding takes place
b) Loco brakes will not apply
c) Formation brakes will not apply
d) Loco brakes will apply lately

721. If water contaminated with lube oil, viscosity of lube oil will be ___ (b)
a)Less b) more c) remains unchanged d) None

722. If water pump tell tale hole is leaking water, ___ seal may be defective (b)
a)Oil b) water c) both a & b d) None

723. If water pump tell tale hole is leaking oil, ___ seal may be defective (a)
a) Oil b) water c) both a & b d) None

724. In place of AC Governor, which Governor is provided for compressor (a) loading and unloading
a) EPG b) GE c) W.W d) Run-Release

725. A goods train having 56 wagons, the BP pressure in engine (b) shall be _____and in BV _____ kg/cm²
a) 5.0, 4.6 b) 5.0, 4.8 c) 4.8, 5.0 d) 6.0, 5.0

726. A goods train having 58 wagons, the BP pressure in loco shall be ____(d) in BV_____ kg/Sq.cm.
a) 5.0, 4.5 b) 6.0, 5.8 c) 5.0, 4.0 d) 5.0, 4.7

727. Loco pilot should conduct BP Continuity test before starting his train to ensure_____ (a)
a) Brake power till the last vehicle Van/SLR
b) To ensure availability of Guard in B.
c) to sign in BPC compressor
d) To know the proper working of

728. By applying A-9 formation brakes are not applying-Reason might be___
a) A-9 COC in working control stand is in closed condition (a)
b) Bogie COCs are in closed condition
c) Train running at excess speed
d) Last vehicle rear BP angle cock is in open condition

729. On run if Air Flow Indictor overshoots with jerk indicates_____(d)
a) Air brake failure b) Loco failure
c) Air flow indicator defective d) Train Parting

730. While working LE's Loco Pilot should ___ to stop the Locomotive. (b)
a) apply A-9 brake b) apply SA-9 and Dynamic Brakes
c) apply Handbrakes d) Close the throttle to zero

731. Locos provided with Cast Iron brake blocks requires ___ than the Locos provided with Composite brake blocks (a)
a) More braking distance b) Less braking Distance
c) frequent change of brake blocks d) BC pressure 3.8kg/cm2

732. If train stopped in mid section on account of Loco Failure Loco pilot should do _____immediately (b)
a) Inform TLC/PCOR
b) Put on Flasher Light, Apply A-9,SA-9, wooden wedges and secure formation.
c) Ask for relief Loco
d) Attend the Locomotive

733. Revised VCD cyclic timings are_____ (a)
a) 60, 8 and 8 seconds b) 60,17 and 17seconds
c) 170, 17 and 17seconds d) 65,8 and 8seconds

734. While working LE's Loco pilot should check and ensure __ before starting.
a) Head light b) Flasher Light (c)
c) Brake Power physically and not moving of Loco up to 2nd Notch on application of SA-9
d) Marker Lights

735. Use of Dynamic Brake is_____ (b)
a) To raise the engine RPM
b) To control the train and to maintain constant speed at PSR , TS Rand Loop lines
c) To nullify the conjunctional brakes
d) To stop the train

736. When LE loco brakes are not applying check (d)
a) SA9 COC b) MU2B c) BC COC &Pressure d) All

737. When loco working as banker the position of MU2B & BP isolation COC
a) Lead & close b) Trail & open c) All d) None (a)

738. Immediate action when BP is not destroying with A9 during controlling of train (b)
a) Open A9 COC in Non-working control stand
b) Apply D1Emergency
c) Change the Control stand
d) Adjust BP pressure

739. Important test should be done before leaving station for a train (c)
a) Brake feel test b) Brake power test c) BP continuity test d) All

740. What test must be done by LP while leaving station with what speed
a) Brake feel test, 15KMPH b) Brake power test, MPS (a)
c) Working of DB, 15KMPH d) None

741. If an Air Brake train stopped on a gradient of 1/400 & above due to any reason, which brakes should be applied (c)
a) SA 9 only b) A9 only c) SA 9 & A 9 d) Hand brake

742. After detaching Loco from formation which safety aspect should be check before working LE. (c)
a) Continuity test b) Traction test
c) Loco Brake power test d) Leakage test

743. While TOC of Loco, If Flasher light glows but does no blink, what action would you take. (a)
a) Loco is failed b) Will work to nearest shed
b) change the bulb d) Work normally

744. How would you work the train if the loco wheel develops skid mark more than 50 mm between section? (b)
a) Fail the loco at site b) Work with 30KMPH
c) Clear section with20 KMPH d) None

745. After which check/restriction, non derailed vehicles of a train involved in accident be allowed for on-ward journey (b)
a) Without check b) After certified by TXR
c) With 10% less speed d) 80 KMPH

746. What immediate action would you take on noticing sudden drop of BP pressure/vacuum on run? (c)
a) Stop the train b) Contact Guard on VHF
c) Switch on Flasher light d) Inform PRC

747. When Head light become defective speed of the train shall not exceed ?(c)
a) 20kmph b) 30kmph c) 40kmph d) 50kmph

748. What should be done by LP for releasing proportional loco brakes during A9 application? (c)
a) Pressing BKIV foot pedal b) Application of DB
c) Either A or B d) None

749. The lead /Trail switch position in consol of WDG4/WDP4 working as MU trailing is (a)
a) Trail b) Lead c) Both d) None

750. If BP & FP pipes are wrongly connected _____ will fail. (b)
a) Loco is failed b) Formation Brakes c) Loco brakes d) All

751. Immediate action of ALP when LP is not controlling of train? (a)
a) Apply D1emergencygradually b) Repeat signals
c) Inform PRC d) Inform CCC

752. What action should be taken by LP when loco fails on run in section? (c)
a) Clear section and stop b) Trouble shoot first
c) Stop & secure first d) Inform PRC

753. In case of Brake binding in air brake wagon, what additional action would you take other than releasing of brake? (a)
a) Isolate DV b) Isolate BC c) Isolate TP cock d) Close BP angle coc

754. What is the initial charging time approximately of a single pipe air brake train (c)
a) 10-15 minutes b) 15-20 minutes c) 20-25 minutes d) 25-30 minutes

755. What is the initial charging time approximately of a twin pipe air brake train? (a)
a) 10-15 minutes b) 15-20 minutes
b) c) 20-25 minutes d) 25-30 minutes

756. Are BP & FP angle cocks to be kept OPEN always in an isolated coach/wagon of an air brake train? (a)
a) Yes b) No c) None of two above d) Above all

757. What would you understand if needle of air flow indicator comes down of a goods train in yard? (c)
a) Full brake application b) Guard side BP angle coc closed
c) Loco side BP angle coc closed d) Brake application by Guard

758. Loco should not be moved if water level above rail is (a)
a) 4 inches b) 3 inches c) 1 inch d) 2 inches

759. Side load pads are provided in this type of under truck (b)
a) Tri mount bogie b) Fabricated bogie c) HTSC bogie d) both b and c

760. How to reset the VCD penalty brakes in Alco locos (c)
a) Bring TH to idle b) Reset after 35secs
c) Both a and b d) Engine will get shut down

761. Hot engine alarm will be experienced after (d)
a) TS1 picks up b) LLOB operates
c) TS2 picks up d) ETS picks up

762. Eddy current clutch is located in (d)
a) Nose compartment b) Control compartment
c) Compressor room d) Radiator room

763. ERF should be put ON when (d)
a) ECC is defective b) R1 & R2 defective
c) TS-1&TS-2Defective. d) Both b and c

764. If radiator fan is not working during continuous hot engine alarm switch ON
a) ERF b) LWS c) DMR d) TR A (a)

765. In M.U. operation if trailing loco ¾" coc alone kept in open position (d)
a) BP will not destroy in any position
b) BP will destroy only in emergency position
c) Loco brakes will not apply
d) BP will not create to 5 kg/cm2

766. Engine should not be cranked if it is shut down for more than (c)
a) 24 hrs. b) 16 hrs. c) 48 hrs. d) 32 hrs.

767. In Alco locomotive Lube oil filter is located in (d)
a) Nose compartment b) Expresser room
c) Engine room d) Radiator room

768. If MCBG power breaker is in OFF position during cranking engine will
a) not Crank b) not Fire c) not Hold d) a and b (b)

769. In Alco loco fuel pump motor is located in (c)
a) Nose compartment b) Radiator room
c) Compressor room d) Engine room

770. Control air pressure is adjusted by (d)
a) A9 Feed valve b) F1 selector valve
c) NS 16 governor d) Limiting valve

771. If inlet valve of HP cylinder is struck up in closed position (b)
a) MR safety valve will blow b) Inter cooler safety valve will blow
c) Auto drain valve will blow d) Both a and b

772. LWS emergency switch should be switched 'ON' if (b)
a) Water level is less than 1" from bottom b) Float is punctured
c) Continuous hot engine alarm d) Both a and b

773. While working twin pipe air brake train if BP metallic pipe is damaged
a) By passing to be done b) Work with FP alone (a)
c) Detach the coach after clearing section d) Both b and c

774. In Air brake passenger train if BP metal pipe is damaged (c)
a) Work with single pipe b) Work further by passing the coach
c) Both a and b d) Work with FP alone

775. Sensitivity of DV is (a)
a) 0.6 kg/cm2 in 6secs b) 0.3 kg/cm2 in 60secs
c) 0.6 kg/cm2 in 60secs d) 0.5 kg/cm2 in 60secs

776. Insensitivity of DV is (b)
a) 0.6 kg/cm2 in 6secs b) 0.3 kg/cm2 in 60secs
c) 0.6 kg/cm2 in 60secs c) 0.5 kg/cm2 in 60secs

777. In M.U operation in Air brake loco, conjunction working in leading loco will takes place through (b)
a) 28 VB b) C3WDV
c) A1 differential valve d) F1 selector valve

778. If A9 coc is closed in both control stands (a)
a) BP will not create b) BP will destroy only in emergency
c) Loco brakes will not release d) BP will not destroy

779. In MU operation during A9 application, trail loco brakes gets applied Through (b)
a) C3W DV b) F1 selector
b) c) Additional C2relay valve d) Both a & c

780. While working an air brake train if engine shuts down on run (c)
a) The train brakes will apply automatically
b) Apply A9 and release after train comes to stop
c) Keep A9 in Emergency position until the trouble is rectified
d) Apply loco brakes alone

781. In IRAB-1 brake system conjunction working of loco brakes takes place Through (b)
a) 28 VB valve b) C3WDV
c) A1 differential valve d) VA1B control valve

782. In MU trailing loco if 3/4" coc alone is kept in open position (b)
a) BP will not destroy b) BP will not create upto 5.0 kg/cm2
c) Loco brakes will not apply d) BP will destroy only in emergency

783. If SA9 COC is closed in working control stand (a)
a) loco brakes will not apply b) conjunction brake will not apply
c) loco brakes will apply d) Bp will not create

784. Location of C3W DV in IRAB brake system is (b)
a) B control stand b) Nose compartment
c) under truck d) A control stand

785. If brake system coc is kept in closed position. (c)
a) BP pressure will not create b) FP pressure will not create
c) Both a and d d) MR pressure will not indicate

786. In IRAB1 brake system conjunction working of loco brakes takes place(b)
through
a) 28 VB valve b) C3W DV c) A1 differential valve d) VA1B valve

787. If brake system coc is closed (c)
a) MR gauge will indicate zero b) FP gauge will indicate zero
c) Both a and d d) BP gauge will indicate zero

788. In ALCO locos turbo super charger turbine is rotated by (c)
a) Gears b) Motor c) Exhaust gas d) Clutch

789. Main reservoir safety valve is set at _____kg/cm² (a)
a) 10.5 b)8 c) 9 d) 9.5

790. Reduction in BP pressure causes _____ (c)
a) Brakes release b) Brakes slow release
c) Brakes application d) MR pressure increasing

791. How many kinds of Brakes are provided on Diesel locomotive? (a)
a) 5 b) 10 c) 11 d) 9

792. In HHP locos turbo super charger turbine is rotated by (c)
a) Gears b) Motor c) Gear & Exhaust gas d) Clutch

793. The dead engine cutout cock, mounted on the air brake rack at the front of the locomotive, limits air braking effort on a locomotive being hauled dead in a train. When the cutout cock is set for a dead locomotive, the pressure regulator (c)

a) Charges MR2 to5kg/cm2.
b) B&C
c) MR2 at1.76kg/cm2 from
d) the brake pipe limiting brake cylinder pressure to 1.76kg/cm2

794. After cooler cooled air in air inlet casing is also called as__ (d)

a) Control air pressure b) Vacuum control air pressure
c) HS4 pressure d) Booster Air Pressure

795. N 1 Reducing valve/Limiting valve is located in (c)

a) Radiator room b) Compressor room
c) Nose compartment d) Rear compartment

796. The exhaust manifold is connected to _____ part of the TSC. (a)

a) Gas Inlet Casing b) Intermediate Casing
c) Turbine Casing d) Blower Casing

797. FTTM drives with (c)

a) Electric motor b) Belts c) Gear d) Hydraulicpressure

798. HP of WDP1 is (d)

a) 1400 b) 1800 c) 2400 d) 2300

799. Latest modified lube oil cooler is of _____type (b)

a) Drum b) plate c) Paper d) Roll

800. Max. continuous current of Traction Alternator is_____ Amp (b)

a) 1200 b) 1250 c) 1150 d) 1050

801. N1 reducing valve is used to control _____ pressure (c)

a) BP pressure b) FP pressure
c) Control Air Pressure d) BC pressure

802. Rail Guard height of WDP1 is _____ (d)

a) 120mm b) 90mm c) 30mm d) 100mm

803. The coupling between right angle gear box & radiator fan is (a)
a) Universal Coupling b) love-joy coupling
c) CBC coupling c) Cam gear

804. To overcome TSC surging problem in HHP Locomotive water wash done for
a) 05 minutes b) 15 minutes c) 25 minutes d) 30 minutes (b)

805. The efficiency of after cooler should not be less than (b)
a) 0.5 b) 0.6 c) 0.75 d) 0.8

806. Tube of radiator core made of (a)
a) Brass b) Copper
c) Aluminium d) None of the above

807. According to EMD MI , Radiator core leakage testing done at (b)
a) 20 psi pressure b) 50psi pressure
c) 65psi pressure d) 90psi pressure

808. If the difference of compression between any cylinder is more than 100 psi then (d)
a) There will be more loading on torsional damper
b) fatigue sign will appear in crankcase
c) fatigue sign will appear in piston pin & thrust washer
d) all of the above

809. NALCO-2100 is a (a)
a) Boron (b) based coolants b) Sodium (Na) based coolant
c) Carboxylate based coolant d) None of the above

810. Drop in flash point of the lube oil indicates (a)
a) Fuel contamination b) Water contamination
c) Carbon deposition d) All of the above

811. Engine cooling water sample testing is done in (a)
a) T-30 & above schedule b) T-90 & above schedule
c) Yearly & above schedule d) Three yearly & above schedule

812. Water sample should be collected (d)
a) in a clean container, with the engine warm, and running
b) from a point where the water flow is normal turbulent
c) after allowing the water to flow for a few seconds
d) All of the above

813. Hand brake is located in the (b)
a) Loco left side b) Loco right side
c) Engine right side d) None of the above

814. There are three consecutive pipes opening in the fuel tank, in which middle pipe connection is for (a)
a) Fuel suction pipe b) Fuel return pipe
c) Primary filter housing drain pipe d) None of the above

815. How many blades are in Radiator cooling fan? (b)
a) 6 b) 8 c) 10 d) None of the above

816. Condition for radar blow down magnet valve operation is (d)
a) Diesel engine should be in running condition
b) The reverser handle should not be in neutral position
c) The LOCAL CONTROL circuit breaker should be in closed condition
d) All of the above

817. Radar is fitted at (b)
a) Under truck at loco left side b) Under truck at loco right side
c) Under truck at engine right side d) None of the above

818. To measure crankcase vacuum U-tube manometer is connected to (d)
a) Modified oil pan cover b) Left side lube oil dipstick tube
c) Right side lube oil dipstick tube d) All of the above

819. The external parts of the injector is cooled & lubricated by (b)
a) Fuel oil b) Lube oil
c) Cooling water d) None of the above

820. In HHP Locomotive right-side rocker arm are used to operate (b)
a) Inlet valve b) Exhaust valve
c) Injector d) None of the above

821. "Clunk Test" is related to (a)
a) Fuel oil system b) Lube oil system
c) Turbo supercharger d) Compressed air system

822. Top fuel line of the fuel manifold is (a)
a) Fuel supply line b) fuel return line
c) Fuel by-pass line d) None of the above

823. Fuel oil suction strainer is cleaned at (b)
a) 60 days b) 90 days c) 180 days d) None of the above

824. Minimum lube oil pressure of HHP Loco at full speed is (b)
a) 8-12 psi b) 25-29 psi c) 20-25 psi d) 125 psi

825. What is the starting sequence of radiator fan? (d)
a) Both fan will pick up at slow speed with interval of 20 seconds
b) 1st fan will pick up at full speed with interval of 20 second of last
c) 2nd fan will pick up at full speed with interval of 20 second of last pick up
d) All of the above

826. In MEDHA control system Radiator fan drop at (b)
a) Below 73°c b) Below 79°c c) Above 85°c d) 96°c

827. What is the valve minimum compressor oil pressure oil pressure in HHP locomotive? (d)
a) 7psi b) 8psi c) 29 psi d) 15 psi

828. What is the valve of maximum Differential pressure across after cooler? (c)
a) 08"of H20 b) 14"of H20 c) 25"of H20 d) 07"of H20

829. Before Placing Power Assembly which of the following point to be check (d)
a) Condition of crankpin journal to be check
b) Condition of lower liner insert to be check
c) Condition of bottom surface of the head & head seat to be check
d) all of the above

830. While applying rocker arm shaft assembly, ensure that (d)
a) the shaft caps is placing with the short toe facing out
b) the shaft caps is placing with the short toe facing in
c) the word "IN" stamped side of shaft caps is placing inside
d) both a & c

831. How many gears are fitted in accessory drive gear train? (d)
a) 4 b) 5 c) 6 d) 7

832. How many magnetic poles are connect in radiator fan circuit when run slow speed? (c)
a) 8pole b) 12pole c) 16pole d) None of the above

833. "Pee" of the HHP locomotive is checked in which schedule? (b)
a) T-30 & above b) T-90 & above c) T-180 & above d) Yearly & above

834. In WDP4DH, DH stand for ? (a)
a) Duel cab loco with Hotel load facility
b) Double head loco with Hotel load facility
c) Disk brake loco with Hotel load facility
d) None of the above

835. How many cam shafts (segment) are fitted in HHP Locomotive (b)
a) 2 b) 4 c) 8 d) 18

836. In leading loco of HHP MU, compressor loaded when (a)
a) MR pressure is drop below 8.3 kg/cm2
b) MR pressure is drop below 9.5 kg/cm2
c) MR pressure is drop below 9.8 kg/cm2
d) MR pressure is drop below 10.2 kg/cm2

837. Minimum water flow pressure of HHP compressor is (d)
a) 4 GPM at 200rpm b) 10 GPM at 200prm
c) 15-27 GPM at 950 rpm d) Both a & c

838.Maximum consumable HP of HHP compressor during loading at 200rpm is
a) 2.2HP b) 22HP c) 23HP d) 70HP (b)

839. Valve leakage is indicated if Blow bye test reading is below (c)
a) 70psi air pressure b) 60psi air pressure
c) 56psi air pressure d) 45 psi air pressure

840. During compression pressure testing, if an individual power assembly (d)
has zero compression then
a) Vent the gauge before removing it
b) Remove the test valve body and insure that it is not plugged
c) If plugged, clean and reinstall the body, and repeat the compression test
d) All of the above

841. Fins of lube oil cooler core is made of (c)
a) Brass b) Copper
c) Aluminium d) None of the above

842. Torque valve of hand hole cover bolts is (c)
a) 20-50 ft-lbs b) 30-50 ft-lbs
c) 20-30 ft-lbs d) 15-20 ft-lbs

843. Torque valve of coupling disc to rim bolts is (b)
a) 190 ft-lbs b) 295 ft-lbs c) 165 ft-lbs d) 210 ft-lbs

844. Which of the following statement is true regarding filter element (d)
a) Same filter element are used in fuel oil primary & lube oil filter
b) Paper type two stage filter element are used in fuel oil primary & oil lube oil filter
c) Long life fuel oil primary & lube oil filter is changed at 180 days
d) All of the above

845. On load condition TSC is drive up to……through exhaust gas. (c)
a) 5^{th} to 8^{th}notch b) 6^{th} to 8^{th} notch
c) 7^{th} to 8^{th} notch d) Only to 8^{th} notch

846. Which of the following factor is consider for condemnation of bearin (d)
a) Water contamination b) Overly flaking
c) Exposed bronze d) All of the above

847. Which crankshaft journal does not have a hole for lube oil ? (b)
a) 1 b) 6 c) 10 d) None of the above

848. No.1 crank pin journal is lubricated through (b)
a) No.10 main bearing journal b) No.1 main bearing journal
c) No.2 main bearing journal d) None of the above

849. To test Clutch rotate TSC drive gear, it will rotate only during (a)
a) Anticlockwise direction b) Clockwise direction
c) Both direction d) None of the above

850. When the engine is driving the turbine (a)
a) The roller are wedged in the small side of the cam plate pocket
b) The roller are move to the wide end of the cam plate pocket
c) Both a. & b
d) None of the above

851. During radial alignment found of aux gen, if bottom reading found negative then (a)
a) Shim to be added in engine side both foundation bolt
b) Shim to be added in blower side both foundation bolt
c) Shim to be remove from engine side both foundation bolt
d) None of the above

852. Which of the following is the reason for high exhaust gas temperature (d)
a) Broken piston ring b) Broken exhaust valve
c) Plugged after cooler d) All of the above

853. Specified limit of main alternator radial run out is (d)
a) ±0.005" b) ±0.010" c) ±0.015" d) ±0.020"

854. Torque valve of injector crab nut is (c)
a) 60 ft-lbs b) 70 ft-lbs c) 50 ft-lbs d) 35 ft-lbs

855. If EPD crankcase button is operated condition then (d)
a) engine will crank
b) engine will not crake
c) engine will crank but not start
d) engine will start but shutdown after 60 seconds through LLOB

856. Maximum permissible thickness of lead wire in lead wire measurement test is (c)
a) 0.13mm b) 0.51mm c) 1.73mm d) None of the above

857. In spectrographic analysis of engine lube oil High range of Boron (B) is (d)
a) above 50ppm b) above 125ppm
c) above 75ppm d) above 20ppm

858. Which type of Battery Is used in WDG4/WDG4D Locomotive (a)
a) Lead acid battery b) Nickel cadmium (NiCd) battery
c) Nickel Metal hydride (NiMH) d) Lithium ion (Li-ion) battery

859. Auxiliary generator out put is utilised (d)
a) To excite the field of companion alternator b) For Battery charging
c) To run FPM d) All of the above

860. Specific gravity of fully charged battery of WDG4D locomotive is (d)
a) 1.1 b) 1.15 c) 1.17 d) 1.25

861. What is the rated capacity of battery fitted in WDG4D locomotive? (b)
a) 8V 450 Ah b) 8V 500 Ah
c) 8V 155 Ah d) None of the above

862. What is the rated capacity of battery fitted in WDP4D locomotive? (c)
a) 450 Ah b) 500 Ah c) 155 Ah d) None of the above

863. In HHP Locomotive there is how many yaw dampers is fitted? (b)
a) 2 b) 4 c) 5 d) 6

864. Cylinder test valve passage is used to (d)
a) Measure compression pressure b) Measure firing pressure
c) Measure temperature d) All of the above

865. Color of NALCO 2100 added coolant water is (a)
a) Pink b) Green c) Yellow d) Red

866. Baggie filter is made of (c)
a) Paper material b) Cotton material
c) Oil coated fiber glass impingement material d) All of the above

867. No of tube in after cooler of HHP Locomotive is (a)
a) 317 b) 644 c) 688 d) None of the above

868. 1st notch TE of WDG4D Locomotive is (b)
a) 35 KN b) 50 KN c) 15 KN d) 25 KN

869. There are how many batteries are fitted in WDG4D Locomotive? (b)
a) 2 b) 8 c) 10 d) none of the above

870. What is sand capacity of HHP Locomotive? (a)
a) 12 cubic foot b) 15 cubic foot c) 18 cubic foot d) None of the above

871. Aux. generator drive shaft coupler is renew during (c)
a) Yearly Schedule b) 2 Yearly Schedule
c) 3 Yearly Schedule d) 6 Yearly Schedule

872. How many MR tank are fitted in HHP Locomotive (b)
a) 1 b) 2 c) 3 d) 4

873. Which solenoid valve is energizes during idle speed (d)
a) A b) A,C c) A,D d) None of the above

874. Which solenoid valve is energizes during 1st notch ? (d)
a)D b) A,C
c) A,D d) None of the above

875. Minimum flash point of RR-460 is (c)
a) 35ºC b) 194ºC c) 240ºC d) None of the above

876. Maximum consumable HP of HHP compressor during unloading at 950 rpm is
a) 2.2HP b) 22HP c) 23HP d) 70HP (c)

877. There are how many " pee" pipe fitted in WDG4D Locomotive ? (c)
a) 8 b) 12 c) 16 d) None of the above

878. How many poles are in main alternator (TA 17) ? (c)
a) 6pole b) 8pole c) 10pole d) 16pole

879. How many gears are fitted in camshaft drive gear train ? (d)
a) 4 b) 5 c) 6 d) 7

880. During changing power assembly, while pacing head seat ring it should be ensure (d)
a) that the chamfered side of the head seat ring is facing up
b) that the chamfered side the head seat ring is facing down
c) that the word "TOP" stamped side of the head seat ring should be facing up
d) both a & c

881.While placing power assembly on engine it must be ensures that (a)
a) that fork rod serial number and basket serial number must be same.
b) that fork rod serial number and blade rod serial number must be same.
c) the blade rod serial number and basket serial number must be same.
d) None of the above

882. In MEDHA control system hot engine alarm come at (d)
a) 73^{o}c b) 79^{o}c c) 85^{o}c d) 96^{o}c

883. Any engine coolant with a PH in excess of ……. Is generally considered unsuitable for use in HHP Engine cooling systems. (d)
a) 5.5 b) 7.5 c) 9.5 d) 10.5

884. Fuel oil suction strainer is a (c)
a) Paper type stage filter element b) Paper type filter in tin container
c) Screen type metallic element d) None of the above

885. To protect FPM in HHP Locomotive (a)
a) Fuel oil suction strainer is provided
b) Fuel oil primary filter is provided
c) Fuel oil secondary filter is provided
d) All of the above

886. Fuel oil primary filter element is a (a)
a) Paper type two stage filter element
b) Paper type filter in tin container
c) Screen type metallic element
d) None of the above

887. Fuel secondary filter element is a (b)
a) Paper type two stage filter element
b) Paper type filter in tin container
c) Screen type metallic element
d) None of the above

888. Bottom fuel line of the fuel manifold is (b)
a) Fuel supply line b) Fuel return line
c) Fuel by-pass line d) None of the above

889. "Clunk Test" is used to detect (a)
a) Misfiring injector b) Lube oil leakage
c) Turbo surging d) Defective governor

890. Function of 15psi check valve in fuel system is to (d)
a) Retain back pressure in the fuel manifold
b) Ensure proper injector filling
c) Aid in staring
d) All of the above

891. In HHP Locomotive Brake block to wheel clearance in no.2-3,4-5 wheel disc is (c)
a) 10mm b) 15.9mm c) 19.1mm to 31.8mm d) None of the above

892. Length of both side water pump suction pipe vent hose is (c)
a) 12" b) 18" c) 23" d) None of the above

893. Metallic pipe of fuel filter supply and drain manifold assembly are joined by
a) Welding b) Forging (c)
c) Brazing d) None of the above

894. White color in humidity indicator of air dryer is indicate (c)
a) Deteriorating condition b) Dry air
c) Wet or contaminated air d) None of the above

895. Yellow color in humidity indicator of air dryer is indicate (c)
a) Deteriorating condition b) Dry air
c) Wet or contaminated air d) None of the above

896. Setting of fuel oil secondary filter By-pass valve is (c)
a) 15psi b) 40psi c) 70psi d) 125psi

897. Setting of lube oil soak back filter relief valve (b)
a) 15psi b) 40psi c) 70psi d) 125psi

898. Lube oil filter elements must be renewed if filter tank pressure reaches ……at 8nitch &……at idle speed (a)

a) 25psi,7psi b) 35psi,15psi

c) 25psi,15psi d) 25psi,15psi

899. In HHP Locomotive if Engine plus Inertial vacuum reading is more than 24" of H20 than (c)

a) Engine will shut down b) Engine will come to idle

c) Power will be reduced to 6^{th} notch d) None of the above

900. HHP Locomotive if Engine plus Inertial vacuum reading is more than 24" of H20 than Power will reduced to 6^{th} notch through (a)

a) EFS b) VFS c) PCS d) None of the above

901. In HHP Locomotive if Engine plus Inertial vacuum reading is more than 24" of H20 than Baggie filter chocked up message will come through (b)

a) EFS b) VFS c) PCS d) None of the above

902. Atmospheric pressure is measured by (b)

a) Manometer b) Barometer c) Hydrometer d) Pyrometer

903. Radiator fan rpm is measured by (a)

a) Stroboscope b) Vibration meter c) Decibel meter d) Pyrometer

904. Maximum coupling rim run out (TIR) of Compressor Drive coupling is (b)

a) 0.005" b) 0.010" c) 0.015" d) 0.020"

905. In MEDHA control system when turbo cool down cycle is running, radiator fan will drop at (a)

a) Below $73^{o}c$ b) Below 79^{o} c c) Above $85^{o}c$ d) $96^{o}c$

906. In HHP locomotive Blended Brake cut out switch is located in (a)

a) Engine control panel b) Nose compartment

c) ECC2 d) ECC3

907. Minimum permissible thickness of lead wire in lead wire measurement test is

a) 0.13mm b) 0.51mm (b)

c) 1.73mm d) None of the above

908. In HHP locomotive Cattle guard is (c)
a) 2 ½ “ b) 4 ½ “ c) 6 ½ “ d) None of the above

909. In HHP locomotive rail guard is (b)
a) 2 ½ “ b) 4 ½ “ c) 6 ½ “ d) None of the above

910. In Lead wire test the difference between the two compressed ends should not excee
a) 0.13 mm b) 1.31 mm c) 0.19 mm d) 0.51 mm (a)

911. When there is communication link failure and micro air brake breaker is active, the Loco will work (b)
a) As lead b) only in Trail c) in both modes d) in helper mode

912. Engine model in HHP locomotive is (a)
a) 710G3B b) Gt46 MAC c) GT 46 PAC d) None of the above

913. Type of Traction Motors in HHP locomotive (a)
a) 3-phase AC motors b) DC series motors
c) both a & b d) None of the above

914. In WDG4D locomotive EEC4 is located in (b)
a) Cab 1 b) Cab 2 c) Under truck d) near compressor room

915. In HHP loco MR efficiency test is conducted through ___ mm orifice (a)
a) 7.14 b) 8.2 c) 10 d) None of the above

916. In WDG4/WDP4 loco while conducting BP leakage test L/T switch should be kept in (c)
a) Lead position b) Trail position c) Test position d) Helper position

917.In WDG4 loco Battery ammeter consists of (a)
a) Green zone & Red zone b) Green zone & Yellow zone
c) Yellow zone & Red zone d) None of the above

918. In WDG4D locomotive PERCOS is provided on (c)
a) 16 CP b) 20 CP c) ERCP d) BP CP

919. Value of Impeller eye clearance of HHP Turbo super charger at 12 o'clock position is (b)
a) 0.012"-0.025" b) 0.024" – 0.048" c) 0.016" – 0.039" d) 0.010"- 0.018"

920. water pump is driven by (a)
a) Governor Drive gear b) Cam Gear
c) Clutch gear d) Crank shaft gear

921. Temperature difference between the two consecutive main bearings should not exceed by (d)
a) 5° C b) 2 ° C c) 6° C d) None of the above

922. Bubble in return sight glass is checked during (c)
a) Lube oil pressure dropping b) Booster pressure dropping
c) Fuel pressure dropping d) air pressure dropping

923. Out of which safety device engine comes to Idle (d)
a) OST b) EPD c) HOD d) PCS

924. In HHP locomotive governor pump is driven by (a)
a) governor drive gear b) No1 idler gear c) No 2 idler gear d) cam gear

925. Accessory drive gear is fitted in the (a)
a) front end of the engine b) rear end of the engine
c) front & rear end of the engine d) None of the above

926. During EPD testing at idle engine should not be shut down before (d)
a) 120 seconds b) 50 seconds c) 60 seconds d) 35 seconds

927. TPU is fitted on (b)
a) Harmonic damper b) TSC
c) Main Alternator d) Companion alternator

928. No of water pumps fitted in WDP4D locomotive (b)
a) 1 b) 2 c) 4 d) 5

929. In HHP locomotive bail off ring is provided (c)
a) to release loco brake b) to release train brake
c) to release loc brake during conjunction working d) None of the above

930. Crank shaft to cam shaft speed ratio is (c)
a) 1: 2 b) 2:1 c) 1:1 d) None of the above

931. Fuel tank capacity is WDG4 locomotive is (b)
a) 5000 litres b) 6000 litres
c) 6500 litres d) None of the above

932. No of teeth in No 2 Idler gear is (a)
a) 58 b) 64 c) 69 d) 79

933. Compressor drive coupling retainer nut is torque at (b)
a) 450 ft-lbs b) 500 ft-lbs c) 250 ft-lbs d) 650 ft-lbs

934. To operate wiper, air supply is received from (a)
a) MR1 b) MR2 c) BP d) FP

935. In HHP locomotive bail off ring is used for (a)
a) VCD acknowledge b) to release train brake
c) to apply train brake d) None of the above

936. Type of governor available in HHP locomotive (d)
a) Woodward governor b) MCBG
c) EH governor d) both a & b

937. In HHP locomotive EPD is fitted in the (c)
a) right side front end of the engine
b) right side rear end of the engine
c) left side front end of the engine
d) None of the above

938. During EPD testing (engine running above 3rd notch) engine should be shutdown in (d)
a) 120 seconds b) 40 seconds c) 35 seconds d) immediately

939. The sight glass located farthest from engine block is (b)
a) Return sight glass b) By-pass sight glass
c) empty sight glass d) None

940. Flywheel point indicator is fitted on (b)
a) harmonic damper b) starter motor bracket c) Main alternator d) None

941. In HHP locomotive crank shaft to cam shaft speed ratio is (a)
a) 1:1 b) 2:1 c) 1:2 d) None of the above

942. Weight of WDG4 locomotive is (a)
a) 126T b) 123T c) 121.2 T d) 117 T

943. Piston of HHP loco is made of (b)
a) cast iron with brazed on outer sleeves
b) cast iron alloy with chrome plating
c) stainless steel with chrome plating
d) cast iron

944. No 1 compression ring of HHP loco piston is made of (c)
a) cast iron with brazed on outer sleeves
b) cast iron alloy with tin plating
c) stainless steel with chrome plated
d) cast iron

945. Cylinder head of HHP locomotive is made of (d)
a) cast iron with brazed on outer sleeves
b) cast iron alloy with tin plating
c) stainless steel with chrome plated
d) cast iron

946. Lower liner insert of HHP locomotive is made of (d)
a) cast iron with brazed on outer sleeves
b) cast iron alloy with tin plating
c) stainless steel with chrome plated
d) cast iron

947. Head of exhust valve of HHP locomotive is made of (d)
a) cast iron with brazed on outer sleeves
b) cast iron alloy with tin plating
c) stainless steel with chrome plated
d) nickel chromium alloy steel

948. Stem of exhaust valve of HHP locomotive is made of (d)
a) cast iron with brazed on outer sleeves
b) cast iron alloy with tin plating
c) stainless steel with chrome plated
d) steel

949. Tin plating is done on HHP piston to (d)
a) improve thrust load bearing capacity
b) reduce liner scuffing
c) aid in the break in process
d) all of the above

950. Shot peening process is associated with (c)
a) Cylinder head b) Cylinder liner
c) Piston ring d) Piston

951. Which oil is used in HHP loco governor (d)
a) Servo prime 76 b) Servo press 100 c) Servo prime 57 d) both a & c

952. In HHP locomotive governor is fitted on (a)
a) front of the engine b) rear end of the engine
c) loco pilot cabin d) ECC-1

953. Crank shaft gear damper is checked for free movement during (d)
a) 90 days schedule b) 180 days schedule
c) 360 days schedule d) 3 yearly & above schedule

954. A short fuel level sight gauge is provided in both side of the fuel tank to
a) prevent over filling in case of glow rod gauge is defective (d)
b) prevent over filling in case of fuel filling flow meter is defective
c) prevent over filling in case of wrong set or adjustment in flow meter by fuel issuer
d) All of the above

955. In spectrographic analysis of engine lube oil normal range of Zinc (Zn) is
a) 0 – 50 ppm b) 0 – 20 ppm (d)
c) 0 -15 ppm d) 0 – 10 ppm

956. Bubbles in fuel return sight glass during priming indicates (a)
a) air draw in suction suction side of the fuel booster pump
b) the leaky fuel injector
c) insufficient fuel supply
d) none of the above

957. Bubbles in the fuel return sight glass after cranking the engine indicates
a) air draw in suction suction side of the fuel booster pump (b)
b) the leaky fuel injector
c) insufficient fuel supply
d) none of the above

958. Bubbles in the fuel return sight glass in higher notch with full load indicates
a) air draw in suction suction side of the fuel booster pump (c)
b) the leaky fuel injector
c) insufficient fuel supply
d) none of the above

959. To charge feed pipe at 6 kg/cm², which valve is fitted (d)
a) F2 feed valve b) FT1 feed valve
c) C2N feed valve d) Any of the above

960. Auto brake valve handle has (d)
a) 2 b) 3 c) 4 d) 5

961. In HHP locomotive wheel to brake block clearance is (b)
a) 10 mm b) depend upon the location of wheel
c) Independ upon the location of wheel d) None of the above

962. In HHP locomotive FP pressure is set at (a)
a) 6.0 ± 0.1 kg/cm² b) 6.1 ± 0.1 kg/cm²
c) 6.2 ± 0.1 kg/cm² d) None of the above

963. In HHP locomotive fuel oil spin on filter is fitted on (a)
a) right side, front end of the engine
b) right side, rear end of the engine
c) left side, front end of the engine
d) none of the above

964. During DBI testing of MR tank of HHP locomotive, hydraulic testing is done at (b)
a) 1 time working pressure b) 1.5 times working pressure
c) 2 times working pressure d) None of the above

965. In HHP locomotive exhaust valve close at (d)
a) 43.5° before BDC b) 43.5° after BDC
c) 107.5° after TDC d) 67° after BDC

966. To operate ABD, air supply is received from (a)
a) MR-1 b) MR-2 c) MR-3 d) None of the above

967. TM blower air duct (bellow) is changed at (d)
a) 360 days schedule b) 720 days schedule
c) 3 yearly schedule d) 6 yearly schedule

968. VCD alarm sound during (c)
a) T0 cycle b) T1 cycle c) T2 cycle d) T3 cycle

969. In which VCD cycle, yellow flashing light will glow (d)
a) T1 cycle b) T2 cycle c) T3 cycle d) All of the above

970. Engine lube oil sample analysis is done in (a)
a) 30 days & above schedule b) 90 days & above schedule
c) Yearly & above schedule d) 3 yearly & above schedule

971. To Loosen the injector rocker arm adjusting screw turning it (a)
a) Counter clockwise b) clockwise
c) any direction d) None of the above

972. Main Purpose of cylinder head seat ring is (a)
a) to maintain proper piston to head clearance
b) to provide water sealing between cylinder head & crankcase
c) to absord the vibration of the cylinder head
d) All of the above

973. Which of the following is required for injector rack setting ? (d)
a) Governor rake to be locked at 1”
b) Rack setting tool to use to adjust rake length
c) Rotate injector rake adjusting lock nut anticlockwise direction to tight it
d) All of the above

974. To advance injector rack length (b)
a) rack adjusting nut to be rotate
b) rake adjusting nut to be rotate anticlockwise
c) Rack adjusting lock nut to be rotate clockwise
d) None of the above

975. Cylinder head seat ring is made of (d)
a) Copper b) Aluminium c) Brass d) Aluminium Bronze

976. While placing cylinder head seat ring must be ensure that (a)
a) chamfered side should be facing up
b) chamfered side should be facing down
c) chamfered side should be outward
d) None of the above

977. In HHP Locomotive length of brake block is (c)
a) 10” b) 12” c) 16” d) 18”

978. To decrease injector rack length (a)
a) Rack adjusting nut to be rotate
b) Rake adjusting nut to be rotate anticlockwise
c) Rack adjusting lock nut to be rotate clockwise
d) None of the above

979. Valve of coupling advance of Compressor drive coupling (Fabricated) is
a) 0.020”-0.060” b) 0.040” -0.110” (a)
c) 0.080”-0.150” d) 0.100”-0.120”

980. Compressor of HHP Locomotive is a (b)
a) Single stage compressor b) Two stage compressor
c) Multi stage compressor d) None of the above

981. In HHP Locomotive normal inter cooler pressure is (b)
a) 30-35 psi b) 40-45psi c) 50-55psi d) 60-65psi

982. In HHP Locomotive if intercooler pressure is above normal then(a)
a) Problem in HP cylinder valve b) Problem in LP cylinder valve
c) Problem in both HP & LP cylinder valve d) None of the above

983. In HHP Loco during unloading intercooler pressure drop to 15-20psi(a)
a) Less than 3 minis b) 3Mins
c) More than 3 minis d) None of the above

984. Crankcase vacuum of compressor sump helps to (c)
a) Prevent oil from being drawn past the piston ring
b) Help to eliminate carbon build up on the compressor valve
c) Both of the above
d) None of the above

985. Intercooler of HHP Locomotive of HHP Locomotive is (b)
a) One-pass intercooler b) Two-pass intercooler
c) Multi-pass intercooler d) None of the above

986. In spectrographic analysis of engine lube oil High range of Copper (Cu) is
a) above 150ppm b) above 125ppm (a)
c) above 15ppm d) above 50ppm

987. In HHP Locomotive limit of KV of engine lube oil is (b)
a) 12.8-20.2sct 100oC b) 13.0.18.3sct 100oC
c) 10.8-20.2sct 100oC d)None

988. In spectrographic analysis of engine lube oil. High range of Aluminium (Al) indicates (b)
a) internal water leakage b) cylinder head seat ring wear
c) cylinder liner wear d)main bearing, crank pin bearing wear

989. Permissible limit of rocker arm shaft support height mismatch for any one cylinder is (a)
a) 0.006” b) 0.010” c) 0.12” d)0.015”

990. If rocker arm shaft support height for any one cylinder is mismatch greater than 0.006" it will lead to (a)
a) cams haft lobe distress and brakeage of rocker arm studs
b) crank shaft distress
c) crankcase distress
d) None of the above

991. Piston to cylinder head minimum clearance in new power assembly is (b)
a) 0.13mm b) 0.51mm c) 1.73mm d) None of the above

992. Oil control ring to head standard clearance is (a)
a) .002"-.006" b) .002"-008"
c) .002"-010" d) .002"-012"

993. If LLOB is operated condition then (b)
a) engine will crake
b) engine will not crake
c) engines will crake but not start
d) engine will start without any problem

994. Torque valve of equipment rake foundation boil is (a)
a) 455ft-lbs b) 400ft-lbs c) 165ft-lbs d) 210ft-lbs

995. In WDG4/4D Locomotive conjunction loco brake application time is (c)
a) 7-9 seconds b) 8-12 seconds
c) 16-30 seconds d) 15-20 seconds

996. Sleeves are provided in engine mounting boils of (b)
a) alternator side bolts b) accessory side bolts
c) both alternator & accessory end bolts d) None of the above

997. How many engine mounting bolts are fitted in accessory end (b)
a) 4 b) 6 c) 8 d) None of the above

998. Torque valve of Water jumper saddle strap nuts is (a)
a) 15ft-lbs. b) 20ft-lbs c) 30ft-ibs d) 35ft-lbs

999. Shim of radiator core is renew during (c)
a) Yearly & above schedule b) Two yearly & above schedule
c) Three yearly & above schedule d) Six yearly & above schedule

1000. Value of compression pressure reading of HHP locomotive (c)

a) 200.300psi b) 275.300psi c) 275-350psi d) 250.375psi

1001. What is the minimum clearance required for wheel to brake block during release? (a)
a) 10mm b) 8mm c) 6mm d) 4mm

1002. Normal TSC rpm of 4500 hp HHP Locomotive is (b)
a) 15000-20000rpm b) 18500-21500rpm
c) 18500-25000rpm d) 18500-20000rpm

1003. Minimum TSC rpm of 4500 hp HHP Locomotive at full load is (c)
a) 1500rpm b) 15932rpm c) 18400rpm d) 018400prm

1004. Scavenging lube oil pump minimum pressure at 8notch is (a)
a) 1.4kg/cm2 b) 4.5kg/cm2 c) 5.2kg/cm2 d) 7.0kg/cm2

1005. Normal air box pressure (BAP) in HHP Locomotive at full speed & full load is
a) 1.1kg/cm2-1.75kg/cm2 b) 1.5kg/cm2-1.95kg/cm2
c) 1.4kg/cm2-1.75kg/cm d) 1.4kg/cm2-1.50kg/cm2 (c)

1006. In HHP Locomotive normal lube oil inlet Temperature is (a)
a) 70-90oc b) 70-80oc c) 80-90oc d) 80-99oc

1007. Air box pressure is ……than the exhaust manifold pressure throughout the speed range (a)
a) 2psi greater b) 5psi greater c) 2psi less d) 5psi less

1008. Normal height of lube oil relief valve safety plate to valve guide is (b)
a) 1” b) 1.5” c) 2” d) 2 ½”

1009. The purpose of the lube oil relief valve is to (c)
a) Protect the scavenging pump from over loading
b) Protect the piston cooling oil pump from over loading
c) limit the maximum pressure of the lube oil entering the engine oil system
d) All of the above

1010. What is the piston travel of brake cylinder in WDM3A loco? (c)
a) 60 to 85 cm b) 85 to 95 cm c) 95 to 105 cm d) 90 to 100 cm

1011. In WDG3A locomotives 3/4" COC(BP COC) is located in/at (a)
a) Nose compartment b) Driver cab
c) Short hood control stand d) None of the above

1012. One of the following equipment is in Nose compartment (c)
a) MR1 b) MR2 c) Control air pressure reservoir d) All the above

1013. "D" solenoid in the Governor is also called_____ (a)
a) Shutdown solenoid b) Cranking solenoid c) Tripping solenoid d) Safety solenoid

1014. When installing lube oil relief valve on engine, make sure that the bypass port is positioned in the (a)
a) downward direction b) upward direction
c) left side direction d) right side direction

1015. In ALCO Locos Fuel oil crossover flexible pipe is located in (c)
a) Radiator room b) Nose compartment
c) Power takeoff end d) Free end

1016. In spectrographic analysis of engine lube oil normal range of Aluminium (AI)is
a) 0-20ppm b) 0-15ppm c) 0-10ppm d) 0-05ppm (d)

1017. Fuel pump motor is not working though the all circuit breakers are switched ON, the immediate reason could be_____ (d)
a) ERF not closed b) R1 and R2 not picked up
b) GFC not picked up d) FPC not picked up

1018. If white smoke is emitting from exhaust chimney, what could be the reason?(a)
a) Water mixed with fuel oil b) Governor oil mixed with fuel oil
c) Lube oil mixed with fuel oil d) None of these

1019. _____ Number of brake blocks are provided on WDM2 (b)
a) 16 b) 24 c) 32 d) 22

1020. The number of Brake cylinders provided on WDM2 locomotive (b)
a) 6 b) 8 c) 10 d) 12

1021. Pre-lubrication is required if an engine that has been shut down for more than_____ hours (a)
a) 48 b) 24 c) 12 d) 8

1022. Lube oil dipstick gauge of WDG3A is having _____ liters capacity (c)
a) 400 b) 380 c) 600 d) 500

1023. In HHP Locomotive, lube oil strainer box is fill up with lube oil within (b)
a) 30 seconds b) 45 seconds c) 60 seconds d) 75 seconds

1024. In Alco Locos Lube oil Cooler is located in_____ (a)
a) Radiator room b) Compressor room c) Generator room d) Under truck

1025. In ALCO Locos Lube oil Filter drum is located in_____ (d)
a) Nose compartment b) Generator room c) Engine block d) Radiator room

1026. What is the Safety Device provided in the Lube oil system? (c)
a) GFOLR b) OSTA c) LLOB d) LWS

1027. When LLOB trips, the engine will_____ (b)
a) Raise b) Shutdown c) Comes to Idle d) Hunting

1028. Electro Pneumatic Governor is located in (a)
a) Compressor room b) Radiator room
c) Nose compartment d) Rear compartment

1029. From where the control air pressure will get air pressure_____ (b)
a) MR2 b) MR1 c) BKTs d) J filter

1030. MR (compressed air pressure) Unloading will takes place at_____kg /cm² (c)
a) 8 b) 9 c) 10 d) 11

1031. The compressed air enters to MR1 tank through (c)
a) MR Safety valve b) MR2 c) Cooling Coil d) 3 / 4" coc

1032. A pressure cap, which is located on the water tank filler pipe, (c)
opens at approximately
a) 5 PSI b) 15 PSI c) 7PSI d) 70 PSI

1033. Cooling Water capacity in WDM2 locomotive is_____ liters (d)
a) 900 b) 910 c) 1300 d) 1210

1034. In WDM2 engine, the Water pump is driven by (c)
a) Motor b) Pulley c) Gear d) Belts

1035. Water leaking continuously from water telltale pipe (b)
a) Dummy it and work further b) Fail the loco duly observing the water level
c) Do fast pumping d) Work on lower notches

1036. Hot engine alarm (HEA) will come at ___ °C in WDG3A (c)
a) 60 b) 70 c) 90 d) 80

1037. During one of the following occasions Hot engine alarm indication will get (c)
a) Continuous 8thnotch working b) Excess load
c) Water pump not working d) Full water in expansion tank

1038. LWS is connected to (b)
a) Water left side return header b) Water expansion tank
c) Water right side return header d) All the above

1039. _____will be switched automatically in loco, during accidents (b)
a) Head light b) Auto flasher light c) Marker light d) Doom light

1040. FP pressure in loco shall be _____ and in BV _____ kg/Sq.cm. (c)
a) 5.0, 4.8 b) 5.0, 4.7 c) 6.0, 5.8 d) 6.0, 5.7

1041. What is the color code for the B.P pressure pipe? (c)
a) Black b) Red c) Green d) Yellow

1042. DV isolating handle in _____position indicates DV is in isolated position (b)
a) Vertical b) Horizontal c) 60 degrees d) None of these

1043. No.1 idle gear to stub shaft, minimum clearance is (a)
a) 0.005" b) 0.008" c) 0.017" d) None of the above

1044. Lube oil pr. Sensing pipe line are provide in the (b)
a) Left Bank top deck cover b) Right Bank top deck cover
c) Inside the crankcase d) Inside the oil pan

1045. When the speedometer of a running train engine becomes defective (b)
a) Fail the locomotive b) Work the train by reducing 10%speed from Booked speed
c) Work further with50kmph d) Ask for the relief engine

1046. The speed restriction that has to be observed by a LP when headlight of (c)
engine fails on BG is _____kmph.
a) 50kmph b) 30kmph c) 40kmph d) MPS

1047. How much BP should be ensured in the engine and BV before staring (c)
air brake train?
a) 6cm2kg,4.9 kg/cm2 b) 5.2kg/cm2, 4.7kg/cm2
c) 5kgcm2, 4.8kg/cm2 d) 4.8kg/cm2,5kg/cm2

1048. Low lube oil shutdown by the governor is also initiated by (d)
a) HOD (Hot Oil Detector) b) EPD low cooling water pressure portion
c) EPD crankcase pressure portion d) All of the above

1049. Coolant water capacity in HHP locomotive (c)
a)1000 b) 1100 c) 1045 d) 1145

1050. Type of bogie in WDG4 locomotive (b)
a) Single suspension b) Double suspension
c) Triple suspension d) None of the above

1051. In 710G3B Engine maximum permissible temperature difference between (b)
lube oil and water is
a) $10^{o}c$ b) $11.1^{o}c$ c) $16^{o}c$ d) None of the above

1052. Identify the problem in brake power ? (d)
a) A9 coc in both control stand in open condition
b) MU2B in Lead position & 3/4"coc in open in Rear loco
c) For loaded rake the Load/empty device handle in empty direction
d) All the above

1053. If MU loco's get parted through which valve brake will apply in rear loco? (c)
a) SA-9 b) A-9 c) F1selector d) N1 Reducing

1054. The effective Brake Power in case of Mail/Express at the originating station(c)
should be____% and enroute can be not less than _____%
a) 100, 85 b) 100, 100 c) 100, 90 d) 100, 95

1055. The following shall not be used for extinguishing fires on electrical (c)
equipment.
a) dry chemical powder b) CO2 c) water d) none of these

1056. In HHP locomotive hand cranking arrangement is provided on the (c)
a) Left rear side of the engine b) Right rear side of the engine
c) Both side, rear end of the engine d) None of the above

1057. What are the present VCD cyclic timings ? (a)
a) 60, 8 and 8 seconds b) 60,17 and 17 seconds
c) 170, 17 and 17 seconds d) 65,8 and 8 seconds

1058. What combination of trains are Permitted for running long haul train ? (d)
a) Empty/Empty b) loaded/Empty c) Loaded/Loaded d) All the above

1059. What condition is to be observed in loco by LP to avoid stalling? (c)
a) COC's b) Lube oil pressure
c) Load meter overshooting d) Conjunctional brake working

1060. What is the position of ¾coc's in both loco while carrying dead loco's ? (b)
a) close/close b) open/close c) Both open d) none of the above

1061. What is the position of C3W/DV/28VB COC in both loco's while carrying dead loco? (a)
a) open/open b) close/open c) Both close d) open/close

1062. What is the position of MU2B & BP isolation COC in banker loco ? (a)
a) Lead & close b) Trail & open c) Trail & close d) None

1063. Fuel oil secondary filter is changed at (b)
a) 60 days b) 90 days c) 180 days d) None of the above

1064. Fuel oil primary filter is filtered up to (b)
a) 600 µ b) 13 µ c) 2 µ d) None of the above

1065. Fuel oil suction strainer is filtered up to (a)
a) 600 µ b) 13 µ c) 2 µ d) None of the above

1066. Fuel oil secondary filter is filtered up to (c)
a) 600 µ b) 13 µ c) 2 µ d) None of the above

1067. Minimum lube oil pressure of HHP loco at idle is (a)
a) 8-12 psi b) 25-29 psi c) 20-25 psi d) 125 psi

1068. What should be the position of BP & FP angle cocks in an DV isolated coach/wagon of an air brake train ? (a)
a) Open b) Close c) None d) BP close & FP open

1069. What will happen when isolation handles of 20 no. DV's in a formation of 58wagons are in isolation condition ? (c)
a) No change in brake power b) load will be reduced
c) Poor brake power d) increase the brake power

1070. While carrying dead loco_____to be ensured (d)
a) Conjunctional brake application in rear loco
b) Conjunctional brake application in leading loco
c) Conjunctional brake in both loco's
d) All the above

1071. How many ETP are fitted in HHP locomotive (b)
a) 1 b) 2 c) 3 d) 4

1072. The internal parts of injector are cooled & lubricated by (a)
a) Fuel oil b) Lube oil c) Cooling water d) None of the above

1073. In HHP locomotive left side rocker arm are used to operate (b)
a) Inlet valve b) Exhaust valve c) Injector d) None of the above

1074. What precaution should be taken for conducting Air brake self test in GM locos? (d)
a) Secure loco b) Secure formation
c) Detach loco and secure d) Secure both & don't detach from formation.

1075. What should be done first for changing consol in WDG 4 / WDP 4 locos ? (a)
a) Disable working control stand & enable nonworking control stand
b) Enable working control stand & disable nonworking control stand
c) As per convenience
d) None

1076. Manual sander will be working when the unit speed is up to (b)
a) 30.6kmph b) 19.5kmph c) 30kmph d) 25kmph

1077. Manual Sanding is cutout when the locomotive is operating in power/wheel creep mode, and moving at speeds above (c)
a) 30kmph b) 10kmph c) 19.5 km/h d) 15kmph

1078. If hot oil detector operates, Engine comes to ----- (b)
a) Idle b) Shut down c) Load meter zero d) No effect

1079. Bail off is provided to release (b)
a) Direct brake application b) Conjunctional brake application
c) Formation brakes d) Both b and c

1080. In HHP locomotive to create crankcase vacuum _____ fitted (a)
a) Oil separator & Eductor tube is fitte b) CCM
c) Exhauster d) all of the above

1081. Oil lubricated TM gear case is provided in (d)
a) WDM 2 b) WDM 3D c) WDG 3A d) WDP 4

1082. In WDG4 loco LLOB is located in (a)
a) Accessories room b) Compressor room
c) Engine power take off end d) ECC3

1083. In WDP4/WDG4 if GR (power) trips continuously 3 times within 10 minutes (a)
a) Truck isolation is to be done b) Defective TM is to be isolated
c) Defective speed sensor is to be isolated d) Fail the Loco

1084. In WDP4/WDG4 loco if LLOB is in tripped position during cranking engine will (d)
a) Crank b) Not Fire c) Not hold d) Not crank

1085. In WDP4/WDG4 loco defective speed sensor should be isolated if (a)
a) False locked axle indication is experienced
b) GR trips more than 3 times within 10 minutes
c) Any one TM is defective
d) Crow bar fires

1086. In WDP4/WDG4 banker loco working C/S, L/T switch should be kept in (c)
a) Lead b) Trail c) HLPR d) Test

1087. In WDG 4 if false locked wheel indication is experienced (a)
a) Isolate defective sensor b) Isolate defective truck
c) Isolate defective TM d) Fail the loco

1088. In WDP4/WDG4 dead loco for quick release of loco brakes open one side (d)
a) MR equalizing cock b) BC equalizing cock
c) BP equalizing pipe d) Both a & b

1089. In WDP4/WDG4 banker loco working control stand A9 should be kept in (a)
a) FS position b) Run position c) Release position d) Emergency position

1090. Oil visibility in bye pass sight glass indicates that (b)
a) Primary filter is choked. b) Spin on filter choked.
c) Lube oil filter choked. d) Lube oil strainer choked.

1091. In WDP4/WDG4 loco choking of fuel oil primary filter is indicated by (a)
a) Filter condition gauge. b) Oil visibility in bye passes sight glass.
c) Both A & B d) Oil visibility in sight glass near to engine block

1092. In WDP4/WDG4 Loco when lube oil temperature exceeds 124°C (d)
a) Hot oil detector operates b) LLOB operates c) OSTA trips d)Both a and b

1093. In WDP4/WDG4 loco if water pressure is less (d)
a) LLOB trips b) Low water pressure button will trip
c) Crank case pressure button will trip d) Both a and b

1094. In WDP4/WDG4 loco when PCS is knocked out (a)
a) MAB breaker should be recycled b) TCC breaker should be recycled
c) Air drier breaker d) Both a and b

1095. In WDP4 /WDG4 loco before conducting air brake self test (a)
a) Recycle MAB b) Recycle TCC1 and TCC2 c) Recycle Air drier breaker.
D) Both a & b

1096. In WDP4/WDG4 loco engine should not be cranked when (b)
a) Low water button is tripped b) crank case pressure button is tripped
c) LLOB is in tripped d) OSTA is tripped

1097. In WDP4/WDG4 loco load meter will not respond if (c)
a) GFB trips b) AGFB trips c) Both a & b d) MAB trips

1098. In WDP4/WDG4 when continuous wheel slip is experienced due to locked axle (c)
a) Isolate the defective TM b) Isolate the defective speed sensor
b) Fail the loco immediately d) Isolate the defective truck

1099. To measure the speed of HHP locomotive ____ is used (c)
a) Axle generator b) Pulse generator c) Radar d) None of the above

1100. Location of Battery Knife Switch in WDG4 Loco is (d)
a) Nose Compartment b) In Accessories Room
c) In LP's cab d) Loco Left Side Foot Plate

1101. In WDP4/WDG4 loco while conducting BP leakage test L/T switch should (c)
be kept in
a) Lead position b) Trail position c) Test position d) Helper

1102. If FOP is dropping due to filter choked (b)
a) By pass secondary Filter b) By pass primary filter
c) Both a & b d) Dummy FIP

1103. Bogie configuration of WDP4 Locomotive is (a)
a) CO-CO b) BO1 - 1BO c) BO-BO d) BU-BU

1104. Axle Load of WDG4 Locomotive is (a)
a) 20.5 T b) 22.5T c) 25T d)19.5T

1105. Axle Load of WDP4 Locomotive is (d)
a) 20.5 T b) 22.5T c) 25T d) 19.5T

1106. HHP Loco Hand brake is applicable for Wheel No. (c)
a) L4,R4 b) L2,R2 c)R4,R5 d)R3,R4

1107. Primary stage suspension in WDG4 is accomplished by (b)
a) Shock absorber b) helical coil spring c) Damper d) Load pads

1108. Length of WDP4B locomotive is (b)
a) 22.98 meters b) 21.24 meters c) 21.7 meters d) None of the above

1109. Dynamic brake grid motor is a (a)
a) DC motor b) Single phase AC motor
c) Three phase AC motor d) None of the above

1110. According to RDSO specification, radiator core leakage test is done at __ psi (c)
a) 20 b) 50 c) 75 d) 90

1111. Secondary stage suspension is accomplished by (a)
a) Load pads b) damper c) rubber compression springs d) helical coil spring

1112. Traction Motor gear ratio for MAC is (c)
a) 17:77 b) 18:90 c) 17:90 d) 16:90

1113. WDG4 Loco is provided with_____ type of bogie (a)
a) three-axle bolster lessbogie b)Tri-mount c) Tetra mount d) Flexi coil

1114. ____is the main power supply of CCB for the CCB system. (b)
a) DCU b)VCU c) PCU d) DVR

1115. Brake cylinder pressure maximum is ___Kg/Cm2 during backup system (a)
a) 3.8 b) 3.2 c) 2.2 d) 5

1116. Length of radiator cooling fan blade is (a)
a) 52" b) 48" c) 23" d) None of the above

1117. Emergency brake application is accomplished by_____ valve provided at the lower left of each console (a)
a)D 1 emergency valve b) Independent brake valve
c) Direct Brake valve d) companion emergency brake

1118. MRPT-main reservoir pressure transducer reads pressure_____ (b)
a) Between MR1&MR2 b) MR1 pressure c) MR2 pressure d) FP pressure

1119. The air brake system, trips locomotive control system whenever _____relay initiates a safety control or emergency air brake application. (a)
a) PCR b) FPR c) WSR d)SR

1120. The EM2000 reads main reservoir air pressure from _____ transducer. (d)
a) BPT b)BCT c) ERT d) MRPT

1121. What is the code for Brake pipe control failure in self test ? (b)
a) 8A b) 6A c)10A d) 22A

1122. What is the code for Brake pipe leakage failure in self test? (a)
a) 6B b) 10B c)6F d) 6S

1123. What is the function of KE valve in CCB system in WDG4 Loco motive ? (a)
a) provides pneumatic back Up b) Creation of BP
c) Creation of FP d) Emergency application

1124. Why Maximum of 5.2kg/cm2 brake cylinder pressure is used in place of 3.5kg/cm2 as in conventional locos ? (c)
a) High horse power loco b) Speed is more
c) A single shoe system is used d) To have effective brake power

1125. Where the booster air pressure stored in Two stroke engine? (a)
a) In air box b) manifold c) tank d) MR

1126. If local control circuit breaker is trip, the loco should be shut down by (a)
a) LLOB b) EFCO c) MUSD d) None of the above

1127. Loading and unloading of compressor is controlled by_____in WDG4/P4(a)
a)MVCC b) EPG c) RGCP d) None of the above

1128. After cranking, allow a minimum of _____minutes for starter motor cooling before attempting another engine start. (c)
a) 20 b) 10 c) 2 d) 5

1129. Do not crank engine for more than _____with starting motors in HHP. (d)
a) 30seconds b) 1minutes c) 10seconds d) 20 seconds

1130. Starting fuse is located in the (a)
a) Left side of the locomotive b) Right side of the locomotive
c) Both side of the locomotive d) None of the above

1131. 8th notch engine RPM of WDG4 (c)
a) 1050 b) 1000 c) 954 d) 915

1132. Buffer Height of WDG4 --------- (b)
a) 1105 mm to 1000mm b) 1105 mm to 1030mm
c) 1105 mm to 1090 mm d)1125 mm to 1030mm

1133. Maximum continuous speed of WDP4 class Loco motive is _____kmph (c)
a) 140 b) 150 c) 160 d) 180

1134. How many number of batteries are there in WDP4 Locomotive (b)
a) 8 b)10 c) 4 d)6 B

1135. Low idle RPM of WDP4 engine is _____ (b)
a) 210 b) 200 c) 220 d) 215

1136. Lube Oil capacity of Compressor in WDP4 is ____ltrs (c)
a) 9 b) 8 c) 10 d) 12

1137. Standard side buffer projection is (b)
a) 584 mm b) 635 mm c) 650 mm d) None of the above

1138. Battery box is located in the WDG4 (a)
a) Left side of the locomotive b) Right side of the locomotive
c) Both side of the locomotive d) None of the above

1139. Maximum rectified output voltage of Companion Alternator is_____ volts (b)
a) 250 b) 230 c) 200 d) 110

1140. Maximum rectified output voltage of Traction Alternator is_____ volts (d)
a) 2400 b) 2500 c) 2700 d) 2600

1141. Minimum continuous speed at Maximum tractive effort of WDP4 Locomotive(d)
is __ kmph
a) 15.5 b) 20 c) 10.0 d) 22.5

1142. HP of WDG4 Loco motive is _____ HP (a)
a) 4500 b) 3900 c) 3950 d) 3939

1143. Normal idle RPM of WDP4 Engine is _____ (b)
a) 290 b) 269 c) 250 d) 296

1144. Type of Water Pump in WDP4 ------: (c)
a) AC motor pump b) Air driven pump c) Centrifugal Pump d) Gear pump

1145. WDP4 OSTA tripping rpm is: (c)
a) (1155 ± 20) b) (1125 ± 20) c) (1045 ± 20) d) (1100 ± 20)

1146. Value of governor drive gear to stub shaft clearance is (a)
a) 0.003" – 0.008" b) 0.008" – 0.016" c) 0.006" – 0.020" d) 0.007" – 0.025"

1147. 6 kg/cm² feed valve is located in the (b)
a) loco left b) loco right c) engine right side d) none of the above

1148. Current rating of Starting fuse IN WDG4 _____ (d)
a) 600 amps b) 1000 amps c) 500 amps d) 800 amps

1149. How many position does PRIME/START switch has_____ (a)
a) 3 b) 2 c) 1 d) 4

1150. If the LR % is_____EM2000 is reducing power output because the engine's capabilities are less than the load being requested. (**b**)
a) less than 200 b) less than 100 c) 100 More than d) 100 less than 500

1151. If the TM temperature is greater than _____degree Celsius the inverter will De-rate to keep the traction motor temperature in control (a)
a) 200 b) 100 c) 95 d)92 `

1152. Maximum starting effort of WDG4 is_____ (b)
a) 120T b) 54T c) 22T d) 44T

1153. Purpose of BWR (brake warning relay) is to (a)
a) To cut out Dynamic brake in case of Over current b) Protect Dyn grid
c) Ensure working of Dyn braking d) All the above

1154. Purpose of TEL (Tractive effort limit) Relay in WDG4 Locos is (d)
a) To limit tractive effort to 200KN or 20T b) To limit tractive effort to 250KN or 25T
c) To limit tractive effort to 150KN or 15T d)To limit tractive effort to 294KN or 29.4T

1157. The functioning of VCU is _____ (b)
a) to reduces 73.5 V DC to filtered 25 V DC to CRU
b)to reduces 73.5 V DC to filtered 24 VDC to CRU
c) to reduces 72 V DC to filtered 25 V DC to CRU
d) to reduces 110 VDC to filtered25 V DC to CRU

1158. The main functions of EM2000 computer is (d)
a) Logic b) Excitation c) Display d) All of the above

1159. How Crank case vacuum is maintained in WDG4/WDP4 engines(EMD)? (c)
a) Blower b) Crank case exhauster c) Eductor d) No vacuum creation

1160. Fuel oil primary filter is located at _____ (d)
a)Generator Room b) Engine room c) Radiator Room d) Equipment rake

1161. If the pressure across the primary filter element exceeds_____, a bypass valve begins to open, bypassing the primary fuel filter. (d)
a) 1.6kg/cm2 b) 5.3kg/cm2 c) 4.8kg/cm2 d) 2.1kg/cm2

1162. When fuel oil pressure at the spin-on filters input rises _____kg/cm2, the spin-on filters bypass valve opens fully and fuel bypasses the engine and return to fuel tank.(b)
a) 5.3kg/cm2 b) 4.2 c) 4.8kg/cm2 d) 3.8kg/cm2

1163. What is the Fuel oil tank capacity in WDP4D locomotive in litres. (b)
a) 6000 b) 5000 c) 3000 d)5500

1164. How many Power Contactors are available in WDG4 Locomotive? (d)
a) 7 b) 9 c) 8 d) 0

1165. WDG4 Engine idle RPM (c)
a) 469 b) 369 c) 269 d)360

1166. LOPS setting of WDG4 loco in 8 th Notch is (a)
a) 25-29 psi b) 8-12 psi c) 12-20 PSI d) 20- 30PSI

1167. LOPS setting of WDG4 loco in idle is (b)
a) 10 - 12 PSI b) 8-12 psi c) 12-20 PSI d) 20- 30 PSI

1168. The purpose of Turbo lube pump in WDP4 Locomotive before cranking is (c)
a) To lubricate the Turbo b) To remove the residual heat
c) To lubricate turbo Bearing d) To lubricate crank shaft

1169. Spectrographic analysis of lube oil is conducted to determine (c)
a) viscosity of lube oil b) PH value of lube oil
c) wear metal elements present in lube oil d) all of the above

1170. Drop in flash point of lube oil in indicates (b)
a) water contamination b) fuel oil contamination
c) carbon contamination d) all of the above

1171. A lower flash point & fuel dilution of lube oil may be cause of (d)
a) crankcase explosions b) LLOB operation
c) EPD operation d) all of the above

1172. In “RR 520 MG”, “20” indicates (a)
a) total base number of lube oil b) total brinnel number of lube oil
c) generation of lube oil d) grade of lube oil

1173. Lube oil sample should be collected by (d)
a) opening pre-lube dummy b) opening no. 5 oil pan hand hole cover
c) a hand syringe inserted through the dipstick hole d) all of the above

1174. No of spline nuts fitted in accessory drive housing (d)
a) 45 b) 24 c) 73 d) 57

1175. Turbo lube pump should be running for _____minutes after engine is shutdown if engine was running at 5th notch and higher for 60minutes prior to engine shut down. (b)
a) 15 b) 35 c) 20 d) 45

1176. _____ Number of brake blocks are provided on WDG4 (b)
a) 16 b) 12 d) 32 d) 22

1177. Lube oil dip stick gauge capacity in WDG4 locos is ___liters. (c)
a) 400 b) 550 c) 625 d) 700

1178. MR Cooling coils in WDG4 is located at (c)
a) Under truck b) Engine block c) Radiator room d) Compressor room

1179. Maximum Stall Tractive Effort of WDG4 Locomotive is (a)
a) 540KN b) 400KN c) 200KN d) 250KN

1180. How many water pumps available in EMD locomotive engine? (d)
a) 1 b) 4 c) 3 d) 2

1181. If the coolant temperature reaches _____degree C, the locomotive will go to throttle six limit. (a)
a) 95 b) 92 c) 85 d) 100

1182. EPD is Located at _____ (a)
a) Engine Accessories Room b) Engine room
c) Radiator Room d) Equipment rake

1183. The EM2000 will consider a temperature probe failed if it reads _____ (b)
a) Less than -155 degrees C or greater than 150 degrees C
b) Less than -55 degrees C or greater than 150 degrees C
c) More than -55 degrees C or greater than 150 degrees C
d) Less than -55 degrees C or greater than 250 degrees C

1184. The system maintains the coolant temperature within a predetermined range of from (a)
a) 79º C to 85º C b) 85 to 95 c) 92 to 100 d) 72 to 80

1185. What is the indication for blown radiator fan fuse ? (c)
a) LED
b) Buzzer
c) Fuse blown out Indicator will project out
d) Message

1186. What precaution should be taken for conducting Air brake self test in GM locos?(d)
a) Secure loco b) Secure formation c) Detach loco and secure
d) Secure both, close BP & FP COC of loco towards formation.

1187. What should be done first for changing console in WDG 4 / WDP 4 locos ? (a)
a)Disable working control stand & enable non working control stand
b) Enable working control stand & disable non working control stand
c)As per convenience d) None

1188. What should be the position of L /T switch in trailing loco of WDG4/WDP4 MU? (a)
a) Trail b) Lead c) Both d) Off

1189. What Test should be done by Crew for Passenger Train detained more than 30 min.?
a) Air brake Self Test b) Air Continuity test (b)
c) Brake feel test d) Brake Power test.

1190. AGFB Stands for (b)

a) Auxiliary Generator Field Button b) Auxiliary Generator Field Breaker
c)Additional Generator Field Button d)Additional Generator Field Breaker

1191. BL KEY Stands for (c)
a) Button Lever Key b) Big Lever Key
c) Box Lever Key d) none

1192. CRU Stands for (d)
a) Control Relay Unit b) Centre Relay Unit
c) Constant Relay Unit d) Computer Relay Unit

1193. DCL Stands for (b)
a) Direct Circuit Link b) Direct Current Link
c) Digital Current Link d) Digital Circuit Link

1194. DIO Stands for (a)
a) Digital Input Output b)Digital Internal Output
c) Direct Input Output d)Digital Interlock Output

1195. ECC-1 Stands for (c)
a) Electrical Control Circuit-1 b) Electrical Control Cubical-1
c) Electrical Control Cabinet-1 d) Electronic Control Cabinet-1

1196. EPU Stands for (b)
a) Engine Performance Unit b) Engine Pick Up
c) Engine Pressure Unit d) Electrical Pick Up

1197. FP RLY Stands for (d)
a) Fuel Pressure Relay b) Failure Protection Relay
c) Full Pressure Relay d) Fuel Pump Relay

1198. GTO Stands for (a)

a)Gate Turn Off Thyrister b) Gate Thyrister off

c) Gate Turn On d)Gate Thyrister On

1199. IPR Stands for (d)

a) Inverter Protection Relay b) Insulator Protective Resistor

c) Inverter Protective Rod d) Inverter Protective Resistor

1200. MMC Stands for (c)

a) Miss Management Case b) Miscellaneous Management Control

c) Miss Management By Crew d) Miscellaneous Management By Crew

1201. WDG4D is specially designed for (a)

a) Goods service b) Passenger service c) Mixed service d) None

1202. No. Of teeth in HHP loco crank shaft (d)

a) 58 b) 64 c) 113 d) 79

1203. WDG4 loco is a (a)

a) Single cab loco b) Dual cab loco

c) Dual cab loco with disc brake d) None

1204. In WDG4 left cam gear is driven by (c)

a) right cam gear b) No.1 Idler gear

c) No. 2 Idler gear d) Crank shaft gear

1205. Maximum speed of WDG4D loco is ____ KMPH (b)

a) 100 b) 105 c) 135 d) 160

1206. No. of cylinders in HHP loco engine (c)

a) 8 b) 12 c) 16 d) 20

1207. Torsional damper is fitted on (a)

a) Front end of engine b) Rear end of engine

c) Front & Rear end of engine d) None of the above

1208. Do not pour ___ water in HHP loco (b)

a) DM b) Raw c) Distilled d) All of the above

1209. TRD timing of 710G3B TSC is (b)

a) Minimum 30 sec b) Minimum 50 sec

c) Minimum 60 sec d) Minimum 180 sec

1210. Modified water pump has (b)
a) Taper bearing b) Ball bearing
b) Both taper & ball bearing d) None

1211. To operate sander, air supply is received from (a)
a) MR1 b) MR2 c) BP d) FP

1212. No. of rollers in clutch assembly (c)
a) 8 b) 12 c) 16 d) 20

1213. During setting of TDC pointer, which power assembly is kept at BDC (a)
a) No. 1 b) No. 16 c) No. 8 d) No. 9

1214. In HHP loco exhaust manifolds have ___ no. of chambers (a)
a) 4 b) 7 c) 8 d) 5

1215. Low viscosity indicates (a)
a) Mixing of fuel oil in lube oil b) Mixing of water in lube oil
c) Mixing of carbon particles in lube oil d)None

1216. In HHP loco bail off ring is provided on (c)
a) Auto brake handle b) Driver back up valve
c) Direct brake handle d) None

1217. Accessory drive coupling retaining bolt is torque at ___ ft-lbs (b)
a) 450 b) 650 c) 250 d) 750

1218. In HHP loco exhaust valve opens at (b)
a) 23° after TDC b) 109° after TDC
b) 180° after TDC d) 43° before BDC

1219. Full form of "EMDEC" is (a)
a) Electro Motive Diesel Engine Control
b) Electro Motive Division of Engine Control
c) Electro Motive Diesel & Electric Control
d) None of the above

1220. Length of WDG4D locomotive is ____ meters (a)
a) 22.98 b) 21.54 c) 21.7 d) 19.5

1221. To operate MVCC, air supply is received from (a)
b) MR1 b) MR2 c) BP d) FP

1222. After changing power assembly which of the following operation is not performed (d)

a) Injector timing b) 'Pee' pipe alignment
c) Lead wire test d) None of the above

1223. In HHP loco mainly which governor is fitted (a)

a) Woodward governor b) MCBG c) EH governor d) None

1224. HHP locomotive has a (a)

a) 2 stroke engine b) 4 stroke engine
c) Multi stroke engine d) None of the above

1225. In HHP loco TSC is fitted in the (b)

a) Front end of the engine b) Rear end of the engine
b) Front or rear end of the engine d) None

1226. During EPD testing at Idle engine normally shutdown in __ sec (c)

a) 120 b) 40 c) 60 d) 30

1227. EPU fitted on (b)

a) Harmonic damper b) Starter motor bracket
c) Main alternator d) Companion alternator

1228. No. of radiators fitted in WDP4D loco is (b)

a) 1 b) 2 c) 4 d) None of the above

1229. Radiator fan mounting bolt is torque at ___ ft-lbs. (b)

a) 450 b) 100 c) 250 d) 50

1230. During injector rack setting governor rack should be kept at (a)

a) 1.00" b) 1.02" c) 1.96" d) 0.62"

1231. In HHP loco power assembly consists of (d)

a) Cylinder liner b) Cylinder Head
b) Piston ,ring, carrier & connecting rod assembly d) all of the above

1232. Liner of HP loco is made of (a)

a) Cast iron with brazed outer sleeves
b) Cast iron alloy with tin plating
c) Stainless steel with chrome plating
d) Cast iron

1233. Type of CBC fitted in WDG4D loco is (a)

a) E-type b) F-type c) H-type d) None of the above

1234. Which of the following crank case oils are approved for application in HHP loco engines (d)

a) Servo RR 520 MG of M/s IOC
b) MAK RR517 M of M/s BPC
c) HP RR 817 M of M/s HPC
d) All of the above

1235. Scavenging pump is a (c)

a) Reciprocating pump b) Centrifugal pump
c) Positive displacement helical gear type pump
d) None of the above

1236. No. of starter motors fitted in WDP4D loco is (a)

a) 2 b) 1 c) 3 d) None

1237. Starter motors in HHP loco are (b)

a) AC motors b) DC series motors
c) 3 phase AC motors d) None of the above

1238. Starter motors in HHP loco are connected in (b)

a) Series b) parallel c) Series parallel d) None

1239. For starting of HHP loco (b)

a) Single electric motor is used
b) Dual electric motor is used
c) Dual air starting motor is used
d) None of the above

1240. Rating of starting motor fuse is (b)

a) 400 A b) 800 A c) 500 A d) None

1241. Use of starting fuse is (a)

a) Only during engine starting
b) Only during engine running
c) Only during engine shutdown
d) All of the above

1242. Number of piston rings in HHP engine piston (d)

a) 2 b) 4 c) 5 d) 6

1243. In Medha control system if starting fuse is removed during running then (d)

a) Engine will shut down
b) Engine will come to Idle
c) TE will comes to zero
d) There will be no effect on engine

1244. Purpose of starting fuse is (c)

a) To protect the LV (low voltage) control circuit
b) To protect the HV (High voltage) control circuit
c) To protect starter motors from current overload
d) All of the above

1245. Black light test is related to (b)

a) Power assembly b) Fuel system
c) Turbo super charger d) Lube oil system

1246. No. of teeth in starter motor pinion is (c)

a) 10 b) 15 c) 11 d) None

1247. During engine starting do not hold the fuel prime/engine start switch (FP/ES) to ES position for more than ____ sec. (a)

a) 20 b) 30 c) 60 d) 80

1248. Backlash to be maintained between ring gear and starter motor pinion (c)

a) 0.008”-0.016” b) 0.007”-0.025” c) 0.015”-0.040” d) 0.020”-0.030”

1249. Compressor of HHP loco is (a)

a) Mechanical driven b) Electrical motor driven c) Belt driven d) None

1250. compressor efficiency test is conducted with ____ mm choke (b)

a) 7.5 b) 7.14 c) 7.6 d) 8.2

1251. In HHP loco inlet port closes at (b)

a) 43.5° before BDC b) 43.5° after BDC
b) 107.5° after TDC d) 67° after BDC

1252. In HHP loco water pressure cap is set at ____ psi (a)

a) 7 b) 12 c) 15 d) 20

1253. For CCB system air supply is received from (b)

a) MR1 b) MR2 c) MREQ d) None

1254. During pre & post lubrication (c)
a) Only main bearing & connecting rod bearing is lubricated
b) Only cam shaft bearing is lubricated
c) Only TSC bearing & gear train is lubricated
d) All of the above

1255. Fuel oil primary filter condition gauge having (d)
a) Green zone b) Yellow zone
c) Red zone d) all of the above

1256. DBI of testing of MR tank of HHP loco is done in interval of (c)
a) 24 months b) 36 months c) 48 months d) six years

1257. In HHP loco TSC spin on filter is fitted on (b)
a) Right side, front end of engine b) Right side, rear end of engine
b) Left side, front end of engine d) None

1258. In HHP loco compressor oil level to be checked at (a)
a) Engine run & Idle condition
b) Engine shutdown condition
c) Engine run & 8th notch condition
d) Any of the above

1259. In HHP loco lube oil level to be checked at (a)
a) Engine run & Idle condition
b) Engine shutdown condition
c) Engine run & 8th notch condition
d) Any of the above

1260. In HHP loco epicyclic gear train is found in (a)
a) Turbo supercharger b) Accessory drive gear train
b) Cam shaft drive gear traind) None of the above

1261. WDP4D loco fitted with _____ rotating engine (a)
a) Left hand b) Right hand c) Both 'A' & 'B' d) None

1262. Injector hand control lever is also known as (a)
a) Lay shaft b) Jacking shaft c) power shaft d) None

1263. Number of Main bearings in HHP locomotive (c)
a) 8 b) 9 c) 10 d) 11

1264. Up to ___ notch HHP loco can be raised without load (b)
a) 4th b) 5th c) 6th d) 7th

1265. MR efficiency test is related to (d)

a) Power assembly b) MR tank
c) Turbo super charger d) Compressor

1266. Marking range on governor terminal shaft scale is (a)

a) 1.96" – 0.62" b) 1.00" – 0.62"
c) 1.02" – 1.96" d) 1.02" – 0.62"

1267. No. 9 to 16 power assemblies are (a)

a) Fork type b) Blade type
c) Fork & Blade mixed d) None of the above

1268. No. 1 to 8 power assemblies are (b)

a) Fork type b) Blade type
c) Fork & Blade mixed d) None of the above

1269. In HHP loco Auxiliary generator drive gear is driven by (a)

a) Right side cam gear b) Left side cam gear
c) No. 2 Idler gear d) No. 1 Idler gear

1270. No. of compression rings fitted in HHP engine piston (d)

a) 1 b) 2 c) 3 d) 4

1271. In HHP loco pinion end TH bearing is lubricated by (a)

a) RR 460 b) Grease c) Cardium compound d) None

1272. In HHP loco both side cam gear rotate (b)

a) in same direction b) in opposite direction
b) in same as crank shaft rotation d) None

1273. in HHP loco the relation between crank shaft & cam shaft rpm (a)

a) rpm of cam shaft = rpm of crank shaft
b) rpm of cam shaft = ½ of rpm of crank shaft
c) rpm of cam shaft = ¼ of rpm of crank shaft
d) None of the above

1274. No. of critical main bearing in HHP loco (b)

a) 2 b) 4 c) 5 d) 6

1275. In HHP loco water drain cock is located in (a)

a) Accessory room b) Under truck loco right
b) Under truck loco left side d) Compressor room

1276. HHP locomotive is a (a)
a) Left hand drive loco b) right hand drive loco
b) Both hand drive loco d) None of the above

1277. ECC-4 is found in (d)
a) WDP4 b) WDG4 c) WDP4B d) WDG4D

1278. In HHP loco torque value of Alternator mounting bolt is (c)
a) 295 ft-lbs b) 650 ft-lbs c) 1400 ft-lbs d) 2400 ft-lbs

1279. Height of rail guard in HHP loco is (a)
a) 4 ½ " b) 5 ½ " c) 6 ½ " d) None

1280. Number of air inlet ports in a power assembly (d)
a) 8 b) 12 c) 16 d) 18

1281. Compressor of HHP locomotive is a (b)
a) Rotary compressor b) Reciprocating compressor
c) Centrifugal compressor d) None of the above

1282. OSTA operation of HP loco is checked in ___ schedule (b)
a) 30 days & above b) 90 days & above
c) 180 days & above d) Yearly & above

1283. Purpose of Torsional damper in HHP locomotive is (a)
a) To absorb crank shaft torsional vibration
b) To absorb vibration of locomotive
c) To absorb vibration of main alternator
d) None of the above

1284. Number of teeth in Sun gear is (a)
a) 37 b) 26 c) 58 d) 130

1285. Number of lube oil bypass valves in HP loco lube oil system (b)
a) 1 b) 2 c) 3 d) 4

1286. What is the limit of crush height in HHP loco (b)
a) 0.007" – 0.025 b) 0.008" – 0.017"
c) 0.016" – 0.039" d0 0.006" – 0.018"

1287. Height of WDP4 loco (over Horn) in meters (a)
a) 4.22 b) 4.25 c) 4.20 d) None

1288. Number of inlet valves fitted in HHP loco power assembly (d)
a) 2 b) 4 c) 6 d) None

1289. Compression ratio f HHP locomotive is (d)
a) 12:1 b) 14:1 c) 12.5:1 d) 16:1

1290. EPD operation of HHP locomotive is checked in ___ schedule (a)
a) 30 days & above b) 90 days & above
b) 180 days & above d) Yearly & above

1291. Number of Lube oil pumps in HHP loco (d)
a) 1 b) 2 c) 3 d) 4

1292. Full form of BL key is (a)
a) Button Lever key b) Block Lever key
c) Bench Lock key d) None of the above

1293. In WDG4 loco Tractive Effort limit value is (c)
a) 200 KN b) 250 KN c) 294 KN d) None

1294. Blades of Dynamic brake grids fans are made of (b)
a) Iron b) Aluminium c) Steel d) None

1295. Normal LR dropping permitted up to (b)
a) 0.75 b) 0.85 c) 0.95 d) None

1296. In HHP loco initial torque value of crab nut is ___ ft-lbs. (b)
a) 450 b) 400 c) 165 d) 200

1297. In HHP loco piston thrust washer minimum permissible thickness is (b)
a) 4.67 mm b) 4.44 mm c) 1.73 mm d) None

1298. In HHP loco maximum percentage of total no. of radiator tubes make dummy is (a)
a) 2 b) 4 c) 5 d) 1

1299. In Spectrographic analysis of engine lube oil normal range of sodium (Na) is (c)
a) 0 – 75 ppm b) 0 – 50 ppm c) 0 – 30 ppm d) 0 – 20 ppm

1300. Model of compressor in HHP locomotive is (a)
a) WLN b) WLG c) WBG d) WBO

1301. Model of diesel engine fitted in HHP locomotive is (b)
a) 645 G3B b) 710 G3B c) 710 G3C d) None

1302. In HHP loco Hand brake applies to (b)
a) R1 & R2 b) R4 & R5 c) L1 & L2 d0 L4 & L5

1303. WLN model compressor has (a)
a) 3 cylinders b) 4 cylinders c) 6 cylinders d) None

1304. TSC of HHP locomotive is cooled by (c)
a) Air b) water c) Lube oil d) None

1305. Number of Brake cylinders in HHP loco (c)
a) 4 b)6 c) 8 d) 10

1306. Number of dowels in fork rod and basket assembly (d)
a) 1 b) 2 c) 3 d) 4

1307. Fork rod power assembly is located in which side of engine (a)
a) Left b) Right c) Both side d) None

1308. Blade rod power assembly is located in which side of engine (b)
a) Left b) Right c) Both side d) None

1309. Pick up time between one radiator fan to another (b)
a) 10 sec b) 20 sec c0 30 sec d) 40 sec

1310. Which one is not required for injector rack setting (a)
a) Concerned power assembly to be kept at TDC
b) Governor rack to be locked at 1”
c) Rack setting tool is required
d) Rotate injector rack adjusting lock nut clockwise direction to loose it

1311. Type of water pump fitted in HHP locomotive (a)
a) Centrifugal type b) Reciprocating type
c) Positive displacement type d) None

1312. Oil separator in HHP loco is cleaned in ____ schedule (b)
a) 30 days & above b) 90 days & above
c) 180 days & above d) Yearly & above

1313. Number of oil control rings in HHP engine piston (b)
a) 1 b) 2 c) 3 d) 4

1314. Discharge capacity of FPM in HHP locomotive (b)
a) 5 GPM b) 7 GPM c) 10 GPM d) 12 GPM

1315. Minimum engine cranking speed for starting (a)

a) 45 – 50 rpm b) 60 – 75 rpm c) 75 – 90 rpm d) 100 – 120 rpm

1316. Maximum speed of WDP4 locomotive is ____ kmph (d)

a) 100 b) 105 c) 120 c) 160

1317. Value of backlash between water pump & Governor drive gear (b)

a) 0.007" – 0.025" b) 0.008" – 0.016"

b) 0.010" – 0.025" d) 0.006" – 0.018"

1318. Minimum engine lube oil viscosity (KV) of HHP locomotive (b)

a) 12.8 cst at 100°C b) 13.0 cst at 100°C

b) 18.8 cst at 100°C d) None of the above

1319. TRD is related to (d)

a) Lube oil cooler b) Radiator c) Compressor d) Turbo super charger

1320. Value of backlash between Aux. Gen. Drive gear & cam gear (c)

c) 0.007" – 0.025" b) 0.008" – 0.016"

d) 0.010" – 0.025" d) 0.006" – 0.018"

1321. Top connecting rod bearing shell is changed after (b)

a) 2 years b) 3 years c) 6 years d) None

1322. No. of 14" expansion joints in HHP loco (b)

a) 1 b) 3 c) 4 d) None

1323. In HHP loco thrust collars fitted in (a)

a) No. 5 & 6 main bearing b) No. 1 & 9 main bearing

c) No. 1 & 10 main bearing d) None of the above

1324. Turbine inlet scroll is (a)

a)welded assembly made from "chrome- moly" plate

b)Forged assembly made from "chrome-moly" plate

c)Welded assembly made from CRCS

d)None of the above

1325. In HHP loco lube oil level to be checked at ____ temperature (a)

a) 72°C b) 52°C c) 62°C d) None

1326. In HHP loco maximum fuel oil is injected at (a)

a) 9.6° before TDC b) 0.8° after TDC

c) 15.8° before TDC d) 16.6° before TDC

1327. How many EBT are fitted in HHP locomotive (a)

a) 1 b) 2 c) 3 d) 4

1328. In HHP locomotive compressor over haul on (a)

a) 360 days schedule b) 2 yearly schedule

c) 3 yearly schedule d) 6 yearly schedule

1329. Fireman emergency brake handle is located at (a)

a) Both control console/desk b) behind LP seat

c) Behind ALP seat d) None of the above

1330. Fuel tank of HHP locomotive is (a)

a) Detachable b) Non-detachable

c) Both detachable & non-detachable d) None

1331. In HHP loco fuel injection ends at (b)

a) 47° before BDC b) 0.8° after TDC

c) 15.8° before TDC d) 16.6° before TDC

1332. Low Idle RPM of WDP4D locomotive is (a)

a) 200 b) 269 c) 350 d) 400

1333. Height of cattle guard in HHP locomotive is (c)

a) 4 ½ “ b) 5 ½ “ c) 6 ½ “ d) None

1334. Number of after coolers fitted in HHP locomotive (b)

a) 1 b) 2 c) 3 d) 4

1335. Delivery rate of soak back pump in HHP engine (b)

a) 27 LPM b) 57 LPM c) 75 LPM d) None

1336. Weight of WDG4D locomotive is (d)

a) 126 T b) 123 T c) 121.2 T d) 130.2 T

1337. ____ oil is filled in HHP loco compressor (b)

a) RR 460 b) SP 100 c) RR 606 d) SP 57

1338. No. of teeth in No.1 Idler gear is (b)

a) 58 b) 64 c) 69 d)79

1339. In HHP loco compressor is cooled by (a)
a) Water b) air c) oil d) None

1340. Pre lubrication is related to (d)
a) Power assembly b) Fuel system
c) Turbo Supercharger d) Lube oil system

1341. Crush height is measured by (c)
a) Vernier Calliper b) Outside micrometer
b) Feeler gauge d) Height gauge

1342. In HHP locomotive specified limit of exhaust gas temperature is (a)
a) 315°C - 400°C b) 435°C - 535°C
b) 490°C - 590°C d) None of the above

1343. Torque value of exhaust manifold to expansion joint bolt is (c)
a) 50 ft-lbs b) 75 ft-lbs c) 80 ft-lbs d) 190 ft-lbs

1344. In spectrographic analysis of engine lube oil, high range of Copper(Cu) indicates (d)
a) Internal water leakage b) inefficient air filtration
b) Cylinder liner water d) bush & bearing wear

1345. Kinematic viscosity of lube oil is checked at (d)
a) 40° C temp b) 100° C temp c) 40° F temp b) both a & b

1346. Unit of kinematic viscosity is (a)
a) CST b) UST c) MST d) PPM

1347. In HHP loco compressor is (b)
a) Belt driven b) Gear driven c) chain driven d) all of the above

1348. Idle rpm of WDP4D locomotive is (a)
a) 269 b) 904 c) 954 d) 1050

1349. No. of marks in HHP loco compressor oil dipstick(modified) gauge (b)
a) 2 b) 3 c) 4 d) None of the above

1350. Control system used in HHP locomotive is (d)
a) EMD b) Medha c) Siemens d) all of the above

1351. Shot peening process is done in piston ring to improve (a)
a) Fatigue strength b) Tensile strength
c) Compressive strength d) None of the above

1352. In Medha control system during pre-lubrication TLPM run for (b)
a) 120 sec b) 900 sec c) 2100 sec d) 1000 sec

1353. Gear case oil capacity of WDP4D locomotive is (b)
a) 7.5 litres b) 8.5 litres c) 9.5 litres d) 9.8 litres

1354. Gear case oil capacity of WDG4D locomotive is (a)
a) 7.5 litres b) 8.5 litres c) 9.5 litres d) 9.8 litres

1355. In HHP loco value of cylinder head valve seat angle is (a)
a) 30°00’ - 30°15’ b) 45°00’ - 45°15’
b) 60°00’ - 60°15’ d) None of the above

1356. POP test is conducted to check the performance of (a)
a) Injector b) TSC c) Lash adjuster d) Air dryer

1357. Water leakage from air box drain pipe indicates (d)
a) Water inlet tube may be crack
b) Cylinder Head/liner may be crack
c) After cooler tube may be punctured
d) All of the above

1358. VCD cycle consists of (d)
a) T0 – Vigilance cycle
b) T1 & T2 – Warning cycle
c) T3 & T4 Penalty brake cycle & Penalty brake reset
d) Al of the above

1359. Minimum lube oil level of HHP loco compressor is (b)
a) 5 litres b) 6 litres c) 8 litres d) 9.8 litres

1360. While VCD Operation T0 – cycle is called (a)
a) Vigilance cycle b) Warning cycle
b) Penalty brake cycle d) all of the above

1361. T1 – Vigilance cycle is called (b)
a) Vigilance cycle b) Warning cycle
c) Penalty brake cycle d) all of the above

1362. T2 – Vigilance cycle is called (c)

b) Vigilance cycle b) Warning cycle

c) Penalty brake cycle d) all of the above

1363. T4 – Vigilance cycle is called (c)

c) Vigilance cycle b) Warning cycle

d) Penalty brake reset cycle d) all of the above

1364. Duration of T0 cycle is (a)

a) 60 sec b) 8±2 sec c) 34±2 sec d) None

1365. Duration of T1 cycle is (b)

a) 60 sec b) 8±2 sec c) 34±2 sec d) None

1366. Duration of T3 cycle is (c)

a) 60 sec b) 8±2 sec c) 34±2 sec d) None

1367. In HHP loco duration of suction period is (a)

a) 87° b) 113° c) 16.6° d) 138°

1368. FPM of HHP locomotive is (c)

a) AC motor b) DC series motor c) 3Ø AC motor d) None

1369. Air dryer is fitted (b)

a) Before MR1 reservoir b) Between MR1 & MR2 reservoir

c) Between MR2 & CCB system d) after MR2 reservoir

1370. Shot peening is related to (b)

a) Lube oil cooler b) Piston ring

c) Turbo super charger d) clutch gear assembly

1371. Final torque value of Crab nut is (d)

a) 250 ft-lbs b) 400 ft-lbs c) 150 ft-lbs d) 2400 ft-lbs

1372. In spectrographic analysis of engine lube oil normal range of Copper (Cu)

a) 0 – 77 ppm b) 0 – 50 ppm c) 0 – 20 ppm d) 0 – 15 ppm

1373. Compressor lube oil dipstick is located on the (a)

a) Left side of the locomotive b) Right side of the locomotive

c) Both side of the locomotive d) None of the following

1374. Length of WDP4D locomotive is ____ meters (a)

a) 22.98 b) 21.24 c) 21.7 d) None of the above

1375. In HHP locomotive compressor air intake filter is changed during (d)

a) 30 days & above schedule b) 60 days & above schedule

c) 90 days & above schedule d) 180 days & above schedule

1376. Free air delivery of GD air compressor is ___ LPM (c)

a) 4000 b) 5000 c) 6000 d) 9000

1377. OSTA of HHP (4500 HP) locomotive is set at (c)

a) 1035 – 1050 rpm b) 1035 – 1075 rpm

c) 1085 – 1100 rpm d) 1185 – 1220 rpm

1378. OSTA of HHP (4000 HP) locomotive is set at (a)

a) 1035 – 1050 rpm b) 1035 – 1075 rpm

c) 1085 – 1100 rpm d) 1185 – 1220 rpm

1379. HHP locomotive brake block is made of (c)

a) Cast iron b) Fibre c) Composite material d) None of the above

1380. In HHP locomotive pilot stud of liner is located at (a)

a) 5 o' clock position b) 6 o' clock position

b) 12 o' clock position d) 13 o' clock position

1381. Maximum speed of WDG4D locomotive (in kmph) (b)

a) 100 b) 105 c) 135 d) 160

1382. In HHP loco when OSTA is set, reset handle rest at (a)

a) 11 o' clock position b) 13 o' clock position

c) 12 o' clock position d) None of the above

1383. In HHP locomotive lube oil strainer is fitted on (a)

a) Right side, front end of the engine

b) Right side, rear end of the engine

c) Left side, front end of the engine

d) Left side, rear end of the engine

1384. In HHP loco bearing to crank pin maximum clearance is (a)

a) 0.010" b) 0.015" c) 0.020" d) 0.0205"

1385. In HHP loco Brake cylinder pressure is adjusted at (c)

a) 1.8 kg/cm² b) 3.5 kg/cm² c) 5.2 kg/cm² d) None

1386. In HHP locomotive compression stroke end at (c)

a) BDC b) 43.5° after BDC c) TDC d) 67° after TDC

1387. Torque the rocker arm adjusting screw lock nut approximately (c)
a) 70-75 ft-lbs b) 75-80 ft-lbs c) 80-85 ft-lbs d) 85-90 ft-lbs

1388. POH of HHP locomotive is done after (d)
a) 8 years b) 12 years c) 15 years d) 18 years

1389. From initial final torque value, crab nut rotates approximately (b)
a) 120° ± 35° b) 200° ± 35° c) 250° ± 35° d) 360° ± 35°

1390. Fuel tank capacity of WDP4D locomotive is ____ litres (a)
a) 5000 b) 6000 c) 6500 d) 5500

1391. Function of compression ring (b)
a) Pull the piston down when cylinder is not firing
b) Prevent the compressed air& gases from entering in to the crankcase
c) Prevent lube oil entering into air box & combustion chamber
d) All of the above

1392. Maximum permissible limit of fuel oil dilution in HHP lube oil is (c)
a) 2 % b) 3 % c) 5 % d) 10%

1393. In HHP loco following model Woodward governor is fitted (b)
a) PGR b) PGEV c) PGR & PGEV d) None of the above

1394. Which of the following valve is not fitted in HHP locomotive compressed air system (a)
a) Duplex check valve b) FT1 feed valve
c) NRV d) None of the above

1395. Fuel oil primary filter condition gauge needle in Green zone indicates fuel oil differential pressure is (a)
a) 20 ± 2 b) 25 ± 2 c) 30 ± 2 d) None of the above

1396. Thrust washer is made of (d)
a) Cast iron brazed on outer sleeves
b) Cast iron alloy with tin plating
c) Stainless steel with chrome plating
d) Copper

1397. In HHP locomotive type of torsional damper is (b)
a) Spring pack type b) Gear type
c) Viscous type d) Pendulum type

1398. In HHP locomotive inlet port open at (a)
a) 43.5° before BDC b) 107.5° after TDC
b) 180° after TDC d) 67° after BDC

1399. To charge feed pipe, air supply is received from (a)
a) MR1 b) MR2 c) BP d) BC

1400. No. of teeth in HHP locomotive crank shaft gear is (c)
a) 58 b) 64 c) 79 d) 113

1401. No. of exhaust valves in a power assembly (d)
a) 1 b) 2 c) 3 d) 4

1402. In HHP locomotive codal life of Turbo Super Charger is (c)
a) 6 years b) 10 years c) 12 years d) 18 years

1403. In HHP locomotive for quick charging of BP _____ is provided (d)
a) BPSW b) SP1
b) Bail off ring d) Release position of Auto brake handle

1404. Maximum speed for clearing the block section with floating/lifting locked axle is (d)
a) 10 kmph b) 15 kmph c) 20 kmph d) 25 kmph

1405. Function of exhaust diffuser in TSC is (a)
a) Eliminate the turbulence of exhaust gases
b) Eliminate the turbulence of compressed air
c) Prevent oil from migrating into exhaust section from the compressor bearing
d) None of the above

1406. Maximum tractive effort of WDP4D locomotive is (b)
a) 24 tons b) 41 tons c) 53 tons d) None of the above

1407. Water temperature maintained in cooling water system of HHP locomotive is (c)
a) 64° - 90° C b) 65° - 91° C c) 79° - 85° C d) None

1408. Capacity of governor oil of HHP locomotive (a)
a) 2.25 litres b) 3.79 litres c) 4.5 litres d) None

1409. Full form of EBT is (a)
a) Electronic Blow Down Timer
b) Engine Battery Temperature
c) Electric Blowing transducer
d) None of the above

1410. Capacity of water tank of HHP locomotive is ____ litres (c)
a) 275 b) 255 c) 625 d) 1045

1411. Number of positions in L/T switch (c)
a) 2 b) 3 c)4 d) 5

1412. Brake cylinder Piston stroke length of HHP locomotive is (c)
a) 2" – 2.5" b) 2" – 4.5" c) 2" – 6.5" d) None

1413. In HHP loco duration of compression period is (b)
a) 84° b) 113° c) 16.6° d)138°

1414. Full form of "EFCO" is (c)
a) Engine Fuel cut Out switch
b) Engine Fuel Conditioning Object
c) Emergency Fuel Cut Off switch
d) None of the above

1415. Control stand of HHP locomotive is called (c)
a) Control cabin b) Control desk c) Control console d) None

1416. 8th notch RPM of WDP4D locomotive is (c)
a) 269 b) 904 c) 954 d) 1050

1417. Normal fear case oil consumption of HHP locomotive should not be more than (a)
a) 1.0 litre/month /gear case b) 2.0 litre/month /gear case
c) 3.0 litre/month /gear case d) 3.5 litre/month /gear case

1418. LR dropping at higher notch, probable reason of it is (d)
a) Baggie filter may be chocked
b) Booster air pipe connection to governor may be broken/disconnected
c) Defective fuel injector
d) All of the above

1419. Advantage of installation of APU system is (d)
a) Saving fuel oil b) reduce emission
c) reduce noise pollution d) all of the above

1420. Number of cells in a battery of WDP4D locomotive (b)

a) 4 b) 5 c) 8 d) 10

1421. Number of cells in a battery of WDG4D locomotive (a)

a) 4 b) 5 c) 8 d) 10

1422. Before re-cranking engine, wait for minimum ___ minutes
To cool starter motors (c)

a) 1 b) 2 c) 3 d)4

1423. Number of sand boxes in HHP locomotive (b)

a) 4 b) 8 c) 12 d) 16

1424. Minimum flash point of RR-520 is (b)

a) 35° b) 194° c) 240 ° d) 300°

1425. To increase OSTA tripping rpm (a)

a) OSTA adjusting spring tension to be increased
b) OSTA adjusting spring tension to be decreased
c) Both 'a' and 'b'
d) None of the above

1426. Hard starting may be experienced due to (d)

a) Weak battery b) Defective Starter motor
c) Less compression pressure c) Any of the above

1427. Maximum speed of traction motor blower of HHP locomotive is controlled by (a)

a) OSTA b) EPD c) LCC d) HOD

1428. Maximum consumable HP of HHP compressor during Unloading at 200 rpm is (a)

a) 2.2 HP b) 22 HP c) 23 HP d) 70 HP

1429. FAD of HHP loco compressor should not be less than (d)

a) 567 LPM at 200 rpm b) 600 LPM at 200 rpm
c) 700 LPM at 200 rpm d) 990 LPM at 200 rpm

1430. Turbine seal is located (c)

a) Directly behind the impeller
b) Between turbine blades and compressor bearing
c) Between turbine blades and turbine bearing
d) None of the above

1431. Compressor seal is located (b)
a) Directly behind the impeller
b) Between turbine blades and compressor bearing
c) Between turbine blades and turbine bearing
d) None of the above

1432. In Siemens control system during dynamic braking, engine raise to _____ notch rpm (b)
a) 2^{nd} b) 4^{th} c) 6^{th} d) None of the above

1433. No. of planet gears in HHP TSC (c)
a) 1 b) 2 c) 3 d) 4

1434. During torqueing of crab nut (a)
a) Torque outboard nuts first then inboard nuts
b) Torque inboard nuts first then outboard nuts
c) Torque the four crab nuts of power assembly crosswise only
d) All of the above

1435. "Crush Height Check" is done to avoid the failure of (a)
a) Connecting rod bearing seizure
b) Main bearing seizure
c) Thrust collar seizure
d) All of the above

1436. In HHP loco engine cylinders are cooled by (c)
a) Water b) Air c) Supercharged air & water d) Lube oil

1437. Maximum tractive effort of WDG4 locomotive is ____ tons (c)
a) 42 b) 23 c) 53 d) 39

1438. Cam of HHP loco is checked in ___ schedule (a)
a) 30 days & above b) 60 days & above
c) 90 days & above d) 180 days & above

1439. No. of Traction Inverters in Medha make traction system in HHP loco (c)
a) 2 b) 4 c) 6 d) 8

1440. Type of Main Generator fitted in HHP locomotive (c)
a) DC Generator b) single phase AC alternator
c) Three phase AC alternator d) None of the above

1441. Type of Traction Motors fitted in HHP locomotive (c)

a) DC series motor b) Single phase AC motor
c) Three phase AC motor d) None of the above

1442. Full form of EPD is (c)

a) Engine Position Device b) Engine Parting Device
c) Engine Protection Device d) Engine Patrolling Device

1443. In HHP loco Medha control system during dynamic braking, engine raise to ____ notch rpm. (a)

a) 2^{nd} b) 4^{th} c) 6^{th} d) None of the above

1444. Air box drain pipe is located at (a)

a) Under truck near fuel tank b) Alternator room
c) Compressor room d) Clean air compartment

1445. Series of WDP4D is (c)

a) 12 b) 20 c) 40 d) 70

1446. WDP4D is a (b)

a) Single cab loco b) Dual cab loco
c) Dual cab loco with disc brake d) Dual cab loco with Hotel load

1447. Function of oil control ring is to (c)

a) Pull the piston down when cylinder is not firing
b) Prevent the compressed air & gases enter in to the crank case
c) Prevent the lube oil entering into the air box & combustion chamber
d) All of the above

1448. Only pour ____ in the HHP loco (a)

a) DM water b) Raw water c) tap water d) all of the above

1449. Full form of DM water is (b)

a) Distilled & Mineralised water
b) Demineralised water
c) Deionised Manufactured water
d) None of the above

1450. Do not switch off _____ circuit breaker immediately after Engine shut down (a)

a) Computer & TLPM b) MAB c) Local control d) None

1451. Do not crank the engine without external pre-lubrication if engine has not been cranked for more than ____ hours. (c)
a) 24 b) 36 c) 48 d) 72

1452. Don't try to raise the engine before engine coolant temperature has been reached upto ----- temperature (b)
a) 42° b) 52 c) 62° d) 72°

1453. Purging cycle of air dryer is (c)
a) 15 ÷ 1 sec b) 30 ÷ 1 sec c) 60 ÷ 1 sec d) None

1454. In HHP loco MR safety valve is fitted at outlet of (a)
a) MR1 b) MR2 c) FP d) MREQ

1455. MR safety valve setting is ___ kg/cm² (c)
a) 8.2 b) 9.6 c) 10.6 d) 10.0

1456. Capacity of Main Reservoir is _____ liters (b)
a) 452 b) 492 c) 575 d) 600

1457. Discharge capacity of Scavenging lube oil pump is ___ GPM (c)
a) 230 b) 109 c) 405 d) 500

1458. Discharge capacity of Piston cooling oil pump is ___ GPM (c)
a) 109 b) 200 c) 405 d) 500

1459. Discharge capacity of main lube oil pump is ___ GPM (c)
a) 109 b) 200 c) 229 d) 500

1460. ECC4 located in (b)
a) Cab 1 b) Cab 2 c) Under truck d) None

1461. Gear ratio in WDG4D locomotive is (b)
a) 17:77 b) 17:90 c) 18:65 d) 18:74

1462. _____ is provided in HHP loco in place of CCEM (d)
a) TLPM b) Scavenging pump c) Exhauster d) Ejector assembly

1463. In HHP loco cooling coil located (c)
a) left side of the loco b) right side of loco c) radiator room d) compressor room

1464. Maximum speed of WDP4d loco is ___kmph (c)
a) 100 b 120 c) 135 d) 160

1465. In HHP loco auxiliary generator rotate at (b)
a) 2 times of the engine speed b) 3 times of the engine speed
c) 5 times of the engine speed d) None of the above

1466. Engine shutdown with white smoke indicating defect may be in (d)
a) clutch assembly b) TSC c) bearing d) All of the above

1467. Length of WDG4 locomotive is (b)
a) 22.98 meters b) 21.24 meters c) 21.7 meters d) None of the above

1468. No. of teeth in TSC drive gear is (d)
a) 47 b) 64 c) 37 d) 81

1469.Maximum starting tractive effort of WDG4D locomotive is (b)
a) 400 KN b) 540 KN c) 900 KN d) None of the above

1470. 4th notch engine rpm WDP4D locomotive is (c)
a) 269 b) 486 c) 572 d) 675

1471. No. of EFCO switches fitted in WDP4D loco (c)
a) 2 b) 3 c) 4 d) None of the above

1472. Lube oil filter element is a (a)
a) Paper type two stage filter element
b) Paper type filter in tin container
c) Screen type metallic element
d) None of the above

1473.. In HHP loco long life lube oil filter is changed at (c)
a) 60 days b) 90 days c) 180 days d) None of the above

1474. Which type of fuel pump is fitted in HHP locomotive (c)
a) Centrifugal type b) Reciprocating type
c) Positive displacement type d) None of the above

1475. Soak back filter is fitted (b)
a) before soak back pump b) after soak back pump
c) 'a' or 'b' d) None of the above

1476. Engine piston stroke in WDP4D locomotive is (c)
a) 10" b) 10.5" c) 11" d) None of the above

1477. In WDP4/4D locomotive Independent brake application time is (a)
a) 7 - 9 seconds b) 8 - 12 seconds
c) 16 - 30 seconds d) 15 - 20 seconds

1478. "TRI-NETRA" is a project related to (c)
a) Introduction of CCTV camera in Railway platform to monitor passenger activity
b) Introduction of CCTV camera in Diesel Loco shed to monitor workmen activity
c) Terrain imaging for locomotive driver
d) All of the above

1479. No. of poles in HHP locomotive Traction Motor (a)
a) 4 b) 6 c) 10 d) None of the above

1480. Which of the following sensor are fitted in the traction motor? (a)
a) Temperature sensor b) Voltage sensor
c) Air Pressure sensor d) All of the above

1481. Black smoke from TSC chimney indicates (a)
a) Incomplete combustion of fuel oil
b) Lube oil burning in combustion chamber
c) Water ingress in combustion chamber
d) None of the above

1482. Codal life of crank shaft is (d)
a) 6 years b) 10 years c) 12 years d) 18 years

1483. Bevel gear is found in which component of HHP locomotive (a)
a) Governor drive b) Sun & planet gear
c) Scavenging pump d) None of the above

1484. Which reason is responsible for TSC failure (d)
a) Failure of soak back pump
b) Blockage in the lubricating passage
c) Interruption in completion of soak back pump cycle
d) All of the above

1485. type of transmission in WDG4D (c)
a) DC – DC b) AC – DC c) AC – AC d) None of the above

1486. Which of the following changes are done during conversion from 4000 HP to 4500 HP (d)
a) 54" Radiator fan is introduced instead of 52" radiator fan
b) 8th notch engine rpm is increased from 904 rpm to 954 rpm
c) OSTA tripping rpm is increased from 1035 to 1085
d) All of the above

1487. Bubbles in fuel return sight glass during priming indicates (a)
a) air draw in suction suction side of the fuel booster pump
b) the leaky fuel injector
c) insufficient fuel supply
d) none of the above

1488. Bubbles in the fuel return sight glass after cranking the engine indicates (b)
a) air draw in suction suction side of the fuel booster pump
b) the leaky fuel injector
c) insufficient fuel supply
d) none of the above

1489. Bubbles in the fuel return sight glass in higher notch with full load indicates (c)
a) air draw in suction suction side of the fuel booster pump
b) the leaky fuel injector

c) insufficient fuel supply
d) none of the above

1490. To charge feed pipe at 6 kg/cm², which valve is fitted (d)
a) F2 feed valve b) FT1 feed valve c) C2N feed valve d) Any of the above

1491. Auto brake valve handle has (d)
a) 2 b) 3 c) 4 d) 5

1492. In HHP locomotive wheel to brake block clearance is (b)
a) 10 mm b) depend upon the location of wheel
c) Independ upon the location of wheel d) None of the above

1493. In HHP locomotive FP pressure is set at (a)
a) 6.0 ± 0.1 kg/cm² b) 6.1 ± 0.1 kg/cm²
c) 6.2 ± 0.1 kg/cm² d) None of the above

1494. In HHP locomotive fuel oil spin on filter is fitted on (a)
a) right side, front end of the engine
b) right side, rear end of the engine
c) left side, front end of the engine
d) none of the above

1495. During DBI testing of MR tank of HHP locomotive, hydraulic testing is done at (b)
a) 1 time working pressure b) 1.5 times working pressure
c) 2 times working pressure d) None of the above

1496. In HHP locomotive exhaust valve close at (d)
a) 43.5° before BDC b) 43.5° after BDC
c) 107.5° after TDC d) 67° after BDC

1497. To operate ABD, air supply is received from (a)
a) MR-1 b) MR-2 c) MR-3 d) None of the above

1498. TM blower air duct (bellow) is changed at (d)
a) 360 days schedule b) 720 days schedule
c) 3 yearly schedule d) 6 yearly schedule

1499. VCD alarm sound during (c)
a) T0 cycle b) T1 cycle c) T2 cycle d) T3 cycle

1500. In which VCD cycle, yellow flashing light will glow (d)
a) T1 cycle b) T2 cycle c) T3 cycle d) All of the above

1501. Which of the following feed valve is not available in HHP locomotive (c)
a) FT-1 Feed valve b) F-2 Feed valve
c) D24B Feed valve d) All of the above

1502. No. of teeth in planet gear is (a)
a) 47 b) 30 c) 26 d) 37

1503. cooling time is related to (b)
a) Lube oil cooler b) Radiator c) Turbo super charger d) Compressor

1504. Minimum thickness of air box hand hole collar (b)
a) 3.0 mm b) 3.9 mm c) 4.5 mm d) 5.1 mm

1505. In HHP locomotive speed of radiator fan should be in the range of (b)
a) 260 – 1905 b) 1085 – 1100 c) 1035 – 1050 d) None

1506. Aspirator hole is provided for (a)
a) Draining purpose of clean air compartment
b) Draining purpose of TCC compartment
c) Draining purpose of compressor compartment
d) All of the above

1507. What is the permissible limit of root wear (b)
a) 3.5 mm b) 6 mm c) 5 mm d) None of the above

1508. The flat tyre limit for WDP4D locomotive is (a)
a) 50 mm b) 60 mm c) 75 mm d) None of the above

1509. More than 50 mm flat tyre, Loco should be moved to nearest shed at a Speed of
a) 20 kmph b) 25 kmph c) 30 kmph d) 40 kmph (a)

1510. New wheel diameter of WDG4D locomotive is (c)
a) 1092 b) 1095 mm c) 1097 d) None of the above

1511. Wooden wedge is a (a)
a) safety item b) safety device c) safety fitting d) None

1512. In HHP locomotive duration of fuel injection period is (c)
a) 87° b) 113° c) 16.6° d) 138°

1513. Specific gravity of electrolyte of battery is measured by (a)
a) Hydrometer b) Barometer c) Hygrometer d) Voltmeter

1514. During Blended Braking (d)
a) Train brake is applied b) Loco brake is applied
c) Dynamic brake is applied d) All the above brakes are applied

1515. Gear case joint curing time is (a)
a) 24 hours b) 36 hours c) 48 hours d) None of the above

1516. Reason for OSTA tripping at lower rpm is (d)
a) Injector rack may be jam
b) Over speed mechanism may be failed
c) Engine load may be dropped due to electrical malfunction
d) All of the above

1517. Reason for oil throwing from TSC chimney may be (d)
a) Damaged power assembly b) Turbo labyrinth seal failure
c) Oil separator screen missing d) All of the above

1518. In HHP locomotive yaw damper is also known as (b)
a) Vertical hydraulic shock absorber b) Horizontal hydraulic shock absorber
c) Secondary rubber pad d) None of the above

1519. During cranking of engine in cold condition, engine rpm not hold due to (c)
a) Improper adjustment of governor compensation needle valve
b) Worn out Teflon seal of power piston
c) Both a & b
d) None of the above

1520. SFC of locomotive depends upon (c)
a) engine performance b) controlling of loco pilot
c) condition of carriage & wagon d) all of the above

1521. 1st notch TE of WDP4D locomotive is (a)
a) 35 KN b) 50 KN c) 15 KN d) 25 KN

1522. Weight of WDP4D locomotive is (b)
a) 126 T b) 123 T c) 121.2 T d) 117 T

1523. No. of batteries in WDP4D locomotive (c)
a) 2 b) 8 c) 10 d) None of the above

1524. The sight glass located nearer to the engine block is called (a)
a) Return sight glass b) By-pass sight glass
c) Empty sight glass d) None of the above

1525. type of battery used in WDP4/WDP4D locomotive is (b)
a) Lead acid battery b) Nickel cadmium (NiCd) battery
c) Nickel Metal hydride (NiMH) battery d) Lithium Ion (Li-ion)battery

1526. In HHP locomotive for quick firing of engine (c)
a) High horse power FPM is fitted b) TLPM is fitted
c) GBPM is fitted d) None of the above

1527. What is the condemning limit of composite brake block is (a)
a) at 10 mm thickness b) at 25 mm thickness
c) at 50 mm thickness d) at 75 mm thickness

1528. Firing order of HHP locomotive is (a)
a) 1-8-9-16-3-6-11-14-4-5-12-13-2-7-10-15
b) 1-8-16-9-8-6-14-11-4-5-13-12-2-7-15-10
c) 1-8-9-16-3-6-11-14-2-7-10-15-4-5-12-13
d) None of the above

1529. Auto drain valve operate automatically (c)
a) when compressor is unloading b) when EBT valve is energized
c) both a & b d) None of the above

1530. Peak firing pressure of locomotive is (c)
a) 350 psi b) 1150 psi c) 1750 psi d0 3500 psi

1531. BSFC of HHP locomotive is (a)
a) 158.8 gm/bhp/hr b) 156.0 gm/bhp/hr
c) 152.2 gm/bhp hr d) 154.2 gm/bhp/hr

1532. No. 1 radiator fan is called that fan which is (a)
a) nearest to compressor b) farthest from compressor
c) no. specific concept for numbering d) None of the above

1533. Coil resistance of Woodward governor solenoid should be (c)
a) 500 Ω ± 10% at 20°C b) 600 Ω ± 10% at 20°C
b) 700 Ω ± 10% at 20°C d) None of the above

1534. Minimum torque value of cylinder liner stud (in liner) is ___ ft-lbs (a)
a) 50 b) 90 c) 190 d) 240

1535. Expected water temperature drop through radiator is (c)
a) 5.5°C b) 7.5°C c) 9.5°C d) None of the above

1536. Tube of lube oil cooler core is made of (a)
a) Brass b) Copper c) Aluminium d) None of the above

1537. Inter cooler of compressor is used to improve (a)
a) Volumetric efficiency of compressor
b) Cooling efficiency of compressor
c) both 'a' & 'b'
d) None of the above

1538. In HHP locomotive compressor breather is replaced in (b)
a) Every 2 years b) Every 3 years c) Every 6 years d) None

1539. In spectrographic analysis of engine lube oil normal range of Silicon (Si) is (c)
a) 0 – 50 ppm b) 0 – 20 ppm c) 0 – 15 ppm d) 0 – 10 ppm

1540. The surface on most TSC bearing is (a)
a) Silver plated b) Gold plated c) Zinc plated d) None

1541. During Dead engine movement (d)
a) L & T switch to be kept in "Trail" position
b) In CCB 1.5, dead engine cock to be kept in vertical position from horizontal/
In CCB 2.0, Dead engine cock (DER) to be kept in "IN" position from "OUT"
c) Open MREQ & BCEQ cut out cocks at ant one end of the dead engine
d) All of the above

1542. Bottom connecting rod bearing shell is changed after (c)
a) 2 years b) 3 years c) 6 years d) None of the above

1543. HHP locomotive is fitted with (a)
a) DURACAM b) FE Cam c) Stiffer Unit Cam d) All of the above

1544. In HHP locomotive, oil level capacity of gear case is (b)
a) Same in WDP4 & WDG4 locomotives
b) More in WDP4 loco as compared to WDG4 loco
c) More in WDG4 loco as compared to WDP4 loco
d) None of the above

1545. RPM of governor drive gear is same as (a)
a) Crank shaft rpm b) Main lube oil pump rpm
c) Water pump rpm d) None of the above

1546. To check fuel oil pressure, gauge to be connected on (b)
a) Primary filter housing b) Secondary filter housing
c) Fuel pump motor d) None of the above

1547. If due to any reason, the value of BAP is exceeds its normal value Then loco will be shutdown through (c)
a) HOD b) Crankcase EPD button
b) Low water EPD button d) None of the above

1548. In HHP locomotive left side cam gear is driven by (a)
a) No. 2 Idler gear b) Crank shaft gear
c) Right side cam gear d) None of the above

1549. No. of bull gears fitted in WDG4D locomotive (c)
a) 2 b) 4 c) 6 d) 8

1550. No. of fuel oil spin on filters fitted in HHP locomotive (b)
a) 1 b) 2 c) 3 d) 4

1551. Where the serial number of crankshaft is written? (a)
a) On the web of both the first and last throws
b) Right side of the main bearing caps
c) Right side of each end "A" frame
d) All of the above

1552. No. of studs in a Power assembly liner (a)
a) 8 b) 12 c) 16 d) 18

1553. Exhaust screen of HHP locomotive is inspected in which schedule? (b)
a) 30 Days & above schedule b) 90 days & above schedule
c) 180 days & above schedule d) Yearly & above schedule

1554. Purpose of thrust collar in HHP locomotive (a)
a) to limit the longitudinal movement of the crankshaft
b) to limit the vertical movement of the crankshaft
c) to limit the vertical movement of cam shaft
d) none of the above

1555. Discharge capacity of water pump in HHP locomotive is (d)
a) 867 LPM (229 GPM) at 900 rpm
b) 413 LPM (109 GPM) at 900 rpm
c) 1534 LPM (405 GPM) at 900 rpm
d) 3411 LPM (900 GPM) at 900 rpm

1556. No. of teeth water pump gear is in (a)
a) 37 b) 26 c) 30 d) 69

1557. Taper stub shaft fitted on (a)
a) Harmonic damper b) Camshaft
c) Main Alternator d) Companion Alternator

1558. No. of springs in Accessory drive gear is (c)
a) 10 b) 12 c) 8 d) 16

1559. No. of rollers in Accessory drive coupling is (a)
a) 10 b) 12 c) 8 d) 16

1560. To measure the speed of HHP locomotive _____ is used (c)
a) Axle generator b) Pulse generator c) Radar d) None of the above

1561. In HHP locomotive to create crankcase vacuum (a)
a) Oil separator &Eductor tube is fitted b) CCM is fitted
c) Exhauster is fitted d) All of the above

1562. No. of ETPs fitted inn HHP locomotive (b)
a) 1 b) 2 c) 3 d) 4

1563. The internal parts of injector is cooled & lubricated by (a)
a) Fuel oil b) Lube oil c) Cooling water d) None of the above

1564. In HHP locomotive left side rocker arms are used to operate (b)
a) Inlet valve b) Exhaust valve c) Injector d) None of the above

1565. In HHP locomotive fuel oil secondary filter is changed at (b)
a) 60 days b) 90 days c) 180 days d) None of the above

1566. In HHP locomotive fuel oil primary filter is filtered up to (b)
a) 600 µ b) 13 µ c) 2 µ d) None

1567. In HHP locomotive fuel oil suction strainer is filtered up to (a)
a) 600 µ b) 13 µ c) 2 µ d) None

1568. In HHP locomotive fuel oil secondary filter is filtered up to (c)
a) 600 µ b) 13 µ c) 2 µ d) None

1569. Minimum lube oil pressure of HHP loco at Idle is (a)
a) 8 – 12 psi b) 25 – 29 psi c) 20 – 25 psi d) 125 psi

1570. In HHP locomotive hand cranking arrangement is provided on the (a)
a) Left rear side of the engine b) right rear side of the engine
c) Both side, rear end of the engine d) N one of the above

1571. In HHP locomotive Low lube oil shutdown is also initiated by (d)
a) HOD (Hot Oil Detector)
b) EPD low cooling water portion
c) EPD crankcase pressure portion
d) All of the above

1572. In 710 G3B engine maximum permissible temperature difference between lube oil and water is (b)
a) 10°C b) 11.1°C c) 16°C d) None of the above

1573. No. 1 Idler gear to stub shaft minimum clearance is (a)
a) 0.005" b) 0.008" c) 0.017" d) None of the above

1574. Lube oil pressure sensing pipe line are provided in the (b)
a) Left bank top deck cover b) Right bank top deck cover
c) Inside the crankcase d) Inside the oil pan

1575. In hHP locomotive lube oil strainer box is filled with lube oil within (b)
a) 30 seconds b) 45 seconds c) 60 seconds d) 75 seconds

1576. In spectrographic analysis of engine lube oil normal range of Aluminium (Al) is
a) 0 – 20 ppm b) 0 – 15 ppm c) 0 – 10 ppm d) 0 – 5 ppm (d)

1577. Normal TSC rpm of 4500 hp HHP locomotive is (b)
a) 15000 – 20000 rpm b) 18500 – 21500 rpm
c) 18500 – 25000 rpm d) 18500 – 20000 rpm

1578. Minimum TSC rpm of 4500 hp HHP locomotive at full load is (b)
a) 15000 rpm b) 15932 rpm c) 18400 rpm d) 18400 rpm

1579. In CCB II fitted HHP locomotive Dead engine cock is located on (b is)
a) EBV b) ERCP c) BPCP d) None of the above

1580. Normal air box pressure (BAP) in HHP locomotive at full speed & full load is (a)
a) 1.1 – 1.75 kg/cm² b) 1.5 – 1.95 kg/cm²
c) 1.4 – 1.75 kg/cm² d) 1.4 – 1.5 kg/cm²

1581. In HHP locomotive normal lube oil inlet temperature is (a)
a) 70 – 90° C b) 70 – 80° C c) 80 – 90° C d) 80 – 99° C

1582. Air box pressure is _____ than the exhaust manifold pressure throughout the speed range (a)
a)2 psi greater b) 5 psi greater c) 2 psi less d) 5 psi less

1583. Normal height of lube oil relief valve safety plate to valve guide is (b)
a) 1 " b) 1.5" c) 2" d) 2 ½ "

1584. The purpose of lube oil relief valve is to (a)
a) protect the scavenging oil pump from over loading
b) protect the piston cooling oil pump from over loading
c) limit the maximum pressure of lube oil entering the engine lube oil system
d) All of the above

1585.When installing lube oil relief valve on engine, make sure that the bypass port is positioned in the (a
a) Downward direction b) upward direction
c) Left side direction d) right side direction

1586. To overcome TSC surging problem in HHP locomotive water wash done for (b)
a) 5 minutes b) 15 minutes c) 15 minutes d) 30 minutes

1587. In HHP locomotive, Lube oil filter elements must be renewed if filter tank Pressure reaches ___ at 8th notch & ____ at Idle speed. (a)
a) 25 psi, 7 psi b) 35 psi, 15 psi c) 45 psi, 25 psi d) 25 psi, 10 psi

1588. Any engine coolant with a PH in excess of ____ is generally considered unsuitable for use in HHP engine cooling system (d)
a) 5.5 b) 7.5 c) 9.5 d) 10.5

1589.Standard range of PH value of corrosion inhibitor in HHP loco coolant is in between (b)
a) 5.5 to 7.5 b) 7.5 to 10.5 c) 9.5 to 10.5 d) 10.5 to 11.5

1590. Degree and top dead centre marking are stamped on the outer rim of the (a)
a) Engine coupling disc b) Ring gear
c) Generator coupling disc d) Vibration damper

1591. Clearance between flywheel ring gear teeth and EPU must be a gap of (b)
a) 0.020"± 0.005" b) 0.025" ± 0.005" c) 0.030" ± 0.005" d) 0.035" ± 0.005"

1592. Excessive backlash in camshaft gear train can cause (d)
a) Improper valve operation b) Improper fuel injection durations
c) Unusual sound d) All of the above

1593. Which No. main bearing are known as critical main bearing? (a)
a) 2,6,8,9 b) 2,4,8,9 c) 1,5,6,10 d) 3,5,6,9

1594. In HHP Locomotive how many thrust collar (bearing) is used? (b)
a) One b) Two c) Three d) Four

1595. In HHP Locomotive minimum crankpin journal diameter is (a)
a) 165.011 mm b) 165.10 mm c) 215.90 mm d) 215. 81 mm

1596. In HHP Locomotive minimum main bearing journal diameter is (d)
a) 165.011 mm b) 165.10 mm c) 125.90 mm d) 215.81 mm

1597. In HHP Locomotive normal crankpin journal diameter is (b)
a) 165.011 mm b) 165.10 mm c) 215.90 mm d) 215.81 mm

1598. In HHP Locomotive normal main bearing journal diameter is (c)
a) 165.011 mm b) 165.10 mm c) 215.90 mm d) 215.81 mm

1599. In HHP Locomotive thrust bearing clearance limit is (a)
a) 0.010" – 0.021" b) 0.0075" – 0.0150" c) 0.0075" – 0.0150"
d) None of the above

1600. In HHP Locomotive main bearing to crankshaft clearance limit is (b)
a) 0.010" – 0.021" b) 0.0075" – 0.0205" c) 0.007" – 0.015"
d)None of the above

1601. In HHP Locomotive bearing to crankpin clearance limit is (c)
a) 0.010" – 0.021" b) 0.007" – 0.020" c) 0.007" – 0.015" d) None of the above

1602. WDP4 is a (a)
a) Single cab loco b) Duel cab loco c) Duel cab loco with disc brake
d) Duel cab loco with Hotel load

1603. Series of WDG4 is (b)
a) 20 b) 12 & 70 c) 40 d) 70

1604. What is the full of form of TELM? (a)
a) Tractive Effort Limiting Switch b) Tracrtive Effort Limiting motor
c) Tractive Effort Liming mechanism d) None of the above

1605. In MEDHA control sytemRaditor fan start at (c)
a) Below 730 c b) Below 790 c c) Above 850c d) 960 c

1606.What is the valve of back lash between no.1 idler gears to no.2 idler gear? (a)
a) 0.007" – 0.025" b) 0.024" – 0.048 c) 0.016" – 0.039" d) 0.006" – 0.018"

1607. There are how many marks in HHP Locomotive lube oil dipstick (modified) (c)
Gauge?
a)24 b)25 c)30 d) None of the above

1608. Axle load of WDG4 Locomotive is (a)
a) 21T b) 20.5T c) 20.25T d) 19.5T

1609. How will you check the working of soak back pamp? (d)
a) After engine shut down & by opening no.1 oil pan hand hole cover
b) After engine shut down & by opening no.8 oil pan hand hole cover
c)After engine shut down & by opening no.9 oil pan hand hole cover
d)After engine shut down & by opening no.16oil pan hand hole cover

1610. No. of teeth in Accessory Drive Gear is (b)
a) 79 b) 113 c) 131 d) 69

1611. What is the value of min.TSC Lube oil pressure at 1st notch in HHP loco (d)
a) 7psi b) 8psi c) 29psi d) 12psi

1612. Where the lube oil relief valve is located (a)
a) on the lube oil manifold, inside the accessory drive gear housing.
b) on the lube oil manifold, inside the crankcase.
c) on the lube oil manifold, inside the oil pan. d) none of the above

1613. In blade rod power assembly (b)
a) both toe of slipper foot are equal in length
b)both toe of slipper foot longer than outside toe
c) both toe of slipper foot is longer than inside toe
d) none of the above in correct

1614. While placing blade rod power assembly on engine it must be ensures that (a)
a) "long toe" of the slipper foot is facing the centre of the engine
b) "short toe" of the slipper foot is facing the centre of the engine
c) "long toe" of the slipper foot is facing the right side of the engine
d) None of the above

1615. What is the minimum permissible fuel oil level of HHP Locomotive? (c)
a) 600 litres b) 2000 litres c) 1500 litres d) None of the above

1616. Starter motor to be remove during changing of power assembly no (c)
a) 1 & 8 b) 8 & 9 c) 8 & 16 d) None of the above

1617. How many TM blowers are fitted in HHP Locomotive (a)
a) 1 b) 2 c) 3 d) 4

1618. Where is the battery knife switch located in HHP Locomotive? (a)
a) on left side platform near clean air compartment
b) on right side platform near clean air compartment
c) on right side platform hand brake
d) None of the above

1619. Maximum power consumed by the radiator fan shall not be exceeds (d)
a) 10HP b) 15HP c) 60HP d) 90HP

1620. In HHP Locomotive compressor oil flushed at (b)
a) T-90 & above schedule b) T-180 & above schedule
c)T-360 & above schedule d)T-720 & above schedule

1621. What is the final pressure of atomized fuel injected to cylinder? (c)
a) 1800-2000 psi b) 1800-2000 psi c) 16000-40000psi d) 20000-40000 psi

1622.How many snap rings are fitted in the HHP Engine piston? (a)
a) 1 b) 2 c) 4 d) 6

1623. Which grooves rings of HHP piston is directionally sensitive? (d)
a) No. 4 grooves b) No. 5 grooves c) No. 6 grooves d) All of the above

1624. Which piston rings of HHP piston are identical? (a)
a) No.2,3 Ring b)No.5,6 Ring c)No.1,4 Ring d) None of the above

1625. Which grooves rings of HHP piston is interchangeable? (a)
a) No.2,3 Ring grooves b) No.5,6 Ring grooves
c) No.1,4 Ring grooves d) None of the above

1626. Which piston rings of HHP piston is stamped with " top" Grooves Only"? (a)
a) No.1 Ring b)No.2 Ring c)No.6 Ring d) None of the above

1627. In HHP Locomotive main bearing to crankshaft maximum clearance is (c)
a) 0.010" b) 0.0.15" c) 0.020" d) 0.025"

1628. Which piston rings many be installed with either side up? (d)
a) No.1 Ring b)No.2 Ring c)No.3 Ring d) No.2& No.3 Ring only

1629. Which piston ring has double hook scraper? (b)
a) No.4 Ring b)No.5 Ring c)No.6 Ring d) all of the above

1630. Which piston ring is special spring loaded with scalloped property? (c)
a) No.4 Ring b)No.5 Ring c)No.6 Ring d) all of the above

1631. What is the main cause of heavy oil loss through the air ports? (d)
a) No.5 Ring many be installed upside down
b) No.6 Ring many be installed upside down.
c) Oil drain hole under the oil control rings many be clogged.
d) All of the above

1632. To drain oil, after lubricating liner (a)
a) 10o drain hole are used b) 15o drain hole are used
c) 45o drain hole are used d) None of the above

1633. In spectrographic analysis of engine lube oil normal range of Chromium (Cr) is (d)
a) 0-50 ppm b) 0-20 ppm c) 0-15 ppm d) 0-10 ppm

1634. Main lube oil pump is a (c)
a) Reciprocating pump b) Centrifugal pump
c) positive displacement with helical gear type pump d) None of the above

1635. Piston cooling lube oil pump is a (c)
a) Reciprocating pump b) Centrifugal pump
c) positive displacement with helical gear type pump d) None of the above

1636. How many Lube oil filter by-pass valves are fitted in WDP4D Locomotive? (b)
a) 1 b) 2 c) 3 d) None of the above

1637. What is the TSC rpm of HHP Locomotive at 1st notch? (b)
a) 3340 rpm b) 4492 rpm c) 15932 rpm d) 18400 rpm

1638. Where the serial number of crankcase is written ? (d)
a) at the top the left bank at the real end b) right side of the main bearing caps.
c) right side of the each end "A" frame d) All of the above place

1639. Value of Impeller Eye Clearance of HHP Turbocharger at 9 O' Clock position is(c)
a) 0.012"-0.025" b) 0.024"-0.048" c) 0.016"-0.039" d) 0.010"-0.018"

1640. Which oil is recommended by EMD for HHP Governor? (a)
a) 10w-30,10w-40,15w-40,20w-40 meeting APL Classification
b) RR 57 c) RR67 d)All of the above

1641. How many sand magnet valves are fitted in HHP Locomotive? (d)
a) 1 b) 2 c) 3 d) 4

1642. How many Sun Gear are fitted in HHP TSC? (a)
a) 1 b) 2 c) 3 d) 4

1643. Lube oil groove is provided in the (a)
a) lower bearing shell of crankpin b) top bearing shell of crankpin
c) both bearing shell of crankpin d) None of the above

1644. Lube oil hole is provided in the (b)
a) lower bearing shell of crankpin b) top bearing shell of crankpin
c) both bearing shell of crankpin d) None of the above

1645. There are two dowel hole in the (b)
a) lower bearing shell of crankpin b) top bearing shell of crankpin
c) both bearing shell of crankpin d) None of the above

1646. There are how many thrust bearings are fitted in Auxiliary Generator Drive assembly? (b)
a)1 b)2 c)4 d) None of the above

1647. Lube oil drain cock is located in (b)
a) Accessory room b) under truck at loco right side
c) under truck at loco left side d) compressor room

1648. Lube oil filter housing drain cock is located in (d)
a) Accessory room b) under truck at loco right side
c) under truck at loco left side d) inside the strainer housing

1649. In HHP Locomotive during adding oil in compressor (a)
a) the engine must be shut down b) the engine must be run in idle
c) the engine must not be raise d) None of the above

1650. During post lubrication lube oil is filtered through (b)
a) Only TSC spin on filter b) Only TSC soak back filter
c) Both, TSC soak back & TSC Spin on filter d) None of the above

1651. Bottom main bearing shell is changed after (b)
a)2Years b)3Years c)6Years d) None of the above

1652. Top main bearing shell is changed after (c)
a) 2 Years b) 3Years c) 6 Years d) None of the above

1653.Water system flexible vent hose is changed during (a)
a) T-360 & onward schedule b) 2 Yearly & onward schedule
c) 3 Yearly & onward schedule d) None of the above

1654. In DUROCAM all non-lobe area being made thicker to (a)
a) eliminate vibration b) eliminate smoke c) eliminate TSC surging d) all of the above

1655. CCB applies emergency penalty whenever BP pressure drop below (c)
a) 1.5kg/cm2 b) 2.2 kg/cm2 c) 2.5 kg/cm2 d) all of the above

1656. What is maximum permissible pressure difference between main lube oil & TSC lube oil pressure (d)
a) 7 psi b) 8psi c) 29psi d) all of the above

1657. How much clearance is maintained in between idler gear to stud shaft (b)
a) 0.007”-0.025” b) 0.004”-0.012” c) 0.016”-0.039” d) 0.006”-0.018”

1658. What is full Form of HOD? (b)
a) Hot Oil Device b) Hot Oil Detector
c) Heavy Oil Dilution d) Heavy Oscillation Damping Device

1659. WDP4B locomotive has……..no. TM (b)
a) 4 b) 6 c) 4 or 6 d) none of the above

1660. No. of teeth in Auxiliary Generator Drive Gear is (d)
a) 80 b) 37 c) 64 d) 26

1661. Don’t shift the ISOLATION Switch to run position immediately after engine start otherwise Engine will shut down due to (a)
a)EPD low water button & LLOB operation.
b) EPD crankcase button & LLOB operation
c)Only LLOB operation. d) None of the above

1662.During setting of injector timing it. Must be ensuring that (d)
a)concerned power assembly at TDC b) OSTA is not trip condition
c)proper injector timing tool is using d)All of the above

1663. Thrust clearance value of Auxiliary Drive Gear is (c)
a) 0.080”-0.120” b) 0.100”-0.110” c) 0.133”-0.162” d) 0.130”-0.140”

1664. In HHP Locomotive duration of power stroke is (c)
a) 87° b) 113° c) 109° d)) 138°

1665. HHP Locomotive cylinder head hydraulic test done at (d)
a)20psi pressure with hot water b) 50psi pressure with hot water
c) 75psi pressure with not water d) 90psi pressure with hot water

1666. Gear ratio (pinion Gear: Bull Gear) of WDP4D Locomotive is (b)
a) 18:65 b)17:77 c)17:90 d)) None of the above

1667. The wiper assemblies are designed operated at a max speed of ….. per minute (c)
a) 40 to 50 cycles(80 to 100 strokes) b) 50 to 60 cycles(100 to 120strokes)
c) 60 to 80 cycles(120 to 160 strokes) d) None of the above

1668. Gap between TM blower intake ring and blower wheel on both sides of wheel assembly i.e.MA/TM is (b)
a) 2.5 to 5 mm b)3.5 to 5mm c)4.5 to 5mm d) none of the above

1669.Driver’s backup valve handle is located (b)
a)Both control console / desk b)Behind LP seat
c) Behind ALP seat d) None of the above

1670. Don’t open water tank pressurise cap without …….expansion thank. (b)
a) filling water in b) releasing pressure of
c) pressing quick connector of d) all the above

1671. During performing welding work in HHP Loco it should be ensured that (d)
a) different connection of connector & sensor of CCB System is removed
b)different connection of connector & sensor of Electrical System is removed
c) earthen connection is connected nearest to the welding job
d) All of the above

1672.Don’t conduct Air Brake Self-Test without (c)
a) shutdown the locomotive b) inserting reverser handle
c) securing locomotive d) All of the above

1673.WDP4B is a (a)

a)single cab loco b) Duel cab loc

c)Duel cab loco with disc brake d) Duel cab loco with Hotel load

1674.if pilot stud is mark as no.1, then cylinder head to liner stud nut torqueing sequence

a)1-2-3-4-5-6-7-8 b) 8-7-6-5-4-3-2-1 c) 1-5-7-3-8-4-2-6 d) None of the above (c)

1675. Series of WDP4 (b)

a) 12 b)20 c) 40 d)70

1676. WDP4BH is a (d)

a) single cab loco b) Duel cab loco

c) Duel cab loco with disc brake d)single cab loco with Hotel load

1677. What is the full form of HTSC? (a)

a)High Tensile Steel Cast bogie b) High Tensile Steel Carbody bogie

c)High Tensile Steel Strength Cast bogie d)None of the above

1678. Series of WDG4D is (d)

a) 12 b) 20 c) 40 d) 70

1679. Combustion gases blowing by the injector nut and cylinder head can be caused by :

a)Improper torque on the injector crab nut

b) inadequate clearance beet between the cylinder head and body of the injector

c) Bent of dislocated injector dowel pin

d) All of the above

1680. 15psi relief valve is located inside the (a)

a) Return sight glass b) By-pass sight glass c) Empty sight glass d) None

1681. Bubble in the fuel return bowl sight glass can caused by : (a)

a) a poor tip seat area inside the injector nut

b) injector nut cone out of round wrong angle or contains surface defects.

c) inadequate clearance between the cylinder head and body of the injector

d) All of the above

1682. What is the full from of RAPB? (a)

a) Restricted Air Penalty Brake Switch b) Rapid Air Penalty brake

c) Restored Air Penalty brake d) None of the above

1683. What is the full from of AEB? (b)

a) Automatic Engine Breakdown b) Automatic Emergency Bypass Brake

c) Automatic Energy Bypass switch d) None of the above

1684. What is the full from of LLOB? (a)
a) Low Lube Oil Button of Governor b) Less lube Oil Button
c) Low Lube Oil blast d) None of the above

1685. In spectrographic analysis of engine lube oil normal range of Tin (Sn) is (c)
a) 0-75ppm b) 0-50ppm c) 0-20ppm d)0-15ppm

1686. Series of WDP4B is (c)
a)12 b)20 c)40 d)7

1687.WDG4DD is a (c)
a)single cab loco b) Duel cab loco
c) Duel cab loco with disc brake d) Duel cab loco with Hotel load

1688. Minimum Fuel oil pressure of HHP Locomotive is (d)
a) 4.9 kg/cm2 b) 3.1 kg/cm2 c) 4.2 kg/cm2 d)2.1 kg/cm2

1689. In EMDEC Engine HOD has been replaced with (a)
a) a lube oil temperature sensor b) a ¾" plug
c) a temperature gauges d) None of the above

1690. Diameter of the Governor lube oil pressure sensing pipe line is (d)
a) 1/2" b) 1/4" c) 3/4" d) 1/8"

1691. Axle load of WDG4D Locomotive (d)
a)21 T b)20.5 T c)20.25 T d) 21.7 T

1692. During pre-lubrication lube oil is filtered through (b)
a)Only TSC Spin on filter b)Only TSC Spin soak back filter
c)Both TSC soak back & TSC Spin on filter d) None of the above

1693. Drivers backup brake valve has (b)
a) 02 position b) 03 position c) 04 position d) 05 position

1694. Which of the following position are in drivers backup brake valv (d)
a) V-Emergency Position b)111-Lap Position
c) ll-Running Position d) All of the above

1695. To activate Drivers backup brake valve (a)
a) PR COS cock to be operated to horizontal position from vertical
b) PR COS cock to be operated to vertical position from horizontal
c) MAB circuit breaker to be off
d) all of the above

1696. During failure of CCB System. Section to be clear by Drivers backup brake valve with Maximum speed of (a)
a) 10kmph b) 15kmph c) 25kmph d) 40kmph

1697. In CCB 1.5 with statement is true regarding" Dead Engine Cock" (d)
a) it has Two position
b) During normal working this cock should be kept in horizontal position
c) During dead movement this cock should be kept in vertical (90o) position
d) All the above

1698. No. of roller in Compressor Drive coupling is (a)
a) 10 b) 12 c) 8 d) 16

1699. In CCB 2 which statement is true regarding " Dead Engine Cock (DER)" (d)
a) It has Two position
b) During normal working this cock should be kept in "OUT" position
c) During dead movement this cock should be kept in "IN" position
d) All of the above

1700. Main component of HHP locomotive turbocharger is (d)
a) Doweling assembly
b) Rotating assembly
c) Gear drive assembly
d) All of the above

1701. The doweling assembly is comprised of (a)
a) 6 iron casting b) 5 aluminium casting c) 5 steel forging unit d) None of the above

1702. Valve of Impeller Eye Clearance of HHP Turbocharger at 3 0' Clock position is(c)
a) 0.012"-0.025" b) 0.024"-0.048" c) 0.016"-0.039" d) 0.010"-0.018"

1703. The doweling assembly is consist of (d)
a) Compressor scroll b) Compressor bearing support
c) Turbine bearing support d) All of the above

1704. The doweling assembly is consist of (d)
a) Main housing b) idler gear support c) Carrier bearing support d) All of the above

1705. …… is also known as the heart of many turbocharger. (b)
a) Doweling assembly b) Rotating assembly) Gear drive assembly d) All of the above

1706. No. of teeth in governor Drive Gear is (d)
a) 37 b) 131 c) 80 d) 113

1707. MR tank of HHP Locomotive is fitted at (b)
a) Left side of the locomotive b) Right side of the locomotive
c) Both side of the fuel tank d) None of the above

1708. Nozzle ring is part of (b)
a)Doweling assembly b) Rotating assembly c)Gear assembly d) All of the above

1709. No. of teeth in Camshaft Drive Gear is (c)
a)26 b) 37 c) 79 d) 113

1710. Exhaust diffuser is a part of (b)
a)Doweling assembly b) Rotating assembly c)Gear assembly d) All of the above

1711.Planet gear is a part of (c)
a)Doweling assembly b) Rotating assembly c)Gear assembly d) All of the above

1712. Carrier shaft assembly is a part of (c)
a)Doweling assembly b) Rotating assembly c)Gear assembly d) All of the above

1713. The passage between stationary vanes of nozzle ring is called (a)
a)Nozzle b) Cradle c)Diffuser d) None of the above

1714.In 710-G TSC no. of blade in impeller is (a)
a)34 b)53 c)16 d) None of the above

1715.In 710-G TSC no. of blade in turbine is (b)
a) 34 b) 53 c) 16 d) None of the above

1716. In 710-G TSC impeller is made of (c)
a) Stainless steel b) Copper c) Aluminium d) Brass

1717. In 710-G TSC impeller is made by (a)
a)Casting b)Forging c)Friction welding d) None of the above

1718. There are ……. Silver –plated hydra-dynamic bearing is HHP TSC (d)
a) 2 b) 3 c) 5 d) 6

1719. "Labyrinth" seal used in the Turbocharger, basically is a (c)
a) Viton rubber seal b) P.T.F.E Teflon c)Air pressure seal d) None of the above

1720. Which "Labyrinth" seal is found in HHP (d)
a) Impeller Seal b) Compressor Seal c) Turbine Seal d) All of the above

1721.lmpeller seal is located (a)
a) Directly behind the impeller
b) Between the turbine blades and the compressor bearing
c) Between the turbine blades and the turbine bearing d) None of the above

1722. Which sight glass is fill up with bubble less fuel oil (a)
a) Return sight glass b) By-pass sight glass c) Empty sight glass d) None of the above

1723. Function of Impeller seal is to (a)
a) Prevent oil in the compressor bearing area from being drawn out into the compressor airscroll by the suction created on the impeller spin
b)Prevent oil from migrating in to exhaust section from the compressor bearing
c)Prevent oil From migrating into the exhaust duct from the turbine bearing
d) All of the above

1724.Function of compressor seal is to (b)
a) Prevent oil in the compressor bearing area from being drawn out into the compressor air scroll by the suction created on the impeller spin
b)Prevent oil from migrating in to exhaust section from the compressor bearing
c) Prevent oil From migrating into the exhaust duct from the turbine bearing
d)Allof the above

1725. Function of turbine seal is to (c)
a) Prevent oil in the compressor bearing area from being drawn out into the compressor air scroll by the suction created on the impeller spin
b) Prevent oil from migrating in to exhaust section from the compressor bearing
c) Prevent oil From migrating into the exhaust duct from the turbine bearing
d) All of the above

1726. FAD of HHP Loco compressor should not be less than (b)
a) 400LPM at 950rpm b) 5677 LPM at 950rpm
c) 6000 LPM at 950rpm d) 7000LPM at 950 rpm

1727. Lube oil consumption of HHP Loco compressor should not be more than (a)
a) 1.5 liters/month b) 2.0 liters/month c) 3.0 liters/month d) 3.5 liters/month

1728. In HHP loco compressor discharge air temp .at HP outlet many allowed up to(c)
a) 100°C b) 150°C c) 200°C d) 250°C

1729. In HHP MU, loading & unloading of compressor of both loco is synchronized by(c)
a) MVCC of leading loco b) MVCC of trailing loco
c) CMPSYN d) None of the above

1730. In HHP MU (d)
a) Loading of compressor of both loco is occurred at same pressure
b) Unloading of compressor of both loco is occurred at same pressure
c) Loading & unloading of compressor of both loco is occurred at same pressure
d) Loading & unloading of compressor of both loco is occurred at different pressure

1731. In HHP Locomotive ,LP& HP cylinders of compressor are arranging with an angle of (c)
a) 30° between them. b) 45°between them.
c) 60° between them d) 90° between them.

1732. Rising Copper levels in lubrication oil is a concern of high (a)
a) Thrust washer wear b) Piston wear c) Liner wear d) None of the above

1733. Maximum allowable wear limit of thrust washer is (c)
a) 0.070”-Based on change in lead wear reading
b) 0.080”-Based on absolute snap ring clearance reading
c) Both a & b
d) None of the above

1734. Thrust washer wear in a power pack can be determine by (c)
a) Change in head wear reading b)Absolute snap ring clearance
c) Both a & b d) None of the above

1735.To check Thrust washer wear by” absolute snap ring clearance method concerned piston to be kept in (b)
a)TDC b)BDC c)45o after TDC d) 22 ½o after TDC

1736. Valve bridge spring seat is made of (b)
a) Copper b) Bronze c) Brass d)None of the above

1737. During cylinder pressure check (Blow bye test) of HHP Locomotive (a)
concerned power assemblies piston to be kept at
a)TDC b)BDC c)107 ½0 TDC d) 22 ½0after TDC

1738. Insufficient compression in a power assembly can be due to (d)
a) Bend valve stem
b) Trapped deposits between valves and corresponding valve seats
c) Excessively worn valve seats
d) All of the above

1739. Maximum speed of traction motor blower of WDG4D Locomotive is (c)
a)817rpm b)2898rpm c)3342rpm d) None of the above

1740. No.3 Compression ring to land maximum permissible clearance is (b)
a) 0.010" b) 0.012" c) 0.015" d) 0.018"

1741. Fins of after cooler core is made of (b)

a) Brass b) Copper c) Tin d) None of the above

1742. In HHP Locomotive Brake block to wheel clearance in no.1 & 6 wheel disc is (b)
a)110mm b)15.9mm c)19.1mm to 31.8mm d) None of the above

1743.The short Fuel level sight lass of fuel tank is indicates the fuel level the (a)
top of the tank to
a) About 4 ½" below the top b) About 7 ½" below the top
c) About 10 ½" below the top d) None of the above

1744. TM Blower mounting bolt is torque at (a)
a) 205ft-lbs. b) 100ft-lbs. c) 250ft-lbs. d) 50ft-lbs

1745. To cut off fuel supply. Hold the governor lay shaft at (a)
a) lts maximum governor rack length b) lts minimum governor rack length
c) Beyond minimum governor rack length d) None of the above

1746. Minimum flash point of HSD is (a)
a) 35° C b)194° C c)240° C d) None of the above

1747. On MUI units, during compressing testing fuel supply to be cut by (c)
a) Isolating injector b)Isolating FPM
c)hold the lay shaft at its maximum governor rack length(no fuel)
d) None of the above

1748. To prevent exhaust valve spring broken problem EMD recommended use of (b)
a) Left hand wound valve spring b) Right hand wound valve spring
c) Both a & b d) None of the above

1749. What is the TSC rpm of HHP Locomotive at low idle speed? (a)
a) 3340rpm b) 4492rpm c) 15932rpm d) 18400rpm

1750. In spectrographic analysis of engine lube oil normal range of lead (pb) is (b)
a) 0-75 rpm b) 0-50rpm c) 0-20rpm d) 0-15rpm

1751.What is the full from of ECP? (a)
a) Engine Control Panel b) Emergency Control Panel
c) Electrical Control Panel d) None of the above

1752. Which of the following NDT process is used for auxiliary generator drive shaft testing (a)
a) ZYGLO testing b) MPT c) UST d) None of the above

1753. In which schedule height is cattle guard & rail guard is measure and recoded?(b)
a) T-30 & above b) T-90 & above c) T-180 & above d) 3Yeatly & above

1754.Which oil is filled in HHP loco gear case (a)
a) RR460 b) SP100 c)RR606 d) SP57

1755. Which type of CBC is fitted in WDP4D Locomotive (c)
a) E-type b) F-type c) H-type d) None of the above

1756. How many magnetic poles are in radiator fan when run in full speed? (a)
a) 8pole b) 12pole c) 16pole d) None of the above

1757."Finger tightness check" is related to (a)
a) Basket to con rod bolts b) Basket to basket bolts
c) Water inlet tube in liner bolts d) All of the above

1758. Lube oil relief valve is located (a)
a) On the left side of the engine b) On the right side of the engine
c) On the left side of the locomotive d) None of the above

1759. In HHP Locomotive normal lube oil outlet Temperature is (d)
a) 70-90° C b) 70-80° C c) 80-90°C d) 80-99°C

1760. No. of teeth in Scavenging Lube oil Pump Drive Gear is (b)
a) 79 b) 80 c) 81 d) 64

1761.During compression pressure testing crank the engine over using the starters (a)
a) approximately 06 revolutions b) approximately 12 revolutions
c) approximately 15 revolutions d) None of the above

1762. Air flow rating of baggy filter is (d)
a) 1000 CFM b) 1500 CFM c) 2000 CFM d) 2500 CFM

1763. On.4 Compression ring to land maximum permissible clearance is (c)
a) 0.010" b) 0.012" c) 0.015" d) 0.018"

1764. During engine starting starter motor rotate (d)
a) 954rpm b) 1035-1050rpm c) 1085-110rpm d) 1200-4800rpm

1765. Which of the following statement is correct regarding HHP Locomotives pinion?(a)
a) WDP4 pinion diameter is larger than WDG4 pinion
b) WDG4 pinion diameter is larger than WDG4 pinion
c) pinion of WDG4 & WWDP4 locomotives is same size
d) All of the above

1766. Codal life of after cooler is (b)
a) 6years b) 10years c) 12years d) 18years

1767. Codal life of lube oil cooler is (b)
a) 6years b) 10years c) 12years d) 18years

1768.How many horn are fitted on the roof HHP Locomotive (d)
a) 1 b) 2 c) 3 d) 4

1769. Water percentage in lube oil is determined by (a)
a) Hydro gauge b) Hydrometer c) Hydrometer d) Tensometer

1770. Greyish blue smoke from TSC chimney indicates (b)
a) Incomplete combustion of fuel oil b) Lube oil burning in combustion
c) Water ingress in combustion chamber d) None of the above

1771. MP.MISC-285is related to (a)
a) Schedule of standard examination of HHP Locomotive
b) Reliability and quality issues of Power Assembly
c) TSC fitment and matching procedure
d) Commissioning Schedule of HHP Locomotive

1772. In HHP Locomotive compressor spin on filter is changed during (d)
a) T-30 & above schedule b) T-60 & above schedule
c) T-90 & above schedule d) T-180 & above schedule

1773.WDP4D Locomotive is design to run in a flood water level of (b)
a) 85mm above rail level b) 102mmabove rail level
c) 148mm above rail level d) 205mm above rail level

1774. Which of the following sensor are fitted in the traction motor? (b)
a) Current sensor b) Speed sensor c) Air pressure sensor d) All of the above

1775. Normal horsepower of WDP4D locomotives traction motor is (a)
a) 855hp b) 924hp c) 1025hp d) None of the above

1776. Maximum starting tractive effort of WDP4D locomotive is (a)
a) 400kn b) 540kn c) 900km d) None of the above

1777. In spectrographic analysis of engine lube normal range of iron (Fe) is (a)
a) 0-75ppm b) 0-50ppm c) 0-20ppm d) 0-15ppm

1778. Piston to cylinder head maximum clearance in new power assembly is (c)
a) 0.13 mm b) 0.51 mm c) 1.73 mm d) None of the above

1779.10" expansion joint assembly are fitted in between (d)
a) Front and intermediate front chamber assembly
b) Intermediate chamber assembly
c) Rear and intermediate rear chamber assembly
d) Adaptor and Turbocharger assembly

1780. Which of the following component are recently fitted in HHP Locomotive (d)
a) APU b) MCBG c) CREDI d) All of the above

1781.70psi valve is located inside the (b)
a) Return sight glass b) By-pass sight glass c) Empty sight glassd) None of the above

1782.Acording to shape, type of main bearing used in HHP Locomotive is (c)
a) 01type b) 02type c) 03type d) 04type

1783. In WDP4/4 Locomotive independent loco brake releasing time is (b)
a) 7-9 seconds b) 8-12 seconds c) 16-30 seconds d) 15-20 seconds

1784…….Gear is attached with the carrier. (b)
a) Sun gear b) Planet gears c) Ring gear d) None of the above

1785.Piston stroke o WDG4/4D engine is (c)
a) 10" b) 10.5" c) 11" d) None of the above

1786.Direction of flow of exhaust gas inside the exhaust manifold of crankcase is (a)
a) Front end to rear end b) Rear end to front end c) Both a.& b. d) None of the above

1787. Hand brake return spring is located (c)
a) Inside the hand brake assembly b) At compressor room
c) At under frame d) None of the above

1788. Big "Y" header is located at (a)
a) Front end of the engine b) Rear end of the engine
c) Middle of the engine d) None of the above

1789. Purpose of the jacking pad is to support the weight of the locomotive while (d)
a) Run b) Rear end of the engine
c) Middle of the engine d) None of the above

1790. Function of soak back lube oil system is to (d)
a) Lubricate the TSC gear train before engine staring b) Removing of resi
c) Middle of the engine d) None of the above

1791. HVAC fitted in HHP locomotive. What is full form of HVAC? (a)
a) Heating Ventilating and Air Conditioner b) High Voltage Air Conditioner
c) High Voltage Alternating Current d) None of the above

1792. Epicyclic gear trains are used in HHP Locomotive TSC. Advantage of Epicyeclic gear trains is to (a)
a) Obtain high velocity ratio in comparatively lesser space
b) Obtain the desired direction of motion of drive gear
c) Transmit power when the distance between the two gear is large
d) None of the above

1793. Lube oil is filter is filtered up to (b)
a) 600µ b) 13µ c) 02µ d) None of the above

1794. Function of EPU is to (d)
a) Measure the rpm of engine crankshaft.
b) Protect the engine crank shaft from damage due to hydraulic lock.
c) Limits the cranking speed to approximately 30rpm during the first engine crankshaf revolution. d) All of the above

1795.Onload condition TSC is driven up to ……..through gear train. (b)
a) 5th notch b) 6thnotch c) 7th notch d) 8th notch

1796. which of the following test is conducted to check TSC performance (d)
a) Clutch test b) Turbocharger oil pressure test
c) Run down time test d) All of the above

1797. Injector control shaft & governor control link is connected through (a)
a) Ball bearing & nut-bolt. b) Roller bearing & nut-bolt
c) Needle bearing & nut-bolt d) Taper roller bearing & nut-bolt

1798. If lube oil is emulsified ,then (d)
a) Replace all lubrication oil filters b) Replace all lower bearings
c) Inspect & replace one upper main bearing d) All of the above

1799. During EPD testing if throttle is above third notch then shut down will occur in (d)
a) Approximately 60 seconds. b) Approximately 40 seconds.
c) Approximately 35 seconds. d) Approximately 02 seconds.

1800. Lube oil pressure is lowest at the (a)
a) Rear of the engine b) Front of the engine
c) Immediate after lube oil relief valve . d) None of the above

1801. Planet gear engage with the sun gear at …… interval. (c)
a) 60o b) 90o c) 120o d) None of the above

1802. Which of the following crankshaft journal does not have a hole for lube oil? (b)
a) 1 b) 5 c) 10 d) None of the above

1803. Screen of exhaust screen assembly is made of (b)
a) High speed steel b) Chromium stainless steel
c) SAE 1050 Steel d) None of the above

1804. Water seal of modified water pump is made of (c)
a) Copper b) Bronze c) Carbon d) Rubber

1805. TSC compressor bearing oil passage pipe plug is located at (a)
a) Right side of the TSC b) Left side of the TSC
c) Both side of the TSC d) None of the above

1806. No. of teeth in Main Lube Oil Pump Drive Gear is (d)
a) 79 b) 113 c) 64 d) 80

1807. Which of the following is the reason for high exhaust gas temperature (d)
a) Improperly timed fuel injector b) Incorrect valve timing
c) Worn injector tips d) All of the above

1808. Cylinder liner is made by (a)
a) Casting b) Forging c) Welding d) None of the above

1809. Specified limit of compressor radial run out is (b)
a) ±0.005" b) ±0.010" c) ±0.015" d) ±0.020"

1810. TSC Spin on filter up to (d)
a) 2µ b) 6µ c) 13µ d) 30µ

1811. No.5 crank pin journal is lubricated through (a)
a) No. 7 main bearing journal b) No. 9 main bearing journal
c) No. 8 main bearing journal d) None of the above

1812. Roller bearing of injector control shaft is changed during (d)
a) T-360 & above schedule b) T-720 & above schedule
c) 3 yearly & above schedule d) 6 yearly schedule.

1813. In spectrographic analysis of engine lube oil High range of Iron (Fe) is (b)
a) above 150ppm b) above 125ppm
c) above 75ppm d) above 50ppm

1814. In HHP Locomotive how many brake cylinder are fitter in a truck (a)
a) 4 b) 6 c) 8 d) 16

1815. In HHP Locomotive valve stem to valve guide maximum clearance is (c)
a) 0.005" b) 0.008" c) 0.010" d) 0.012"

1816. In HHP Locomotive compressor oil is changed during (d)
a) T-30 & above schedule b) T-60& above schedule
c) T-90 & above schedule d) T-180 & above schedule

1817. Free air delivery of ELGI compressor is (c)
a) 4000 LPM b) 5000 LPM c) 5380 LPM d) 6000 LPM

1818. Minimum lube oil pressure of Compressor at low idle speed at 60o temp is (b)
a) 8 psi b) 15 psi c) 20 psi d) 25-29 psi

1819. WLG model compressor has (c)
a) 3 cylinders b) 4 cylinders c) 6 cylinders d) None of the above

1820. HHP Locomotive compressor has (a)
a) 3 cylinders b) 4 cylinders c) 6 cylinders d) None of the above

1821. In HHP Locomotive which type breather valve is used (c)
a) Spring type b) Diaphragm type c) Reed type d) None of the above

1822. In HHP Locomotive compressor which type sump is used (c)
a) Deep sump oil pan b) Shallow sump oil pan
c) Narrow sump oil pan d) None of the above

1823. In HHP Locomotive compressor which type lube oil pump is used (b)
a) Plunger type oil pump b) Gear type oil pump
c) Reed type oil pump d) None of the above

1824. Purpose of cylinder head seat ring is (d)
a) to maintain proper piston to head clearance
b) to provide proper setting surface of the cylinder head
c) to provide sealing between cylinder head & crankcase head retainer
d) All of the above

1825. To tighten the injector rocker arm adjusting screw turning is (b)
a) Counter clockwise b) Clockwise c) Any direction d) None of the above

1826. Maximum speed of WDP4D Locomotive (b)
a) 105kmph b) 165kmph c) 140kmphd) 160kmph

1827. In HHP Locomotive what is permissible difference in wheel diameter on the same Locomotive (c)
a) 0.5-2.5 mm b) 02-08mm c) 15-25mmd) Nome of the above

1828. In HHP Locomotive duration of scavenging period is (c)
a) 43.5° b) 113° c) 110.5° d) 138°

1829. In HHP Locomotive duration of exhaust period is (d)
a) 87° b) 113° c) 16.6° d) 138°

1830. To apply emergency brake. Fireman emergency brake handle is (b)
a) Operated to downward b) Lifted to Upward
c) Operated Upward d) None of the above

1831. How many ABD are fitted in HHP Locomotive (b)
a) 1 b) 2 c) 3 d) 4

1832. Normal position of fireman emergency brake handle is (a)
a) Downward b) Upward c) In middle position d) None of the above

1833. Height of WDG4D Locomotive over AC is (b)
a) 4.22 meters b) 4.25 meters c) 4.20 meters d) None of the above

1834. Thickness of HHP fuel tank plate is (a)
a) 5-6 mm b) 6-7 mm c) 7-8 mm d) None of the above

1835. Fuel tank capacity of WDP4 Locomotive is (b)
a) 5000Litres b) 6000Litres c) 6500Litres d) 4000Litres

1836. Axle load of WDP4D Locomotive (b)
a) 21T b) 20.5T c) 20.25T d) 19.5T

1837. Length of WDP4 Locomotive is (b)
a) 21T meters b) 21.24 meters c) 21.7 meters d) None of the above

1838. Which of the following pair contain the same no. of teeth (d)
a) sun gear & water pump gear b) Accessory drive gear & Governor
c) Left side cam gear & right-side cam gear d) All of the above

1839. Fuel flowing in By-pass sight glass indicates that (a)
a) Fuel oil spin on filter is chocked b) Fuel oil primary filter is chocked
c) Fuel oil suction strainer is chocked d) All of the above

1840. Which sight glass is always being empty (b)
a) Return sight glass b) By-pass sight glass
c) Both return & by-pass sight glass d) None of the above

1841. Backlash of auxiliary generator is measured by (b)
a) filler gauge b) "C" clamp, Magnet block & dial gauge
c) Lead wire d) None of the above

1842. Injector timing is measured by (b)
a) Vernier caliper b) Timing tool c) Outside micrometer d) Filler gauge

1843. TSC rpm is measured by (b)
a) EPU b) TPU c) SLM d) Pyrometer

1844. Crank shaft rpm is measured by (a)
a) Tachometer b) Vibration meter c) Decibel meter d) Pyrometer

1845. Thrust clearance of auxiliary generator is measured by (a)
a) Filler gauge b) Magnet block & dial gauge
c) Lead wire d) None of the above

1846. Exhaust valve timing is measured by (d)
a) Vernier caliper b) Timing tool c) Filler gauge d) Magnet block & dial gauge

1847. Weight of WDP4 Locomotive is (d)
a) 126 T b) 123 T c) 121.2 T d) 117 T

1848. Fuel tank capacity of WDP4B Locomotive is (a)
a) 5000Litres b) 6000Litres c) 6500Litres d) 4000Litres

1849. In HHP Locomotive what is permissible difference in . on the same axle? (a)
a) 0.5-2.5 mm b) 02-08mm c) 15-25mm d) None of the above

1850. In HHP Locomotive what is permissible difference in wheel diameter on the same bogie? (a)
a) 3.2 mm to 6.4 mm b) 5.2 mm to 6.4 mm c) 1.2 mm to 3.4 mm d) None

1851. Valve of backlash between TSC Drive gears to TSC Idler gear is (d)
a) 0.012”-0.025” b) 0.024”-0.048 c) 0.016”-0.039” d) 0.006”-0.018”

1852. Maximum speed of WDG4 Locomotive is (a)
a) 100kmph b) 105kmph c) 135kmph d) 160kmph

1853. If Cylinder head seat ring is damage then (d)
a) Crankcase head retainer wear will increase b) Oil throwing from will increase
c) Crankcase vacuum will destroy d) All of the above

1854. Injector Timing Plate is located on the (a)
a) Right rear side of the engine crankcase
b) Left rear side of the engine crankcase
c) Right front side of the engine crankcase
d) Left Front side of the engine crankcase

Technical Objective Bit bank

Three Phase Locomotives:

1 In 3Ø loco, to isolate pantograph No. 2, keep panto selector switch in ……..…… position and close……..… COC. (C)

A Auto , PAN-1 & 2 B II , PAN-1

C I , PAN-2 D I or II , PAN-1 or 2

2 In 3Ø dead loco, ……. COC should be open for charging BP pressure into auxiliary reservoir. (B)

A 70 **B 47**

C 74 D 136

3 While 3Ø loco working as banker, put on ……. switch and close 70 COC. (B)

A ZTEL **B ZBAN**

C BLHO D None of the above

4 For resetting VCD in WAG 9 or WAP 7 loco (E-70 brake system), wait for ……. seconds. (D)

A 120 B 100

C 240 **D 160**

5 In 3Ø loco, SS-17 belongs to …… sub system. (C)

A Fire Detection B MEMOTEL

C Processor FLG-1 D Processor FLG-2

6 To perform shunting with 3Ø loco, keep ……. switch in ……. position. (C)

A 154 ; 0 B 154 ; 1

C 160 ; 0 D 160 ; 1

7 While working with WAP-7 or WAG-9 with light load, if Harmonic filter is isolated, work with normal speed after isolating …… (D)

A Auxiliary converter-1 B Traction converter-1 & 2

C Auxiliary converter-2 **D Traction converter-1**

8 In 3Ø loco, Battery charger is getting supply from …… (C)

A Auxiliary converter No. 1 B Auxiliary converter No. 2

C Auxiliary converter No. 3 D Traction converter No. 1

9 While energizing 3Ø loco, if UBA meter is showing "0" and corridor lights also not glowing check, MCBs No. …….. (C)

A 100,110 B 110,112

C 112, 112.1 D 100,112.1

10 In 3Ø loco, for charging of BP pressure …… COC to be kept open. (B)

A A-8 **B 70**

C 74 D 47

11 In 3Ø loco, if battery voltage drops below …….. volts, loco will shut down. (A)

A 82 B 87

C 90 D 92

12 In 3Ø loco, Battery charger output MCB No. is ……. and its location is at…… (B)

A 110 ; SB1 **B 110 ; SB2**

C 100 ; HB1 D 100 ; HB2

13 In 3Ø loco, VCD is required to be acknowledged from ……..... kmph of speed. (C)

A 5 B 1

C 1.5 D 15

14 During loco brake testing of WAG-9 or WAP-7, loco should not to move up to …….. KN. (B)

A 100 **B 150**

C 300 D 125

15 In 3Ø loco, continuous pressing of PSA for more than 60 seconds is called as ……..mode. (B)

A VCD isolation **B Dead man**

C VCD acknowledgement D None of the above

16 In 3Ø loco, Constant speed control (CSC) can be activated above …….. kmph of speed. (A)

A 5 B 1

C 1.5 D 15

17 In 3Ø loco, Auxiliary converter No.2 feeds ……motors (D)

A Traction motor blower-1 & 2 B Transformer oil pump-1 & 2

C SR Oil pump-1 & 2 **D all the above**

18 While clearing 3Ø loco (provided with Knorr brake) as dead, mode switch position in both cabs is …… (D)

A HLPR B Lead

C Test **D Trail**

19 In 3Ø loco, Constant speed control (CSC) will be de-activated automatically if BP pressure drops (with or without A9) more than …….. Kg/cm^2 . (C)

A 1 B 1.5

C 0.25 D 0.6

20 In 3Ø loco, SS-10 belongs to …… sub system (B)

A Battery **B Brake system**

C Auxiliaries HB1 D Auxiliary Converter No. 3

21 In 3Ø loco, location of TM Blower-1 is …… (B)

A Machine room No.1 (near cab-2) **B Machine room No.2 (near cab-1)**

C Under machine room No.1 D Under machine room No.2

22 In 3Ø loco, if vigilance penalty brakes are applied BP pressure drops to …… kg/cm^2 (Gauge reading) in E.70 brake system (B)

A 2 **B 2.5 to 3.0**

C 2.5 to 3.5 D 0

23 When ZTEL is switched ON Tractive Effort (TE) is limited to …….. KN in WAG-9. (B)

A 0.8 to 1.5 **B 300**

C 150 D 458

24 Maximum permissible speed of WAG-9 loco is ……. Kmph. (A)

A 100 B 130

C 140 D 160

25 In 3Ø loco, on moving BL key from 'D' to 'OFF' position, ……..….. brakes will apply automatically. (C)

A Direct brakes B Auto brakes

C Parking brakes D All brakes

26 In 3Ø loco, parking brakes are applied and released through …….. switch in Panel 'A'. (C)

A Solenoid valve B BPCS

C BPPB D None of the above

27 In 3Ø loco, SS-14 belongs to …… sub system. (B)

A Cab 1 **B Cab 2**

C Fire detection D Auxiliaries in HB 2

28 In 3Ø loco, If ZBAN is switched ON in working cab, …….. Happens. (A)

A BP pressure drops to 'O' B FP pressure drops to 'O'

C BC pressure raises to 3.5 kg/cm^2 D None of the above

29 Hotel load facility is available in ……. loco(s). (C)

A WAP-5 B WAP-7

C All WAP-5 and modified WAP-7 D All three phase locos

30 Three phase loco is having …… number of auxiliary Converter (s). (C)

A 1 B 2

C 3 D 4

31 In 3Ø loco, SS-18 belongs to …… sub system. (D)

A Fire Detection B MEMOTEL

C Processor FLG-1 **D Processor FLG-2**

32 In 3Ø loco, to close the DJ, ensure …… node information on screen (in driving mode). (B)

A FLG-504 **B FLG-550**

C FLG-570 D FLG-590

33 Total oil /coolant points in WAG 9 or WAP 7 locos are …… (C)

A 7 B 6

C 13 D 8

34 To apply parking brakes in 3Ø dead loco, press. …..… side plunger of solenoid valve. (A)

A Left B Right

C Any plunger D None of the above

35 Three phase loco is having …… no. of three phase auxiliary motors. (C)

A 16 B 22

C 12 D 13

36 In 3Ø loco, UBA meter needle deviates when BL key is in …… mode(s) of BL key. (C)

A Driving B Cooling

C Driving or Cooling D None of the above

37 If speed of the train is increased more than …… than loco MPS, emergency brake will apply in 3Ø loco. (C)

A 0.5% B 5%

C 10% D 50%

38 In 3Ø loco, battery charger input MCB No. is …… and located in …… (B)

A 100 , HB-1/BUR2 **B 100 , HB-2/BUR2**

C 112.1 ,SB-2/SR2 D 112 , SB-1/SR1

39 In 3Ø loco, if speed is more than …… % than loco MPS, only audio visual indications will appear. (B)

A 0.50 **B 5**

C 15 D 50

40 Parking brake is provided to ……wheels in WAG-9 loco. (B)

A 1, 4, 5 & 8 **B 2, 6, 7 & 11**

C 2 & 11 D 1, 6, 7 & 12

41 Over current relay in 3Ø loco is …… (C)

A OCR-86 B MVR-86

C OCR-78 D None of the above

42 In ……. gradient area and terminal goods yards Constant speed control (CSC) of 3 phase loco should not be used. (C)

A Up B Down

C Undulating D Steep down

43 In WAG-7 or WAP-4, ……. output is given to all TMs fields during RB. (B)

A RSI-1 **B RSI-2**

C Both RSI-1 & RSI-2 D None of the above

44 While working 3Ø loco as banker, close …… cocs in pneumatic panel. (A)

A 70& 136 B 70&74

C 74&136 D All the above

45 In 3Ø loco, to reset the Fire detection unit (FDU) press the …….button. (B)

A BPFA **B Press Reset button on FDU**

C ESPB D BPVR

46 In 3Ø loco,……auxiliary motors works only in cooling mode. (C)

A All three Ø and single Ø motors B All single Ø motors and MCP 1 & 2

C Only single Ø motors & MCPA D None of the above

47 In 3Ø loco, if 'Catenary voltage out of limit' appears on screen, change …….. fuse after lowering panto and try. (D)

A FL B CCBA

C No need to Change **D Potential Transformer**

48 In 3Ø loco, SS-09 belongs to …… sub system. (A)

A Battery sytem B Brake system

C Auxiliaries HB-1 D Auxiliary converter No.3

49 In 3Ø Knorr Bremse brake loco, rear cab mode switch position is…… (C)

A HLPR B Lead

C Trail D Test

50 To reset VCD in WAP-5 loco, wait for ……seconds. (D)

A 0 B 160

C 240 **D 120**

51 In 3Ø loco, cab changing is to be done with in …… minutes otherwise CE will switch OFF. (A)

A 10 B 0

C 15 D 20

52 In 3Ø locos, in cooling mode, for panto and DJ ……. motor creates pressure. (B)

A MCPs **B MCPA**

C Both A and B D None of the above

53 In 3Ø loco potential transformer is connected to ……roof bar. (A)

A Middle B Panto-1

C Panto-2 D None of the above

54 The position of mode switch in leading cab of 3Ø loco provided with Knorr brake is …… (B)

A HLPR **B Lead**

C Trail D Test

55 In 3Ø loco, normal position of 152 switch is …… (A)

A '0' B '1'

C 'NORM' D None of the above

56 In 3Ø loco, SS-16 belongs to …… sub system. (C)

A Cab-2 B Fire detection

C Memotel (Speedometer) D Processor FLG-1

57 In 3Ø loco, SS-04 belongs to ……..…… sub system. (D)

A Traction bogie-1 B Traction bogie-2

C Main power **D Harmonic filter**

58 In 3Ø loco, SS-08 belongs to ……sub system. (C)

A Auxiliary converter No.1 B Auxiliary converter No.2

C Auxiliary converter No.3 D Battery

59 In 3Ø loco provided with Knorr Bremse brake, Auto brake valve (A9) handle can be locked or unlocked in …..……..… position . (C)

A Emergency B Neutral

C Full service D Minimum reduction

60 3Ø loco is having …… number of roof bars. (B)

A 2 **B 3**

C 4 D 3+3

61 3Ø loco having …… number of additional COCs (total COC on both sides). (B)

A 4 **B 4 + 4**

C 16 D 2

62 In 3Ø loco, SS-05 belongs to …… sub system. (B)

A Harmonic filter **B Hotel load**

C Brake system D Fire detection

63 WAG-9 loco is provided with ……. No. of direct brake cylinders and …… No. of parking brake cylinders. (A)

A 12 & 4 B 12 & 12

C 4 & 12 D 12 & 6

64 3Ø loco is fitted with ……type of traction motors. (A)

A 3 Ø AC Asynchronous squirrel cage induction motor B TAO 659

C Hitachi D Hitachi or TAO 659

65 In 3Ø loco, position of control Electronics (CE) during cab changing is ……. ……. (C)

A OFF B ON

C Self hold mode D None of the above

66 In 3Ø loco, location of BPFL switch is …… (B)

A FLCU B In both cabs Panel A

C In both cabs Panel B **D In both cabs Panel** C

67 To move 3 Ø loco as live or dead ensure ……& …… brakes are released. (C)

A Parking brakes, proportional B Direct brakes, proportional

C Parking , Direct brakes D None of the above

68 In 3Ø loco, if throttle (ATDC) is failed, keep …… switch in …… position. (B)

A 154 , 0 **B 152 , 1**

C 152 , 0 D 160 , 1

69 In 3Ø loco, when parking brakes are applied, parking brake gauge shows ……. . (A)

A 0 Kg/cm2 B 4 Kg/cm2

C 3.5 Kg/cm2 D 6 Kg/cm2

70 In 3Ø loco, SS-15 belongs to ……sub system. (B)

A Cab-2 **B Fire detection**

C Memotel (Speedometer) D Processor FLG-1

71 In 3Ø loco, to isolate pantograph No.1, keep panto selector switch in ……. Position (C)

A Auto B I

C II D I & II

72 Location of Emergency stop push button switch in 3Ø loco is-------- (A)

A **In both cabs Panel A** B In both cabs Panel B

C In both cabs Panel C D In both cabs Panel D

73 WAG-9 or WAP-7 locos are having …….. number of dampers (in both primary and secondary suspension). (B)

A 16 **B 20**

C 40 D 10

74 Location of MCP-2 in 3 Ø loco is ……..… (B)

A Loco left side below Machine room No.1 **B Loco right side below Machine room No.2**

C Machine room No.1 D Machine room No.2

75 In 3Ø loco, glowing of BPFA and flickering of LSFI indicates ……fault. (B)

A Isolation of sub system **B Priority-1**

C Priority-2 D Both Priority-1 & 2 faults at a time

76 In 3Ø locos, VCD is required to acknowledge once in every …… seconds. (B)

A 8 **B 60**

C 68 D 160 in WAG-9 or WAP-7 & 120 in WAP-5

77 In 3Ø loco, on run glowing of BPFA alone indicates …… fault. (C)

A Priority-1 B One of the sub system is isolated

C Priority-2 D Priority-1 fault or Priority-2 fault

78 Location of Harmonic filter resistances in 3Ø loco is …… (A)

A Loco roof B Inside FB

C Machine room No-2 D By the side of pneumatic panel

79 In 3Ø loco, to bring isolated sub system into service (isolated sub system), procedure is …… (A)

A Switch OFF and switch ON CE B Reset concerned MCB

C Close concerned COC D Operate concerned rotating switch

80 In 3Ø loco, Status code '00' means---------- (D)

A Major fault in loco B No sub system isolated

C Minor fault in loco D **No fault and No sub system isolated**

81 In 3Ø loco, Auxiliary converter No.3 feeds …… Motors. (D)

A TMB 1&2 B MCP-1 & 2

C OCB 1&2 **D TFP PUMP 1&2**

82 In 3Ø loco, In case of emergency, ALP can stop the train by operating …… . (D)

A Emergency stop switch B Emergency brake valve

C BPVG D **Emergency stop switch or Emergency brake valve**

83 In 3Ø loco, Constant speed control (CSC) will be de-activated automatically if throttle is disturbed above …….. % in TE side or BE side. (C)

A 33% B 66%

C 3% D No such limit, on moving throttle

84 WAG-9 loco is having ……type of bogie. (C)

A Bo-Bo flexi coil B Co-Co Tri mount

C Co-Co flexi coil D Co-Co tetra mount high adhesion

85 3Ø loco having … number of single phase 415V auxiliary motors. (B)

A 12 **B 4**

C 8 D 13

86 In 3Ø loco, Machine room blowers & their scavenging blowers works in……..…… Mode(s). (D)

A Driving mode only B Cooling mode only

C Off D **Driving mode & Cooling mode**

87 In WAG-9 or WAP-7, location of air dryer is …… (C)

A Behind MCP-1 in left side B Between two trucks

C **Behind cattle guard-1 loco pilot side** D Behind cattle guard-1 in ALP side

88 In 3Ø loco, SS-06 belongs to ……..…… sub system. (A)

A Auxiliary converter No. 1 B Auxiliary converter No. 2

C Auxiliary converter No. 3 D Traction converter No. 1

89 In 3Ø loco, Continuous glowing of LSFI indicates---------- (B)

A Priority-1 fault
B At least one sub system is isolated
C Priority-2 fault
D Priority-1 fault or Priority-2 fault

90 In 3Ø loco, location of MCP-1 is ……..…… (D)

A In machine room No.1
B In machine room No.2
C Below machine room No.2
D **Below machine room No.1**

91 In 3Ø loco, 3Ø scavenging blower collects dust from air filters of…… & ……..… . (D)

A Oil cooling blowers-1&2
B Bogie blowers-1&2
C Machine room blowers-1&2
D Oil cooling blower & Bogie blower

92 In 3Ø loco, to operate reverser ensure …… node information on screen and MR pressure should be more than 6.4 kg/cm2. (C)

A FLG-504
B FLG-550
C FLG-570
D FLG-590

93 In 3Ø loco, when harmonic filter is isolated, speed of the train is restricted to ……... (B)

A 60 Kmph.
B 40 Kmph.
C 25 Kmph.
D No such restriction

94 In 3Ø loco, location of Fire detection unit (FDU) is …… (B)

A SB-1
B SB-2
C HB-2
D Panel

95 In proportional working, maximum brake cylinder pressure in WAG-9 loco is ……..kg/cm^2 (B)

A 1.8 kg/cm2
B 2.5 kg/cm2
C 3.5 kg/cm2
D 5 kg/cm2

96 3Ø loco is having …….. No. of 3 phase auxiliary motors in loco under frame. (B)

A 2
B 4
C 12
D 8

97 If RS pressure is below 5.2 Kg/cm^2 and MCPs are not working, MCPA starts automatically provided BL key is in ……..…… position. (C)

A "C"
B "D"
C "C" or " D"
D None of the above

98 In 3Ø loco before operating throttle, ensure …… node information on screen. (D)

A FLG-504 B FLG-550

C FLG-570 **D FLG-590**

99 In 3Ø loco, SS-03 belongs to ……sub system. (B)

A Traction bogie-1 **B Traction bogie-2**

C Main power D Harmonic filter

100 In 3Ø loco, Oil cooling blower cools …&……Oils/ water coolant. (C)

A SR-1, SR-2 B TFP-1, TFP-2

C TFP & SR D Traction motors

101 In 3Ø loco, to isolate truck No.1 (traction converter-1), keep …….. switch in ……. position. (A)

A 154, I position B 154, II position

C 154, Auto position D 154, I & II position

102 In 3Ø loco, if battery voltage drops to …… volts for 30 seconds, P-2 message appears. (A)

A 92 Volts B 82 Volts

C 90 Volts D 85 Volts

103 In 3Ø loco, for application of parking brakes speed should be below……..…. (A)

A 5 Kmph B 15 Kmph

C 1.5 Kmph D Zero Kmph

104. In GTO locos, Speed is not increasing more than 1 kmph with ASC1. Tacho generator error (DDS Message), isolate…….. (C)

A. Isolate SR-2 B. Isolate BUR-1

C. Isolate SR-1 D. Isolate Bur-2

105. Before operating 160 switch, procedure to be followed is …… (D)

A. Keep throttle on ‘0’. B. Stop the loco

C. Keep reverser on ‘0’ **D. all the above**

106. VCD resetting time in CCB2.0 locos is ……. (B)

A. Minimum 120 Sec. **B. 32 Sec**.

C. Minimum 160 Sec. D. Minimum 60 Sec.

107. Location of bogie-1 brakes isolation COC is…… (C)

A. Underneath loco body, above MCP-2 B. Left side of pn.panel

C. Underneath loco body, above MCP-I D. In front of pn.panel

108. In 3 phase locos modified procedure for Bogie-1isolation on run is …… (D)

A. Keep throttle on '0' & Open VCB B. Observe Node 550

C. Keep 154 switch on 1 **D. All the above**.

109. Location of bogie-2 brakes isolation COC is…… (A)

A. Underneath loco body, above MCP-2 B. Left side of pneumatic panel

C. Underneath loco body, above MCP-I D. In front of pneumatic panel

110. Location of MCB 112 is……. (B)

A. Near BA box-1 **B. Near BA box-2**

C. In SB-2 D. In SB-1

111. Location of MCB112.1 is……. (C)

A. Near BA box No.1 B. Near BA box No.2

C. In SB-2 D. In SB-1

112. If MCE not switching OFF with BL key, ……. MCB to be tripped/kept OFF. (D)

A. 100 B. 110

C. 112 **D. 112.1**

113. In PTDC mode, ……. cock to be opened on Pneumatic Panel. (C)

A. 74 B. 136

C. PERCOS D. 47

114. In 3 phase locos, normal position of PERCOS is……. (A)

A. Horizontal B. Vertical

C. Horizontal/Vertical D. None of the above

115. In 3 phase MU locos (E-70) position of 136 COC in master loco is …….
and in slave loco is …… (A)

A. Open, Close B. Open, Open

C. Close, Open D. Close, close

116. In CCB 2.0 dead loco during proportional braking loco brake cylinder
pressure is in dead loco is ……. Kg/cm^2 (D)

A. 1.8 B. 2.0

C. 2.5 **D. 3.8**

117. In GTO locos, Speed is not increasing more than 1 kmph with ASC2.
Tacho generator error (DDS Message), isolate…….. (A)

A. Isolate SR-2 B. Isolate BUR-1

C. Isolate SR-1 D. Isolate Bur-2

118. Quick trouble shooting for panto not raising in 3 phase locos is …… (C)

A. Ensure PR pressure is above 5.5 Kg/cm2 B.Press 130.1 Contactor in SB-2

C. Follow A&B D. Follow Only B

119. Normal position of IG38 Key in CCB2.0 locos is ……. (B)

A. Horizontal **B. Vertical**

C. 450 D. 1350

120. When auxiliary converter-1 is isolated, OCB1&2 shared by ……converter. (D)

A. Fail the loco B. OCB-1 in Auxiliary Converter No 2, OCB-2 in Auxiliary Converter No 3

C. Auxiliary Converter No.3 **D. Auxiliary Converter No.2**

121. If SR-1 pump not working, work the train further …… (C)

A. Keep 154 on 1 B. 50% sectional load

C. A&B D. 70% TE/BE

122. If Auxiliary converer-2 is isolated, TMB 1 & 2 shared by …….. (A)

A. Auxiliary Converter No. 1 B. TMB-1 in Auxiliary Converter No.1, TMB-2 in Auxiliary Converter No.3

C. Auxiliary Converter No. 3 D. Fail the loco

123. If Auxiliary converter No.3 is isolated, MCP 1 & 2 shared by …….. (C)

A. Auxiliary Converter No.1 B. MCP-1 in Auxiliary Converter No.1, MCP-2 in Auxiliary Converter No.2

C. Auxiliary Converter No. 2 D. Fail the loco

124. If SR-2 pump not working, work the train further …… (C)

A. Keep 154 on 2 B. 50% sectional load

C. A&B D. 70% TE/BE

125. In 3 phase MU locos 47 dead cock position in master loco is …… and in slave loco is …… (D)

A. Open, Close B. Open, Open

C. Close, Open **D. Close, close**

126. In 3 phase CCB 2.0 loco before set up PTDC mode ……. MCB to be kept OFF…… (A)

A. 127.7 B. 128.1

C. 129.1 D. 127.1/1

127. In 3 phase loco if speed is not increasing more than 15 Kmph …… Switch to be checked. (B)

A. 152 **B. 160**

C. 154 D. 237.1

128. Quick trouble shooting for VCB not closing in 3 phase locos is …… (C)

A. Ensure Node No.550 and VCB cock in open position
B. Press 136.4 contactor in SB-1
C. Both A&B
D. Only follow B

129. VCU reset push button purpose is ……. (C)

A. To reset MCBs in SB1&2
B. To reset MCBs in HB 1&2
C. To switch OFF & ON MCE
D. None of the above.

130. Inching mode available in ……. Locos. (A)

A. WAG9
B. WAP7
C. WAP5
D. In all locos

131. Status code 90 indicates…… (D)

A. No sub system isolated, no fault
B. Subsystem batteries isolated
C. Atleast subsystem isolated, P1 fault
D. At least one subsystem isolated, no fault

132. If Corridor lights are not glowing ……. MCB to be checked in SB-2. (A)

A. 310.4
B. 310.7
C. 310.1
D. 310.2

133. To check healthiness of MCB112, …… lights to be switched ON before switching ON MCE. (B)

A. Corridor
B. Marker
C. Flasher
D. Head light

134. In IGBT locos …… cock(s) are closed/dummied on Pneumatic panel. (C)

A. FB
B. 70
C. SR1 & SR2
D. 47

135. From Cab-1 both side head lights are not working, …… MCB to be checked (A)

A. 310.1/1
B. 338/1
C. 310.1&310.2
D. 338/1 & 338/2

136. From Cab-2 both side head lights are not working, …… MCB to be checked (C)

A. 310.1&310.2
B. 338/1
C. 310.1/2
D. 338/1 & 338/2

Conventional Locomotives:

1. In WAG-5, ... output is given to all TMs fields during RB. (A)

   A RSI-1 B RSI-2

   C Both RSI-1 & RSI-2 D None of the above

2. Location of line contactors L-1, L-2 & L-3 in WAG-7 (above 27200) & in WAP4 locos is at …… (A)

   A HT-1 BA-1 panel B HT-3 BA-2 panel

   C HT-3 BA-3 panel D HT-3 BA-4 panel

3. Location of line contactors L-4, L-5 & L-6 in WAG-7 (above 27200) & in WAP4 locos is at ……..… (C)

   A HT-1 BA-1 panel B HT-3 BA-2 panel

   C HT-3 BA-3 panel D HT-3 BA-4 panel

4. Location of R-1 COC in WAG-5 loco is at …… (C)

   A Cab-1 center locker B Near control reservoir

   C Above wheel no.4 D Cab-1 left side locker

5. Location of R-1 COC in WAG-7 loco is …… (B)

   A Cab-1 center locker **B Near control reservoir**

   C Above wheel no.4 D Cab-1 left side locker

6. Location of C2A relay valve in WAG-7 loco 27200 onwards & WAP-4 crew friendly cab locos is at …… (B)

   A Behind BA box no.3 **B Pneumatic panel**

   C Behind BA box no.1 D Behind BA box no.4

7. Location of C2B relay valve in WAG-7 (27200 onwards) & WAP4 crew friendly cab locos is at ……. (D)

   A In between MR-1 & MR-2 B In between MR-3 & MR-4

   C In between MR-2 & MR-3 **D Pneumatic panel**

8. Location of EP-3 COC in WAG-7(27200 onwards) & WAP-4 locos is …… (A)

   A Near BA-4 panel B Near BA-3 panel

   C Near BA-2 panel D Near BA-1 panel

9. Location of MVSL-1 in WAG-7 loco 27200 onwards is …….. (A)

   A HT-1 compartment B HT-2 compartment

   C HT-3 compartment D None of the above

10. Location of MVSL-2 in WAG-7 loco 27200 onwards is …….. (B)

    A HT-1 compartment **B HT-2 compartment**

    C HT-3 compartment D None of the above

11. In conventional locos, ...reservoir pressure is used for horns. (D)

A MR1 B MR2

C MR3 **D MR4**

12. In modified locos, when additional BP angle cock is closed in leading side, …… cab BP gauge shows '0' reading. (A)

A Trailing B Leading

C In both cabs D None of the above

13. In conventional locos, ...reservoir pressure is used for creation of loco BC pressure. (D)

A MR1 B MR2

C MR3 **D MR4**

14. In each cab A9 feed valve is having .....No. of pipelines and …….. No. of COCs (B)

A 2 & 1 **B 3 & 2**

C 2 & 3 D 3 & 4

15. In conventional locos, A8 COC Position while working with cab-2 leading is …….. (C)

A Partially open B partially closed

C Open D Close

16. Total number of loco brake cylinders in WAP-4 loco is …….. (D)

A 6 B 8

C 4 **D 12**

17 Normal pressure of SMGR is ..... Kg /cm^2. (A)

A 2.5 - 3.5 B 3.0 - 2.0

C 3.5 - 4.5 D 5.0 - 3.0

18. Location of A-8 COC in WAG-7 loco above 27200 is …… (B)

A In cab-1 below A-9 **B Pneumatic panel**

C In cab-2 below A-9 D None of the above

19 If all line contactors are not closed in WAG 5 loco, ensure ……. COC is in open position. (A)

A EP 2 COC B EP 1 COC

C MR 4 COC D VEAD COC

20. Location of A-8 COC in WAP-4 crew friendly locos …… (B)

A In cab-1 below A-9 **B Pneumatic panel**

C In cab-2 below A-9 D None of the above

21. Brake pipe pressure should be ..... Kg/ cm^2 in locomotive and …….. Kg/ cm^2 in brake van of train having 58 vehicles. (C)

A 5.0, 4.8 B 5.0, 4.9

C 5.0, 4,7 D 5.0, 5.0

22. Minimum FP pressure Should be ..... Kg/ cm^2 in locomotive and ……. Kg/cm2 in rear SLR of a 24 vehicles coaching (A)

A 6.0, 5.8 B 6.0, 5.9

C 6.0, 5.7 D 6.0, 5.6

23. In WAG 7 loco, if all line contactors are not closed, ensure …….. COCs are in open position. (D)

A EP 2 & EP3 B EP 1& EP3

C MR 4 & EP3 **D EP 1 and EP 2**

24. In conventional locos, CP Individual safety valve setting is ……. kg/cm^2. (C)

A 8 B 11.5

C 11 D 9.5

25. When BP drops below 4.4 kg/cm^2 (in BP gauge) without A9 …….. starts functioning. (C)

A ACP Indication B AFL

C Both A & B above D none of the above

26. In conventional locos, if ALP is driving from trailing cab and loco pilot is controlling from leading cab, do not exceed ……. Kmph of speed. (A)

A 40 B 15

C 30 D No Speed Restriction

27. In conventional locos RGEB2 is connected on ..... Pipe line. (B)

A FP pipe **B Brake Pipe**

C Control pipe D All the above

28. In conventional locos auto Drain Valve will drain out the moisture at ……... Kg/cm^2 (when BLCP is closed). (B)

A 8 **B 9.5**

C 10.5 D 11

29. Location of C-145 in WAG-7 (27200 onwards) & in WAP4 (with RB) is at …… (D)

A HT-1 BA-1 panel B HT-3 BA-2 panel

C HT-3 BA-3 panel **D HT-3 BA-4 panel**

30. For lowering or for raising the pantograph in three stages ..... valve is provided. (B)

A Panto servo motor **B Throttle valve**

C Both A & B D None of the above

31. In conventional locos, if ALP is in leading cab and Loco pilot is controlling from trailing cab, do not exceed …….. Kmph of speed. (B)

A 40 **B 15**

C 30 D No Speed Restriction

32. In conventional locos during RB, if loco brake cylinder pressure is above 1.0 kg/cm^2 …… relay will de-energise to bring GR to '0'. (D)

A Q 51 B QVRF

C QE **D Q 50**

33. Location of VEPT-1 in crew friendly locos is …… (D)

A Loco roof B Cab-1 left side locker

C Cab-1 center locker **D Cab-1 back panel**

34. The clearance between brake block and wheel tyre should be ……. mm in release position of loco brakes. (A)

A 10 B 5

C 15 D 20

35. The ..... reservoir pressure is used for BA2 and BA3 panels in WAG5 loco. (A)

A Control reservoir B MR1

C MR2 D MR4

36. In conventional locos duplex check valve is set at …….. kg/ cm^2. (B)

A 5 **B 4.9**

C 6.5 D 8

37. In conventional locos ..... reservoir pressure is used for FP pressure creation. (B)

A MR1 **B MR2**

C MR3 D MR4

38. When BPSW is pressed, ……. valve energizes for quick recreation of BP pressure. (A)

A MV4 B R6

C VEF electrical D IP

39. The normal position of air intake COC is ..... (A)

A Close B Open

C Partially Open D Partially Close

40. In conventional locos, SS2 safety valve is set at ……..... kg/cm^2. (C)

A 10 B 11

C 10.5 D 11.

41. Location of HQOP-1 in WAG-7 loco 27200 onwards is ……. (A)

A HT-1 BA-1 panel B HT-3 BA-3 panel

C HT-3 BA-2 panel D Switch panel

42. In conventional locos proportional working pressure with A9 is ..... kg/ cm^2. (C)

A 2 B 2.5

C 1.8 D 3.5

43. For normal functioning of air dryer, ... color COCs to be kept open and ..... color COC to be kept closed. (B)

A Red, Green **B Green, Red**

C Red, Red D Green, Green

44. In conventional locos, Air Dryer is connected between …….. and …… reservoirs. (B)

A MR1, MR2 **B MR2, MR3**

C MR3, MR4 D None of the above

45. In conventional locos, for discharging back pressure from CP delivery pipe line, …… valves are provided (A)

A Un loader B Auto drain

C Both A & B D None of the above

46. Maximum …… kg/ cm^2 of pressure will go to brake cylinders of each wagon, when BP drops to '0'. (D)

A 2 B 2.5

C 1.8 **D 3.8**

47. A-8 COC position is ..... in MU leading loco and ….. in MU trailing loco (A)

A Open, Close B Open, Open

C Close, Close D Close, Open

48. In BMBC system, each coach having …..... no. of brake cylinders. (C)

A 2 B 3

C 4 D 5

49. Maximum loco brake cylinder pressure with A9 is ……..... Kg/cm^2 and with SA-9 is ..…… Kg/ cm^2. (B)

A 1.8, 2.5 **B 1.8, 3.5**

C 2.0, 2.5 D 1.8, 3.8

50. Location of HQOP-2 in WAG-7 loco 27200 onwards is …….. (C)

A HT-1 BA-1 panel B HT-2 compartment

C HT-3 BA-2 panel D Switch panel

51. In MU locos, MU2B position in leading loco is…….. and in trailing loco is…… . (C)

A Lead, Lead B Trail, Lead

C Lead, Trail D Trail, Trail

52. In conventional locos SS-1 safety valve setting… Kg/cm^2. (D)

A 8.5 B 9

C 10.5 **D 8**

53. In conventional locos, if wipers, sanders are not working and FP pressure is not creating ..... valve to be tapped. (A)

A Duplex check valve B Double check valve

C Both A&B D None of the above

54. In conventional locos, if DJ trips during RB ..... valve destroys BP pressure automatically. (A)

A IP(M) B C3W

C A9 feed D Auto drain

55. Location of A-8 COC in WAG 5 loco is …… (A)

A In cab-1 below A-9 B Pneumatic panel

C In cab-2 below A-9 D None of the above

56. Sensitivity of distributor valve is reduction of…….. Kg/cm^2 amount of BP pressure within …….seconds. (A)

A 0.6, 6 B 0.3, 6

C 0.6, 3 D 0.3, 60

57. In conventional dead loco, IP (M) COC must be in ..... position. (A)

A Close B open

C Either close or open D None of the above

58. In conventional locos,.....pressure switch is provided on A9 control pipe line (related to AFL). (A)

A P1 B P2

C RGCP D RGAF

59. Leakages in formation 'BP' pipe is indicated through …… gauges in both cabs. (D)

A MR B Loco BC

C FP **D AFI**

60. To by pass the air dryer ..... colour cut out cock to be closed and …….colour cut out cock to be opened. (B)

A Red, Green **B Green, Red**

C Red, Red D Green, Green

61. In air brake locos, ALP emergency brake is connected to ..... pipe line. (A)

A BP B MR

C FP D BC

62. In conventional locos,.....pipeline of A9 is not having any COC in both cabs. (C)

A MR pipe B Control pipe

C BP pipe D None of the above

63. When additional BP cut out cock is closed on formation side, …… pressure will not charge in to the formation. (A)

A BP B FP

C MR D All the above

64. Location of CTF-3 in WAG-7 loco 27200 onwards & WAP4 (with RB) is ……. (D)

A HT-1 BA-1 panel B HT-3 BA-2 panel

C HT-3 BA-3 panel **D HT-3 BA-4 panel**

65. During BP pressure leakage in formation, …….. lamp glows in signaling panel. (C)

A LSDJ B LSP

C **LSAF** D LSB

66. In Air flow indicator, ……... colour needle is called as reference needle and ..... colour needle is called as indicating needle. (D)

A White, Red B Red, Green

C Green, Red **D Red, White**

67. Normal position of additional BP cut out cocks on either side of the loco is…… . (A)

A Open B Close

C Either close or open D None of the above

68. In conventional locos, ... Pressure switch is provided on BP pipe line (related to AFL). (B)

A P1 **B P2**

C RGCP D RGAF

69. The C145 contactor position is..... when MP is in traction side. (A)

A open B close

C either close or open D neither close nor open

70. In 58 BOXN+BV load, if 6 DVs are defective, the effective brake power is.....%. (A)

A (53 / 59) X 100 = 90% B (59 / 53) X 100 = 111%

C Cannot calculate D None of the above

71. The C145 contactor position is..... when MP is in braking side. (A)

A close B open

C neither close nor open D either close or open

72. Formula for effective brake power percentage is---------- (A)

A (Effective No. of cylinders /Total no of cylinders)X100 B (Total no of cylinders /Effective No. of cylinders)X100

C (Effective No. of cylinders X 100) D (Total no of cylinders / 100)

73. Though MCPA is working and RS pressure is not creating, …….. …… drain cocks to be checked. (D)

A EP B CP

C CDC D **RS, PT & CPA**

74. For grounding conventional loco, place ZPT key in HOM box in……..… position and turn it to ……..… position in clock wise direction. (A)

A 5° clock, 7°clock B 5° clock, 6°clock

C 7° dock, 9° clock D 11° clock, 1°clock

75. When MP is in traction side, the CTF1, CTF2 & CTF3 handles position are …….. (D)

A CTF1, CTF2 up & CTF3 down B CTF1, CTF2 down & CTF3 up

C CTF1, CTF2, CTF3 down **D CTF1, CTF2 & CTF3 up**

76. In single pipe air brake system, formation wagon / coach auxiliary reservoir is charged with ……. pressure. (D)

A MR4 B FP

C BC **D BP**

77. In MU both locos pneumatic pressure is maintained equally through ……. pipe. (D)

A BP B FP

C BC equalising **D MR equalising**

78. In twin pipe air brake system, coaches auxiliary reservoir is charged with ……. pressure. (B)

A MR4 **B FP**

C BC D BP

79. In conventional locos, ... reservoir pressure is used for creation of BP pressure. (C)

A MR 1 B MR 2

C MR 3 D MR 4

80. In double head trailing loco , A8 COC must be in .....position. (B)

A Open **B Close**

C Either (A) or (B) D None of the above

81. While moving conventional loco as dead, MR4 reservoir is charged with …….. pressure when DV is in service (MR Eq. pipe is not connected between locos). (A)

A BP B FP

C MR D None of the above

82. For single loco both side BC equalizing pipes angle COC must be in ..... position. (A)

A Close B Open

C Either (A) or (B) D None of the above

83. During CP efficiency test, when BPSW is pressed, BP should not drop below ….....kg/cm^2 (write the BP gauge reading). (B)

A 4 **B 4.4**

C 3.5 D 2.5

84. When MP is in braking side, the CTF1, CTF2 & CTF3 handles position are …….. (B)

A CTF1, CTF2, CTF3 up **B CTF1, CTF2 & CTF3 down**

C CTF1, CTF2 down & CTF3 up D CTF1, CTF2 up & CTF3 down

85. During BP continuity test, ……kg/ cm^2 of BP pressure to be dropped through A9 in the loco. (D)

A 2.5 B 3.5

C 2 **D 1**

86. During CP efficiency test, when BPSW is not pressed, BP gauge needle should show between …… and …… kg/cm^2. (A)

A 2.5 & 3.5 B 1.5 & 2.5

C 3.0 & 3.5 D Any one of the above

87. In modified locos, when C145 contactor is closed, ……. lamp glows near Q50 relay. (C)

A LSB B LSGR

C LSC-145 D LSOL

88. When L1 or L6 is not closed, then ..... traction failure occurs. (C)

A TLTE with GR progression B TLTE w/o GR progression

C PLTE D 1st notch auto regression with LSP

89. Auto sanding is done by the energisation of ……. Relay. (C)

A Q44 B Q49

C Q48 D Q50

90. Whenever cattle run over takes place, if BP dropped the immediate duty of crew is to switch ON …… light. (D)

A Head light B Cab light

C Marker light **D Flasher light**

91. Whenever cattle run over takes place, after clearing the block section, the LP has to check …… voltage. (B)

A OHE voltage **B Battery voltage**

C Charger voltage D None

92. Whenever cattle run over takes place, if BP dropped due to front side BP angle cut-off cock is broken , the duty of LP is to maintain BP pressure is by closing ……. ……COC. (C)

A MR-4 COC B Rear side addl. BP COC

C Front side addl. BP angle COC D Both side addl. BP COCs

93. Relay Q 46 is called as ……. relay. (C)

A GR half notch protection relay B Auxiliaries protection relay

C **GR full notch protection relay** D DJ protection relay

94. Relay Q 118 is called as ……..... relay. (B)

A GR half notch protection relay **B Auxiliaries protection relay**

C GR full notch protection relay D DJ protection relay

95. On closing BLDJ, pressing BLRDJ, LSDJ remains glowing means …….. Tripping failure. (B)

A Operation A beginning **B ICDJ**

C Operation A ending D Mechanical locking of DJ

96. While checking reasons for ICDJ, UBA meter shows more than 90 V indicates ……..fuse(s) are in good condition. (C)

A CCPT & CCBA B CCBA

C Addl. CCBA D CCPT & CCDJ

97. To avoid ICDJ, minimum …….... kg/cm^2 of MR/RS pressure is required. (B)

A 6.6 **B 6.5**

C 6 D 5.5

98. While checking the reasons for ICDJ, the panto raised condition indicates ……& ……..fuses are in good condition. (C)

A CCDJ & CCPT B Addl CCBA & CCA

C CCBA & CCPT D Addl CCBA & CCDJ

99. On closing BLDJ, pressing BLRDJ, LSDJ lamp extinguishes and glows immediately is an indication for ..... tripping failure. (D)

A Operation A ending B Operation A ending part II

C Operation B Part I **D Operation A beginning**

100. Earth fault in Q 118 relay coil causes …… fuse to melt. (C)

A CCBA B CCDJ

C CCPT D Addl. CCBA

101. Earth fault in Q 45 relay coil causes ..... fuse to melt. (B)

A CCBA **B CCDJ**

C CCPT D Addl. CCBA

102. Earth fault in Q 44 relay coil causes …… fuse to melt. (A)

A CCPT B CCDJ

C CCBA D Addl. CCBA

103. Earth fault in MTDJ coil causes ……fuse to melt. (D)

A CCBA B Addl. CCBA

C CCPT **D CCDJ**

104. Earth fault in C 118 contactor coil causes ……. fuse to melt. (A)

A CCDJ B Addl. CCBA

C CCPT D CCBA

105. Permanent welding of the tips of C 106 contactor causes ..... tripping failure. (C)

A No tension B 6th notch tripping

C ICDJ D Operation 'O'

106. Melting of CCDJ fuse causes …… tripping failure. (D)

A Operation 'A' ending B Operation 'O'

C Operation 'A' beginning **D ICDJ**

107. For closing of DJ ..... push button switch can be used. (C)

A BP1DJ B BPP

C BP2DJ D BPR

108. Improper contact of …….. push button switch I/L causes ICDJ trouble. (A)

A BP1DJ B BPP

C BP2DJ D BPR

109. In emergency DJ can be tripped by ALP by pressing ..... push button switch in cab-2. (A)

A BP1DJ B BPP

C BP2DJ D BPR

110. Defective QVRH relay causes …… tripping failure. (D)

A Operation I B Operation B Part I

C Operation II **D Operation 'O'**

111. Defective QPH relay causes …… tripping failure. (B)

A Operation I B **Operation B Part 1**

C Operation II D Operation 'O'

112. LSCHBA glowing on run, but DJ is not tripped indicates ……..... or …… equipment is defective. (A)

A QV61 or CHBA B ARNO or CHBA

C QCVAR or ARNO D ARNO or QV61

113. Any blower contactor not closed, causes ..... tripping failure. (C)

A Operation I B Operation B Part I

C Operation II D Operation 'O'

114. Defective MVSI-1 motor causes ..... tripping failure. (A)

A Operation I B Operation B Part I

C Operation II D Operation 'O'

115. Sluggish operation of GR causes tripping of DJ through ……..……. relay. (B)

A Q 118 **B Q 44**

C Q 50 D Q 45

116. Struck up of GR in full notches during quick regression causes tripping of DJ through …….. relay energisation. (A)

A Q 46 B Q 118

C Q 44 D Q 48

117. Energisation of any safety relay, causes DJ to trip after… seconds. (B)

A 0.6 **B 0**

C 0.5 D 5.6

118. Defective Q 30 relay leads to ..... tripping failure. (C)

A Operation A ending B Operation B Part I

C Operation B Part II D Operation 'O'

119. The defective ARNO leads to ……tripping failure. (A)

A Operation A ending B Operation B Part I

C Operation B Part II D Operation 'O'

120. To overcome the Operation B part II tripping failure ……... relay is to be wedged. (C)

A Q 44 B Q 118

C Q 45 D Q 46

121. For wedging ……. relay in DJ Control circuit, permission of TLC is necessary. (A)

A Q 44 B Q 118

C Q 45 D Q 46

122. After taking permission from TLC, before wedging Q-44 relay …… test is to be conducted. (C)

A Loco brake test B LT test

C GR efficiency test D Traction test

123. Operation - I tripping failure causes due to ..... or……. defective relays. (D)

A QVMT 1 or QVMT 2 B QVSL 1 or QVSL 2

C QPH or QVRH **D QVSI 1 or QVSI 2**

124. When Q 45 relay is to be wedged, ensure ……..…… trouble should not be existing in the loco. (A)

A Operation A ending B Operation B Part I

C No tension D Operation A Ending part II

125. Operation - II tripping is due to non-closing ..... contactors or their I/Ls. (C)

A C 101 or C 102 or C 103 B C 106 or C 107 or C 108

C C 105 or C 106 or C 107 D C 111 or C 121 or C 118

126. In VCB locos, if DJ N/O I/L parallel to C 118 N/O I/L on MTDJ branch is defective……tripping failure will occur. (D)

A Operation A Ending B Operation B Part I

C No tension **D Operation A Ending part II**

127. In VCB locos, the C 118 N/O I/L on MTDJ branch is defective, ……..tripping failure will occur. (A)

A ICDJ B Operation B Part I

C No tension D Operation A. Ending part II

128. The defective Q 30 relay causes ……tripping failure. (B)

A Operation A ending **B Operation B Part II**

C No tension D Operation A Ending part II

129. Relay Q 45 is called as ……. relay. (C)

A DJ protection relay B Auxiliaries protection relay

C **DJ resetting relay** D Notch by notch progression relay

130. After passing neutral section, If ICDJ is experienced, check ..... & ..... fuses. (C)

A CCPT & CCBA B Addl. CCBA & CCPT

C **ADDl. CCBA & CCBA** D CCPT & CCDJ

131. During manual operation of Q 44 relay, it should not be pressed for more than …….. seconds. (B)

A 5.6 **B** **1**

C 0.5 D 0.6

132. MTDJ coil is called as …… coil. (A)

A **DJ closing, holding & tripping coil** B DJ tripping coil

C DJ closing coil D DJ holding coil

133. In case Q 45 relay is wedged, DJ will close directly by the moment …….. Switch closes. (B)

A BLRDJ **B** **BLDJ**

C BP2DJ D BP1DJ

134. On switching on HBA, …….. relay in DJ control circuit will energise provided Addl. CCBA, CCBA and CCPT are in good condition. (C)

A Q 45 B Q 44

C **Q 118** D None of the above

135. Defective MPH motor leads to …… tripping failure. (B)

A Operation A ending **B** **Operation B Part** I

C No tension D Operation B Part II

136. Defective QCVAR leads to ……tripping failure. (A)

A **Operation A Ending** B Operation B Part I

C No tension D Operation B Part II

137. Relay Q 118 is having ..... seconds of time lag. (A)

A **5** B 6

C 3 D 60

138. Defective QPDJ leads to ……tripping failure. (C)

A Operation A ending B Operation B Part I

C **ICDJ** D Operation B Part II

139. If relay Q 44 is wedged, the precautions for …….. relay also to be observed along with Q 44 relay precautions. (B)

A Q 45 **B** **Q 118**

C QCVAR D None of the above

140. To overcome the Q 30 relay defective trouble, ……. relay can be wedged. (A)

A Q 45 B Q 118

C QCVAR D None of the above

141. Relay Q 44 is having ..... seconds of time lag. (C)

A 1 B 0.5

C 0.6 D 2

142. When MPJ is kept in Reverse direction in cab 2, the J1 & J2 handles position are ……..…… (D)

A J1 up, J2 down B J1 down, J2 up

C both J1,J2 down **D both J1,J2 up**

143. In Static converter loco, to work MCPs…….. & …… relays should be energized (A)

A QCON & QTD101 B QTD101

C QCON D Q 100

144. Time delay of QTD 101 relay is ..... seconds. (B)

A 2 **B 5**

C 0.6 D 60

145. In SIV locos, ... switch is to be kept on '0', in the event of external earth fault and unable to rectify and to work the train further. (A)

A HSIV B HVSI

C HBA D HCHBA

146. In SIV locos, after keeping HSIV on '0' & pressing ELD bypass switch, time allowed to work the train is …… minutes. (C)

A No time limit B 60

C 45 D 30

147. In SIV locos, C108 contactor is provided for …….. motor. (A)

A AC MVRF B DC MVRF

C SIV rectifier D SIV inverter

148. After using RB in SIV locos, experiencing 6th notch tripping, ensure whether ..... contactor is closed. (B)

A C 108 **B C 107**

C C 118 D C 145

149. Time delay of QSVM relay is .....seconds. (B)

A 5 **B 2**

C 0.6 D 60

150. ..... & ..... safety relays are removed in static converter locos. (D)

A QLM & QLA B QOP1 & 2

C QRSI 1 & 2 **D QOA & QLA**

151. In Microprocessor loco, if experienced TLTE due to malfunctioning of AFL/ACP circuit, change the position of ……. switch. (C)

A HAD B HRSZ

C HPAR D HBA

152. If DJ is tripped through static converter, ……..…… ……. Lamp glows in both the cabs. (C)

A LSRSI B Internal fault lamp

C LSSIT D External fault lamp

153. To avoid QD action in microprocessor loco, ... switch to be pressed up to 10th notch. (A)

A BPQD B BPSW

C ZQWC D PSA

154. In microprocessor loco, before checking any loco equipment or attending any loco trouble ensure to keep ……. switch in open position. (A)

A HBA B HPAR

C BLDJ D HOBA

155. Location of CHBA ammeter in SIV locos …….. . (A)

A On SIV panel B On switch panel

C On relay panel D On CHBA

156. Rating of CCINV is ..... Amps. (A)

A 6 B 16

C 10 D 2

157. To close all line contactors, position of EP1 & EP2 COCs in WAG7 are …….. (B)

A EP1 & EP2 close **B EP1 & EP2 open**

C EP1 open, EP2 close D EP1 close, EP2 open

158. HRAVT is provided to isolate ....., ..., …… &…….. Equipment. (C)

A Static converter B Micro processor

C Heaters, cab fans, NR & W/T charger D None of these

159. When static converter is not working …….. fuse(s) to be checked. (D)

A CCINV B CCDJ

C CCA **D CCINV & CCA**

160. In static converter locos, ……..…… ……..…… fuses to be checked during ICDJ. (A)

A Addl. CCBA, CCBA, CCPT & CCDJ B Addl. CCBA, CCBA, CCINV & CCA

C CCINV & CCA D None of these

161. In static converter locos compressors will start with a delay of ……..... seconds after extinguishing of LSCHBA. (B)

A 2 **B 5**

C 60 D 45

162. In SIV locos, if LSSIT glows continuously, crew experiences …….. tripping failure. (A)

A ICDJ B No Tension

C Operation 'A' Ending D None of these

163. In static converter locos during RB, ... motor stops working and ……. motor starts working. (A)

A MVRH, MVRF B MVRF, MVRH

C MPH, MVRH D None of the above

164. When SIV is working …….……. relay energises. (B)

A QSIT **B QCON**

C QCVAR D None of these

165. In microprocessor loco ……fuses are removed. (A)

A CCDJ, CCLS, CCA & CCLSA B CCA & CCINV

C CCINV & CCAD D CCCPU & CCBA

166. ..... & ..... time delay relays are removed in static converter locos. (A)

A QTD 105 & 106 B QTD 100 & 101

C QTD 107 & 108 D None of these

167. The correct preparation for traction as well as braking is supervised by ..... relay. (C)

A Q-52 B Q-51

C Q-50 D Q-49

168. On Siemens make SIV loco panel ..... & …….. lamps glows continuously in normal working of SIV. (B)

A LSSIT & CHBA ON **B CHBA ON & SIV** ON

C External & Internal fault D OHE out of range & SIV ON

169. ..... N/C interlock is provided newly on Q118 branch of SIV DJ control circuit. (B)

A QSIT **B QCON**

C QSVM D None of these

170. If earth fault occurs in out side of SIV, ... lamp glows on SIV panel. (B)

A OHE out of range **B External fault**

C Internal fault D None of the above

171. In static converter loco DJ control circuit, on MTDJ branch ..... relay interlock provided in place of QOA &QLA. (A)

A QSIT B QCON

C QSVM D None of these

172. When TLTE with LSB is experienced, it indicates ……. relay not energized. (A)

A Q-50 B Q-51

C Q-52 D Q-48

173. In WAG-5 loco the centre pivot carries …….% of load & each side bearer carries ……..% of load. (D)

A 40, 60 B 60, 40

C 50, 50 **D 60, 20**

174. In WAG-7 loco the side bearers nearer to the centre pivot carries …….% of vertical load & the side bearers away to the center pivot carries …… % of vertical load. (B)

A 40, 60 **B 60, 40**

C 50, 50 D 100, 0

175. ……..…numbers of brake cylinders are provided in WAG-5 or WAG-7 loco. (A)

A 8 B 24

C 6 D 12

176. ……&…… oil points to be checked in WAG-5 bogie (other than Traction motor oils). (A)

A Center pivot-1-no & side bearers-2nos B load bearers 4-nos

C side bearers 4-nos D center pivot-1No, side bearers-4 nos

177. ..... type bogie provided in WAG-7 locos. (B)

A CO - CO tri mount bogie **B CO-CO tetra mount high adhesion bogie**

C CO - CO flexi coil bogie D BO-BO tri mount bogie

178. ..... type bogie provided in WAP-4 locos. (C)

A CO - CO tri mount bogie B CO - CO tetra mount high adhesion bogie

C CO-CO flexi coil bogie D BO-BO tri mount bogie

179. When hand brake is applied in WAG-5 or in WAG-7 locos, ……...…….&…….……wheels brakes gets apply. (A)

A **No-2 both sides, no-4 one side** B No-2

C No-1 both sides, no-2 one side D No-4 both sides, no-2 one side

180. When hand brake is applied in WAP-4 locos ……wheel gets apply. (B)

A No-2 both sides, no-4 one side **B** **No-2**

C No-1 both sides, no-2 one side D No-4

181. QWC relay's action is up to ..... notch, when ZQWC is Pressed (18 shunting contactors loco). (C)

A 20 B 15

C **10** D 1

182. When dead loco is attached on formation, if loco brakes are not releasing proportionally, …… is to be isolated in dead loco to avoid wheel skidding. (A)

A **C3W Valve** B C2A

C MU2B D Both cab A 9

183. Switch OFF blowers when the train is expected to stop for more than ……minutes to conserve the energy. (C)

A 10 B 30

C **15** D 20

184. If train is expected to stop for more than …… minutes lower the panto with the consultation of SM/SCOR. (A)

A **30** B 15

C 45 D 60

185. Location of hand brake in crew friendly locos is ……. (C)

A Cab-1 left side locker B Cab-1 right side locker

C **Cab-1 on floor** D Cab-2 on floor

186. During RB, working of MVRF is indicated through ……. Lamp. (B)

A LSAFL **B** **LSDBR**

C LSOL D LSGRPT

187. In Static inverter fitted loco …… lamp is provided to indicate the tripping of static inverter. (C)

A QSIT B LSGRPT

C LSSIT D LSAF

188. While working with MU, If CHBA is failed in trailing loco …… & …… lamps will glow in leading loco. (C)

A LSCHBA & LSGRPT B LSGRPT & LSOL

C LSOL & LSCHBA D None of the above

189. While working with MU, If tell-tale fuse is projected in leading loco …… & …… lamps will glow in leading loco. (B)

A LSRSI & LSOL **B LSRSI & LSGRPT**

C LSOL & LSGRPT D None of the above

190. While working with MU, If tell-tale fuse is projected in trailing loco …… &…… lamps will glow in leading loco (A)

A LSRSI & LSOL B LSRSI & LSGRPT

C LSOL & LSGRPT D None of the above

191. While working with MU, If Q 50 is de energised in leading loco …… & …… lamps will glow in leading loco. (C)

A LSB & LSOL B LSOL & LSGRPT

C LSB & LSGRPT D None of the above

192. While working MU, If Q 50 is de energised in trailing loco …… & ……lamps will glow in leading loco. (A)

A LSB & LSOL B LSOL & LSGRPT

C LSB & LSGRPT D None of the above

193. If signaling lamps are not working defect may be with …… ……..…….. Fuses (D)

A CCBA & Addl. CCBA B CCPT & CCLS

C CCLC & CCBA **D Addl. CCBA & CCLS**

194. Q 20 actions are ……..……. (A)

A Auto regression of GR, glowing of LSOV & sounding of SON B Glowing of LSOV & sounding of SON

C Sounding of SON D None of the above

195. While working with MU …… lamp glows in healthy loco, …… lamp glows in defective loco. (A)

A LSOL & LSGRPT B LSOL & LSOV

C LSGRPT & LSAFL D LSGRPT & LSOL

196. While working with MU, If DJ is tripped in leading loco …… & …… lamps will glow in leading loco. (D)

A LSDJ & LSGRPT B LSOL & LSOV

C LSOL & LSGRPT **D LSDJ, LSCHBA, LSB,**

197. While working with MU, If DJ is tripped in trailing loco …… & …… lamps will glow in leading loco. (D)

A LSDJ & LSGRPT
B LSOL & LSOL
C LSOL & LSGRPT
D LSDJ, LSCHBA, LSB & LSOL

198. When ZQWC is pressed, QWC relay will energise only when GR is on ……. notch(es). (C)

A '0'
B '1'
C '0' or '1'
D on & above 20th

199. While attaching loco on to formation stop the loco first at .....meters from the formation. (C)

A 10
B 15
C 20
D 25

200. In roof mounted RB provided WAP-4 locos, revised setting of QF relay is .....Amps. (C)

A 700
B 800
C 850
D 900

201. After resetting BPEMS switch, operate ZPT from …… position to ……..position. (A)

A 0, 1
B 2, 0
C 1, 0
D 1, 2

202. Earth fault in line contactors coils causes, …… fuse to melt. (A)

A CCPT
B CCA
C CCDJ
D CCLSA

203. In conventional locos, if VCD is not acknowledged, after 60secs, ... will happen for next 8secs. (B)

A Alarm will sound
B Yellow flashing light will glow
C Auto regression and BP Drops
D All the above

204. In conventional locos, when VCD is acted, ...…….actions will take place. (A)

A Auto regression and BP drops
B DJ trips
C Panto lowers
D None of the above

205. In conventional locos, to acknowledge VCD, Ack. push button/paddle switch should not be pressed for more than …Secs. (D)

A 30
B 32
C 45
D 60

206. When BPEMS is pressed, ... actions will take place. (D)

A DJ trips B Panto lowers

C BP drops **D All the above**

207. In conventional locos, VCD acknowledgment is done by operating …….. once in every 60 seconds (write any two). (D)

A A-9 or SA-9 B Sander or horns

C Progression or regression or Ack. **D Any one of the above**

208. In conventional locos, if VCD is not acknowledged, after 68secs, ... will happen for next 8secs. (C)

A Alarm will sound B Yellow flashing light will glow

C **Alarm will sound and yellow light will glow** D Auto regression and BP drops

209. In conventional locos, before resetting VCD, ...……. to be operated. (B)

A HBA to be kept in '0' and '1' **B MP to be kept on '0'**

C ZPT to be kept in '0' and '1' D MPJ to be moved to '0'

210. In conventional locos, for resetting VCD, ... to be pressed. (C)

A BPP/BPR B horns

C Ack. or Reset button D sanders

211. In conventional locos, in case of any malfunctioning, to isolate VCD, keep ..... switch in 'OFF' position. (A)

A VCD Bypass B Reset

C Acknowledgement D None of the above

212. Whenever cattle run over takes place, if BP dropped due to front side BP angle cut-off cock is broken, the duty of LP is to maintain BP pressure is by closing …… (C)

A A8 COC B RAL COC

C **Front side Addl. BP angle cock** D A-9 COC

213. Controlling fuse for SMGR control circuit is ..... (A)

A CCPT B CCA

C CCBA D CCDJ

214. Before taking notches, if Q51 is in energised condition crew experiences ..... traction failure. (B)

A TLTE with LSB **B TLTE without LSB**

C Auto regression with LSP D None of the above

215. GR travelling time (0 to 32 notches) for progression is.... seconds. (A)

A 11 to 13 B 10 to 12

C 32 D 15

216. While operating GR manually ..... equipment to be observed. (D)

A PHGR B RPGR

C CGR arc-chutes **D RGR**

217. For operating GR manually take out ZSMGR handle from..... position. (C)

A 6 O' clock B 7 O' clock

C 3 O' clock D 5 O'clock

218. While operating GR manually GR shall be rotated within …….. seconds. (A)

A 0.5 B 0.6

C 5 D None of above

219. When MP is moved from traction to braking side, the correct preparation for braking is ensured by glowing and extinguishing of ..... signaling lamp. (B)

A LSP **B LSB**

C LSGR D LSRSI

220. During RB if DJ trips, ... valve de-energises and causes Destruction of BP pressure automatically. (A)

A IP(E) B IP(M)

C VEF(E) D VEF(M)

221. Whenever DJ is tripped on notches GR comes to zero by... relay. (D)

A Q52 B Q51

C Q46 **D Q50**

222. While operating GR manually MP should be placed in ....Position. (D)

A O B +

C - **D N**

223. Auxiliary controlling relay is ..... (D)

A Q118 B Q49

C Q119 **D Q100**

224. In EP C118 provided locos Q100 is replaced with ..... Relay. (C)

A Q119 B Q120

C QTD100 D Q121

225. When BLVMT is defective blowers can be started by--------- (C)

A Wedging contactors B Changing switch position

C Taking a notch D Ask relief loco

226. When C107 is not closed, try by keeping ……switch on… position. (B)

A HVRH, 2 **B HVRH, 3**

C HVRH, 1 D HVRH, 0

227. After wedging any 3 phase EM contactor ensure..... without fail. (C)

A Proper closing of 3 tips B Motor is working

C Both A & B D None of above

228. ..... fuse will melt, when earth fault occurs in J1 / J2 coils. (A)

A CCPT B CCBA

C CCA D CCLS

229. During RB, all traction motor fields are connected in---------- (B)

A Parallel **B Series**

C Series-parallel D None of the above

230. While using RB ..... brakes should not be used to avoid loco wheel skidding. (B)

A Formation(A-9) **B SA-9**

C All above D None of the above

231. If ..... number of fuses are projected in same RSI block, isolate concerned block and work further. (A)

A 2 or more B 1

C All above D None of the above

232. QD actions are (D)

A Auto regression of few notches B Auto sanding

C LSP glows **D All the above**

233. Traction motor meter connections in Cab-1 are ..... and in Cab-2 are ..... . (A)

A U1-TM1, U2-TM2, A3-TM3, A4-TM4, U5-TM5, U6-TM6, B A1-TM1, U2-TM2, U3-TM3, A4-TM4, U5-TM5, U6-TM6,

C A1-TM3, A2-TM4, U1-TM1, A4-TM4,U5-TM5, U6-TM6, D None of the above

234. The controlling fuse for reversers control circuit is ……. (C)

A CCA B CCDJ

C CCPT D CCLS

235. When rear cab BL is not locked properly, crew experiences ……Traction failure. (D)

A TLTE with LSB B TLTE with out LSB

C Auto regression with LSP **D 1st notch auto regression with out LSP**

236. On run when GR is on notches and CCPT is melted,…….. happens in the loco. (D)

A Panto lowers B GR comes to zero

C DJ trips **D Both A & C**

237. When CCA is melted crew experiences ..... tripping failure. (B)

A Operation O **B Operation-II**

C Operation-I D Operation-B part-I

238. When Q100 is not energized crew experiences …… tripping failure. (C)

A Operation-O B Operation-I

C Operation-II D Operation-B part-I

239. When C106 is not closed, try by keeping …… switch on ……. position. (D)

A HVMT-2, 2 B HVMT-2, 0

C HVMT-2, 1 **D HVMT-2, 3**

240. Purpose of Q119 is ..... . (D)

A To enrgise VEULs B Late starting of MCP-3

C To energise VEAD **D Both A & B**

241. During RB..... valve energizes automatically to avoid proportional working. (B)

A Auto drain **B VEF(E)**

C RGCP D VEAD

242. When notches are not progressing & regressing by MP, try with---- (A)

A EEC operation B GR manual operation

C Ask for relief loco D None of the above

243. When Pacco switch is in pressed condition, crew experiences …….. traction failure. (B)

A TLTE with LSB **B TLTE without LSB**

C Auto regression with LSP D None of the above

244. If Q52 is permanently energised, crew experiences ..... traction failure. (B)

A TLTE with LSB **B TLTE without LSB**

C Auto regression with LSP D None of the above

245. In conventional locos, if CHBA is isolated, work the train for……. hours during day time and …..……. hours during night time with minimum utilization of battery supply. (A)

A 6, 4 B 4, 6

C 5, 4 D 6, 3

246. While changing Bi-polar switch on DC-DC converter, ... switch to be switched off. (B)

A BLPRF **B ZRT / ZPR**

C BLPRR D BLPRD

247. The minimum battery voltage required to energise conventional AC loco is ..... Volts. (B)

A 50 **B 90**

C 110 D 100

248. If CCBA is melting even HOBA is in OFF position …… to be checked. (D)

A PANTO B DJ

C CHBA **D LTBA**

249. On closing HBA and ZUBA, if UBA reads zero volts .... …….. Fuse to be checked. (B)

A CCBA **B Addl. CCBA**

C CCA D CCPT

250. When BPSW is pressed ..... valve energizes. (B)

A PR1 **B MV4**

C PR2 D QWC

251. ..... relay causes Auto Regression during AFL working. (B)

A PR1 **B PR2**

C RGEB2 D Q20

252. During A9 application ..... Relay energises and nullifies the AFL actions. (D)

A Q-121 B Q-120

C QFL **D PR-1**

253. Length of the conventional type of Neutral section is .....meters. (C)

A 42 B 45

C 41 D 4.8

254. The purpose of ATD in OHE is ..... . (A)

A Maintains tension in OHE B Uniform wear & tear of panto

C A & B D None of the above

255. To maintain uniform wear & tear of panto pan …… arrangement is provided on OHE. (B)

A ATD **B Staggering**

C Anti creep D A & B

256. Emergency telephone sockets are provided at a distance of ……..... metres along the track. (A)

A 1000 /900 B 1500

C 800 D 750

257. In modified locos Notch Repeater is gets supply from------- (A)

A CHBA B DC-DC Converter

C TFVT D ARNO

258. The controlling fuse for reversers control circuit is ……. (C)

A CCA B CCDJ

C CCPT D CCLS

259. When head light is not glowing work the train with maximum ..... kmph speed during night time. (C)

A 50 B 30

C 40 D 60

260. Purpose of additional CCBA is …….. (A)

A Protects BA +ve cable B Protects BA –ve cable

C Protects CHBA D Protects UBA

261. The OHE supply of two traction substations is separated by------- (A)

A Neutral section B SP

C SSP D TSS

262. The length of PTFE neutral section is ..... meters. (C)

A 2.8 B 4.2

C 4.8 D 5.2

263. The zig-zag arrangement of contact wire is called as-------- (D)

A Auto tension B Regulating

C Un-regulating **D Staggering**

264. On run, if OHE contact wire is found hanging, the immediate duty of the crew is …… (B)

A Inform TLC **B Keep ZPT on "0" and apply Emergency brakes or press BPEMS.**

C Inform TPC D None of the above

265. If ATDs are provided at both ends of contact and catenary wires, it is known as ..... type of OHE. (C)

A Un-regulated B Semi- regulated

C Regulated D Un-known

266. The purpose of the CHBA is ..... & ..... (D)

A Charging Batteries B Supply to Arno

C Supply to all control circuits after closing DJ **D both A & C**

267. If ATDs are not provided at both ends of contact and catenary wires, it is known as ……. (A)

A **Unregulated OHE** B Semi regulated OHE

C Regulated OHE D Un known

268. Traction motor meter connections in Cab-1 are ..... and in Cab-2 are..... (A)

A **U1-TM1, U2-TM2, A3-TM3, A4-TM4, U5-TM5, U6-TM6**, B A1-TM1, U2-TM2, U3-TM3, A4-TM4, U5-TM5, U6-TM6,

C A1-TM3, A2-TM4, U1-TM1, A4-TM4,U5-TM5, U6-TM6, D None of the above

269. Total no. of roof bars provided in WAG 5 loco are …… (B)

A 6 **B** **6+2**

C 4 D 4+2

270. Total No. of roof bars provided in WAP 4 loco are …… (D)

A 6 B 6+2

C 4 **D** **4+2**

271. In conventional locos, to close DJ …….. BL switches to be operated. (C)

A BLDJ B BLRDJ

C **BLDJ, BLRDJ** D BLSN

272. Location of MU2B in crew friendly locos is …….. (C)

A Motor chest no.1 B Motor chest no.2

C **Pneumatic panel** D Switch panel

273. When panto is raised and DJ is open position, …… protects roof equipment against surge voltage. (C)

A ETTFP-1 B ET- 2

C **ET- 1** D ET TFP- 2

274. After closing DJ, …… protects main transformer against surge voltage. (B)

A ETTFP-1 **B** **ET-2**

C ET-1 D ETTFP-2

275. …… relay is called as TM output over current relay during RB. (A)

A **QF-1 or QF-2** B QE

C QRSI-1 or QRSI-2 D None of the above

276. Arno starting phase is given through …… contactor & ……resistance. (A)

A C118 & R118 B C118 & RGR

C C145 & R118 D C108 & RPGR

277. Starting phase of ARNO is suppressed by……. relay. (B)

A Q45 **B QCVAR**

C Q30 D Q44

278. Poly glass material projecting from TM vent mesh is called as ..... failure. (C)

A Short circuit B Over current

C Banding failure D None of the above

279. Earth fault in MPH motor causes tripping of DJ through …..….relay. (C)

A QLA B QOP-1

C QOA D QRSI-1

280. If MPH motor is isolated, starting 5 minutes……Amps current and continuously……Amps current to be observed for TM. (A)

A 920, 500 B 500, 500

C 750, 500 D 1000, 500

281. If MVSL-2 is not working, work the train by isolating ……. (D)

A No restriction for TM current ratings B isolate bogie-2

C Work 50% load **D Above all**

282. If MVRH motor is isolated, starting 5 minutes …Amps current and continuously……Amps current to be observed for TM. (A)

A 920, 500 B 500, 500

C 1000, 750 D 1000, 500

283. In conventional locos, ……motors are called direct motors. (D)

A MPH, MVSI-1 B MVSI-2, MVSL-1

C MVSL-2 **D All the above**

284. MVMT 1 & MVMT 2 are …… type of auxiliary motors. (D)

A direct auxiliary B starts along with ARNO

C Both A & B **D remote controlled**

285. To isolate the TM-5 in WAG-7 loco, HMCS-2 has to be placed in …… position and…… bit to be packed on –ve side of TM. (C)

A 3, J1-10th B 3, J1-8th

C 3, J2-10th D 3, J2-8th

286. To isolate the TM-3 in WAP-4 loco (without RB), HMCS-1 has to be placed in ……position and …. bit to be packed on –ve side of TM. (D)

A 4, J1-12th B 4, J1-10th

C 4, J2-6th **D 4, J1-6th**

287. To isolate the TM-4 in WAP-4 loco (With RB), HMCS-2 has to be placed in ……. position and …… bit to be packed on –ve side of TM. (B)

A 2, J2-6th **B 2, J2-8th**

C 1, J2-6th D 2, J1-8th

288. Location of IP mechanical valve with COC in crew friendly locos is--- (C)

A Cab-1 left side locker B Motor chest no.1

C Pneumatic panel D Motor chest no.2

289. In WAG-5 loco during RB application, if there is earth fault in TM-6 field .....relay will act. (A)

A QOP-1 B QOP-2

C QRSI-1 D QE

290. After moving MP to 'P' position, ...contactor closes. (B)

A C-107 **B C-145**

C C-118 D C-111

291. ..... relay will act when banding failure takes place in TM-1. (C)

A QRSI B QLM

C QOP-1 D QOP-2

292. If banding failure takes place clear the section with not exceeding ……..… Kmph of restricted speed. (D)

A 40 B 25

C 10 **D 15**

293. ATFEX comes into service after closing ..... contactor. (C)

A C-108 B C-118

C CTF-3 **D C-145**

294. ..... number of shunting contactors provided in WAG-5 orWAG-7 locos. (D)

A 24 B 16

C 22 **D 18**

295. …… relay is called traction power ciruit-1 earth fault protection relay. (B)

A QOP-2 **B QOP-1**

C QOA D QRSI-1

296. RPS resistances are cooled by ..... motor. (C)

A MVSI-1 B MVSL-1

C MVRH D MVMT-1

297. RB should not be used if ..... relay is wedged in energized condition. (D)

A Q44 B Q118

C Q51 **D Q50**

298. During RB, MVRF motor gets feed from …….. TM. (A)

A TM-1 B TM-2

C TM-4 D TM-6

299. To isolate the TM-1 in WAG-5 loco, HMCS-1 has to be placed in ..... position and …….. bit to be packed on –ve side of TM. (B)

A 2, J1-6th **B 2, J1-8th**

C 2, J2-8th D 3, J1-8th

300. QD-1 is connected between ..... and ..... traction motors. (A)

A TM2 & TM3 B TM1 & TM3

C TM1 & TM2 D None of the above

301. QD-2 is connected between ..... and ..... traction motors. (C)

A TM4 & TM6 B TM5 & TM6

C TM4 & TM5 D None of the above