

**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/9/2025

Date: 20.02.25

Sr. DPO/SC

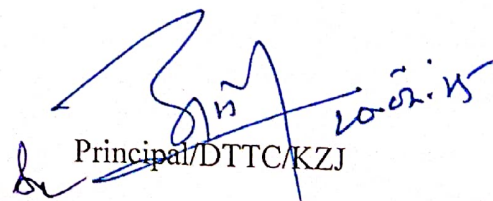
Sub: Syllabus and sample question bank for filling up of the post of Junior Engineer of Mechanical wing of DSL Cardre in level.6-7<sup>th</sup> CPC pay matrix against 25% promotional quota in Mechanical Department of SC Division.

Ref:-Sr.DPO/SC Lr.No.SCR/P-SC/210(a)/DLS/KZJ/JE/PRQ/Mech/206136-dated.14.02.25.

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 Junior Engineer of Mechanical wing of DSL Cardre in level.6-7<sup>th</sup> CPC pay matrix against 25% promotional quota in Mechanical Department of SC Division Mechanical wing at DTTC/KZJ.

Encl:- Annexure -I : Syllabus

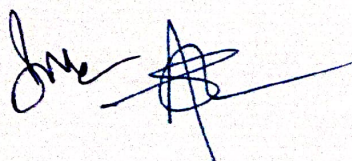
Annexure -II : Sample question bank

  
Principal/DTTC/KZJ



**Syllabus for Selection of JE –(Mechanical wing) at DLS/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



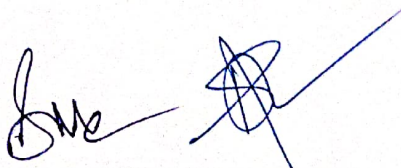


- locomotives (applicable only those maintained by shed) & HTSC bogies.
8. Safety – Knowledge of various safety items fitted in the engine & locomotive.
  9. Safety checks to be conducted on locomotive (including fire safety), before despatch.
  10. Knowledge of Air brake system – Alco & HHP locomotives- 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.

General:

As per extant instructions at least 10% of the total marks prescribed for the written test should be on official policy and rules on optional basis.

\*\*\*



- 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) 1<sup>st</sup> row                      b) 2<sup>nd</sup> row                      c) 3<sup>rd</sup> row                      d) 4<sup>th</sup> 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 in WDG6G 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/cm<sup>2</sup> in 6 secs b) 0.3 kg/cm<sup>2</sup> in 60 secs  
 c) 0.6 kg/cm<sup>2</sup> in 60 secs d) 0.5 kg/cm<sup>2</sup> in 60 secs
- 50) Insensitivity of DV is ( b )  
 a) 0.6 kg/cm<sup>2</sup> in 6 secs b) 0.3 kg/cm<sup>2</sup> in 60 secs  
 c) 0.6 kg/cm<sup>2</sup> in 60 secs d) 0.5 kg/cm<sup>2</sup> in 60 secs
- 51) In M.U operation in Air brake loco, conjunction working in leading loco will take 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/cm<sup>2</sup>  
 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/cm<sup>2</sup> b) 1.8kg/cm<sup>2</sup> 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/cm<sup>2</sup> ( 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 unsprung 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/Cm<sup>2</sup> ( 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/cm<sup>2</sup>.  
 b) Brake cylinder  
 c) MR2 at 1.76kg/cm<sup>2</sup> from the brake pipe

- d) limiting brake cylinder pressure to 1.76kg/cm<sup>2</sup>
- 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/cm<sup>2</sup> brake cylinder pressure is used in place of 3.5kg/cm<sup>2</sup> 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 torque  
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)  $1155 \pm 20$  b)  $1125 \pm 20$  c)  $1045 \pm 20$  d)  $1100 \pm 20$
- 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) How 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<sup>th</sup> 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 starting air brake train ? ( c )  
 a) 6cm<sup>2</sup>kg, 4.9 kg/cm<sup>2</sup> b) 5.2kg/cm<sup>2</sup>, 4.7 kg/cm<sup>2</sup>  
 c) 5kg/cm<sup>2</sup>, 4.8 kg/cm<sup>2</sup> d) 4.8kg/cm<sup>2</sup>, 5kg/cm<sup>2</sup>
- 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 3/4 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 be 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)Conjunctonal brake application in rear loco b)conjunctonal brake application in leading loco c)Conjunctonal 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/cm<sup>2</sup>
- 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. stand    b)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 ( d )  
be taken?  
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, IDLE      c) 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/Cm<sup>2</sup> b) 6Kg.Cm<sup>2</sup> c) 8.5Kg/Cm<sup>2</sup> d) 9.5Kg/Cm<sup>2</sup>
- 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/cm<sup>2</sup> ( b )

- a) 3.5      b) 5      c) 6      d) 8
- 300) FP pressure in Alco locomotive is \_\_\_\_\_ kg/cm<sup>2</sup> ( c )
- a) 3.5      b) 5      c) 6      d) 8
- 301) Fuel oil relief valve is set at \_\_\_\_\_ kg/cm<sup>2</sup> 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/cm<sup>2</sup>      b) 3.5 kg/cm<sup>2</sup>      c) 1.8 kg/cm<sup>2</sup>      d) 5.2 kg/cm<sup>2</sup>
- 305) Maximum Brake cylinder pressure with A9 ( c )
- a) 5 kg/cm<sup>2</sup>      b) 3.5 kg/cm<sup>2</sup>      c) 1.8 kg/cm<sup>2</sup>      d) 5.2 kg/cm<sup>2</sup>
- 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/cm<sup>2</sup> ( 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/cm<sup>2</sup> ( b )  
a)3 b) 4 c) 5 d) 6
331. In Alco loco lube oil relief valve is set at \_\_\_\_ kg/cm<sup>2</sup> ( d )  
a)6 b) 7 c) 8 d) 9
332. In WDG3A loco max. exhaust gas temperature is \_\_\_\_ °C ( 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/cm<sup>2</sup> ( 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/cm<sup>2</sup> ( a )  
 a) 5                      b) 2                      c) 3                      d) 4
361. In Alco loco fuel oil regulating valve is set at \_\_\_\_\_ kg/cm<sup>2</sup> ( 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/cm<sup>2</sup> ( 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 WDM3A 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/cm<sup>2</sup> 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/cm<sup>2</sup> ( 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    d) 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  $\frac{3}{4}$ " 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) Weak 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/cm<sup>2</sup> 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/cm<sup>2</sup> in 6 sec b) 0.6 kg/cm<sup>2</sup> in 60 sec  
c) 0.3 kg/cm<sup>2</sup> in 60 sec d) None
426. In banker loco 3/4<sup>th</sup> cock should be in \_\_\_\_\_ position ( b )  
a) Open b) close c) 'a' or 'b' d) None
427. Maximum BC pressure in kg/cm<sup>2</sup> with SA9 in Alco loco ( a )  
a) 3.5 b) 1.8 c) 5.0 d) 5.2
428. Maximum BC pressure in kg/cm<sup>2</sup> 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/cm<sup>2</sup>) ( c )  
a) 5 b) 10 c) 8 d) 6
437. In Alco locomotive MR cut out pressure (in kg/cm<sup>2</sup>) ( 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/cm<sup>2</sup> 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/cm<sup>2</sup> in 8<sup>th</sup> 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/cm<sup>2</sup>                      b) 1.3 & 1.6 kg/cm<sup>2</sup>  
c)2.5 & 3.0 kg/cm<sup>2</sup>                      d) 4.0 & 2.8 kg/cm<sup>2</sup>
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 4<sup>th</sup> notch                      d) work up to destination
453. Engine having 5 kg/cm<sup>2</sup> and BV having 4.0 kg/cm<sup>2</sup> 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. 3/4" 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<sup>th</sup> 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/cm<sup>2</sup>    b) 6 kg/cm<sup>2</sup>    c) 8 kg/cm<sup>2</sup>    d) 10 kg/cm<sup>2</sup>
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) 3/4" 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/cm<sup>2</sup> 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/cm<sup>2</sup> without A9 application ( c )  
\_\_\_ starts functioning  
a) APU b) VCD c) AFL d) all the above
491. Additional C2 relay valve is meant for \_\_\_ pressure creation, ( b )  
Maintenance & destruction  
a)FP b) BP c) BC d) all the above
492. In MU locos, MU2B position in leading loco is \_\_\_ ( a )  
& in trailing loco is \_\_\_\_  
a) Lead, Trail b) Trail, Trail c) Trail, Lead d) Lead, Lead
493. \_\_\_ brake only can be applied in stabled dead loco ( c )  
when pneumatic pressure is zero in main reservoir  
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/cm<sup>2</sup> and ( a )  
BC becomes \_\_\_\_ kg/cm<sup>2</sup>  
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/cm<sup>2</sup> to \_\_\_\_ kg/cm<sup>2</sup> ( 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 (Eddy 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 ( b )  
 brake cylinder for brake application  
 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/cm<sup>2</sup> ( 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) 538°C b) 438°C c) 338°C 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<sup>2</sup>) ( 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/cm<sup>2</sup> ( 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 ( b )  
is active, the loco will work  
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/cm<sup>2</sup>) 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 ( d )  
a) Loco brake                      b) Formation brake  
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 )  
 a) LWS Operated b) OSTA Tripped  
 c) SAR Defective d) All the above
702. If engine is cranking but not firing while starting what may be the reason ( d )  
 a) FPM not working b) Fuel Booster Pump defective  
 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 (Below 1.6Kg/Cm<sup>2</sup>) 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



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/cm<sup>2</sup>  
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 Indicator 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/cm<sup>2</sup>
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 D1 Emergency  
 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  
 c) 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 with 20 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 ( c ) pressure/vacuum on run?  
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 D1 emergency gradually              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  $\frac{3}{4}$ " 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/cm<sup>2</sup>
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 )  
a) By passing to be done b) Work with FP alone  
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/cm<sup>2</sup> in 6secs b) 0.3 kg/cm<sup>2</sup> in 60secs  
c) 0.6 kg/cm<sup>2</sup> in 60secs d) 0.5 kg/cm<sup>2</sup> in 60secs
776. Insensitivity of DV is ( b )  
a) 0.6 kg/cm<sup>2</sup> in 6secs b) 0.3 kg/cm<sup>2</sup> in 60secs  
c) 0.6 kg/cm<sup>2</sup> in 60secs d) 0.5 kg/cm<sup>2</sup> 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/cm<sup>2</sup>  
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/cm<sup>2</sup> ( 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 to 5 kg/cm<sup>2</sup>.
  - b) B&C
  - c) MR2 at 1.76 kg/cm<sup>2</sup> from
  - d) the brake pipe limiting brake cylinder pressure to 1.76 kg/cm<sup>2</sup>
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) Hydraulic pressure
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) 1<sup>st</sup> fan will pick up at full speed with interval of 20 second of last  
 c) 2<sup>nd</sup> 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 H<sub>2</sub>O    b) 14" of H<sub>2</sub>O              c) 25" of H<sub>2</sub>O              d) 07" of H<sub>2</sub>O
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/cm<sup>2</sup>  
b) MR pressure is drop below 9.5 kg/cm<sup>2</sup>  
c) MR pressure is drop below 9.8 kg/cm<sup>2</sup>  
d) MR pressure is drop below 10.2 kg/cm<sup>2</sup>
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 ( b )  
a) 2.2HP b) 22HP c) 23HP d) 70HP



839. Valve leakage is indicated if Blow by 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<sup>th</sup> to 8<sup>th</sup> notch      b) 6<sup>th</sup> to 8<sup>th</sup> notch  
c) 7<sup>th</sup> to 8<sup>th</sup> notch      d) Only to 8<sup>th</sup> notch
846. Which of the following factor is consider for condemnation of bearing ( 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)  $\pm 0.005''$       b)  $\pm 0.010''$       c)  $\pm 0.015''$       d)  $\pm 0.020''$
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. 1<sup>st</sup> 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 1<sup>st</sup> 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) 35°C      b) 194°C      c) 240°C      d) None of the above
876. Maximum consumable HP of HHP compressor during unloading at 950 rpm is ( c )  
a) 2.2HP      b) 22HP      c) 23HP      d) 70HP
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 packing 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°C                      b) 79°C                      c) 85°C                      d) 96°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 starting  
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 ( c )  
a) Welding      b) Forging  
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 ( c )  
24" of H2O than  
a) Engine will shut down b) Engine will come to idle  
c) Power will be reduced to 6<sup>th</sup> notch d) None of the above
900. HHP Locomotive if Engine plus Inertial vacuum reading is more than 24" of  
H2O than Power will reduced to 6<sup>th</sup> 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 H2O than Baggie filter choked 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 ( a )  
fan will drop at  
a) Below 73°C b) Below 79° c c) Above 85°C d) 96°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 exceed ( a )  
a) 0.13 mm b) 1.31 mm c) 0.19 mm d) 0.51 mm
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 3<sup>rd</sup> 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 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) 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 ( d )  
a) prevent over filling in case of glow rod gauge is defective  
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 ( d )  
a) 0 – 50 ppm                      b) 0 – 20 ppm  
c) 0 -15 ppm                         d) 0 – 10 ppm

956. Bubbles in fuel return sight glass during priming indicates ( a )  
a) air draw in 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 ( b )  
a) air draw in suction side of the fuel booster pump  
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 ( c )  
a) air draw in suction side of the fuel booster pump  
b) the leaky fuel injector  
c) insufficient fuel supply  
d) none of the above
959. To charge feed pipe at 6 kg/cm<sup>2</sup>, 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) Independent upon the location of wheel   d) None of the above
962. In HHP locomotive FP pressure is set at ( a )  
a)  $6.0 \pm 0.1$  kg/cm<sup>2</sup>                      b)  $6.1 \pm 0.1$  kg/cm<sup>2</sup>  
c)  $6.2 \pm 0.1$  kg/cm<sup>2</sup>                      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)  $43.5^\circ$  before BDC                      b)  $43.5^\circ$  after BDC  
c)  $107.5^\circ$  after TDC                      d)  $67^\circ$  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 absorb 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 )  
a) 0.020"-0.060"      b) 0.040" -0.110"  
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) 018400rpm
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 1/2"
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 ( d )  
a) 0-20ppm    b) 0-15ppm    c) 0-10ppm    d) 0-05ppm
1017. Fuel pump motor is not working though the all circuit breakers are ( d )  
switched ON, the immediate reason could be \_\_\_\_\_  
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 ( a )  
than \_\_\_\_\_ hours  
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 /cm<sup>2</sup> ( 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 8<sup>th</sup> notch 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 with 50kmph d) Ask for the relief engine
1046. 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
1047. How much BP should be ensured in the engine and BV before starting air brake train? ( c )  
 a) 6cm<sup>2</sup>kg, 4.9 kg/cm<sup>2</sup> b) 5.2kg/cm<sup>2</sup>, 4.7kg/cm<sup>2</sup>  
 c) 5kg/cm<sup>2</sup>, 4.8kg/cm<sup>2</sup> d) 4.8kg/cm<sup>2</sup>, 5kg/cm<sup>2</sup>
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 lube oil and water is ( b )  
 a) 10°C b) 11.1°C c) 16°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) F1 selector d) N1 Reducing
1054. 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
1055. The following shall not be used for extinguishing fires on electrical equipment. ( c )  
 a) dry chemical powder b) CO<sub>2</sub> 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  $\frac{3}{4}$ coc'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  $\mu$  b) 13  $\mu$  c) 2  $\mu$  d) None of the above
1065. Fuel oil suction strainer is filtered up to ( a )  
 a) 600  $\mu$  b) 13  $\mu$  c) 2  $\mu$  d) None of the above
1066. Fuel oil secondary filter is filtered up to ( c )  
 a) 600  $\mu$  b) 13  $\mu$  c) 2  $\mu$  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 58 wagons 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 ( d )  
 locos?  
 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 ( c )  
 power/wheel creep mode, and moving at speeds above  
 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 less bogie      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/Cm<sup>2</sup> 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/cm<sup>2</sup> brake cylinder pressure is used in place of 3.5kg/cm<sup>2</sup> 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. 8<sup>th</sup> 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)  $(1155 \pm 20)$  b)  $(1125 \pm 20)$  c)  $(1045 \pm 20)$  d)  $(1100 \pm 20)$
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/cm<sup>2</sup> 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 filtered 25 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/cm<sup>2</sup> b) 5.3kg/cm<sup>2</sup> c) 4.8kg/cm<sup>2</sup> d) 2.1kg/cm<sup>2</sup>
1162. When fuel oil pressure at the spin-on filters input rises \_\_\_\_\_ kg/cm<sup>2</sup>, the spin-on filters bypass valve opens fully and fuel bypasses the engine and return to fuel tank. ( b )  
a) 5.3kg/cm<sup>2</sup> b) 4.2 c) 4.8kg/cm<sup>2</sup> d) 3.8kg/cm<sup>2</sup>
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 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 brinell 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      c) 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) 79° C to 85° 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.? ( b )  
 a) Air brake Self Test                      b) Air Continuity test  
 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 Thyristor b) Gate Thyristor off  
c) Gate Turn On d) Gate Thyristor 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  
c) 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  
c) 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 & 8<sup>th</sup> 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 & 8<sup>th</sup> 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  
c) Cam shaft drive gear train d) 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) 4<sup>th</sup> b) 5<sup>th</sup> c) 6<sup>th</sup> d) 7<sup>th</sup>

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 =  $\frac{1}{2}$  of rpm of crank shaft  
 c) rpm of cam shaft =  $\frac{1}{4}$  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” d) 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 of 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 made 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      d) 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      c) 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 d) 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)  $30^{\circ}00' - 30^{\circ}15'$  b)  $45^{\circ}00' - 45^{\circ}15'$   
c)  $60^{\circ}00' - 60^{\circ}15'$  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) All 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  
c) 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)  $8 \pm 2$  sec c)  $34 \pm 2$  sec d) None
1365. Duration of T1 cycle is ( b )  
 a) 60 sec b)  $8 \pm 2$  sec c)  $34 \pm 2$  sec d) None
1366. Duration of T3 cycle is ( c )  
 a) 60 sec b)  $8 \pm 2$  sec c)  $34 \pm 2$  sec d) None
1367. In HHP loco duration of suction period is ( a )  
 a)  $87^\circ$  b)  $113^\circ$  c)  $16.6^\circ$  d)  $138^\circ$
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  
c) 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/cm<sup>2</sup> b) 3.5 kg/cm<sup>2</sup> c) 5.2 kg/cm<sup>2</sup> 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)  $120^\circ \pm 35^\circ$  b)  $200^\circ \pm 35^\circ$  c)  $250^\circ \pm 35^\circ$  d)  $360^\circ \pm 35^\circ$
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)  $20 \pm 2$  b)  $25 \pm 2$  c)  $30 \pm 2$  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. 8<sup>th</sup> notch RPM of WDP4D locomotive is ( c )  
a) 269                      b) 904                      c) 954                      d) 1050
1417. Normal fear case oil consumption of HHP locomotive ( a )  
should not be more than  
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 choked  
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                      d) 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 ( b )  
raise to \_\_\_\_\_ notch rpm  
a) 2<sup>nd</sup>      b) 4<sup>th</sup>      c) 6<sup>th</sup>      d) None of the above
1433. No. of planet gears in HHP TSC ( c )  
a) 1      b) 2      c) 3      d) 4
1434. During torquing 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 ( c )  
in HHP loco  
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, ( a )  
engine raise to \_\_\_\_ notch rpm.  
a) 2<sup>nd</sup>              b) 4<sup>th</sup>              c) 6<sup>th</sup>              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 ( a )  
Engine shut down  
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/cm<sup>2</sup> ( 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. 4<sup>th</sup> 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) 8<sup>th</sup> 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/cm<sup>2</sup>, 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) Depend upon the location of wheel d) None of the above
1493. In HHP locomotive FP pressure is set at ( a )  
a)  $6.0 \pm 0.1$  kg/cm<sup>2</sup> b)  $6.1 \pm 0.1$  kg/cm<sup>2</sup>  
c)  $6.2 \pm 0.1$  kg/cm<sup>2</sup> 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

DTCKZJ/SCR

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 )  
a) 20 kmph      b) 25 kmph      c) 30 kmph      d) 40 kmph
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. 1<sup>st</sup> 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 d) 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)  $500 \Omega \pm 10\%$  at  $20^\circ\text{C}$  b)  $600 \Omega \pm 10\%$  at  $20^\circ\text{C}$   
c)  $700 \Omega \pm 10\%$  at  $20^\circ\text{C}$  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 in 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  $\mu$  b) 13  $\mu$  c) 2  $\mu$  d) None
1567. In HHP locomotive fuel oil suction strainer is filtered up to ( a )  
a) 600  $\mu$  b) 13  $\mu$  c) 2  $\mu$  d) None
1568. In HHP locomotive fuel oil secondary filter is filtered up to ( c )  
a) 600  $\mu$  b) 13  $\mu$  c) 2  $\mu$  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 ( b )  
between lube oil and water is  
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 ( d )  
a) 0 – 20 ppm      b) 0 – 15 ppm      c) 0 – 10 ppm      d) 0 – 5 ppm
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/cm<sup>2</sup>      b) 1.5 – 1.95 kg/cm<sup>2</sup>  
c) 1.4 – 1.75 kg/cm<sup>2</sup>      d) 1.4 – 1.5 kg/cm<sup>2</sup>

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 ( a )  
the speed range  
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 ( a )  
is positioned in the  
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 ( a )  
Pressure reaches \_\_\_\_ at 8<sup>th</sup> notch & \_\_\_\_ at Idle speed.  
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 ( d )  
unsuitable for use in HHP engine cooling system  
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 ( b )  
is in between  
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) Dual cab loco      c) Dual cab loco with disc brake  
d) Dual 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) Tractive 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) Gauge? ( c )  
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.16 oil 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) 0.015" 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) 2 Years b) 3 Years c) 6 Years d) None of the above
1652. Top main bearing shell is changed after ( c )  
 a) 2 Years b) 3 Years 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/cm<sup>2</sup> b) 2.2 kg/cm<sup>2</sup> c) 2.5 kg/cm<sup>2</sup> 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 120 strokes)  
 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 tank. ( 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 torquing sequence ( c )  
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
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 form 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) Dual cab loco  
 c) Dual cab loco with disc brake      d) Dual cab loco with Hotel load
1688. Minimum Fuel oil pressure of HHP Locomotive is ( d )  
 a) 4.9 kg/cm<sup>2</sup>      b) 3.1 kg/cm<sup>2</sup>      c) 4.2 kg/cm<sup>2</sup>      d) 2.1 kg/cm<sup>2</sup>
1689. In EMDEC Engine HOD has been replaced with ( a )  
 a) a lube oil temperature sensor      b) a 3/4" 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 valve ( d )  
 a) V-Emergency Position      b) 11-Lap Position  
 c) 11-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 c) 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. Impeller 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) All of 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 1/2o 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 1/2o TDC                      d) 22 1/2oafter 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 glass of fuel tank 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) Its maximum governor rack length    b) Its 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 form 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) 3 Yearly & 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-285 is 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) 102mm above 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) 900kn      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 glass    d) None of the above
1782. According 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 of WDP4/4D 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 starting 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 Epicyclic 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) 6th notch c) 7th notch d) 8th notch



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 )  $\pm 0.005''$                       b)  $\pm 0.010''$                       c)  $\pm 0.015''$                       d)  $\pm 0.020''$
1810. TSC Spin on filter up to ( d )  
 a )  $2\mu$                       b)  $6\mu$                       c)  $13\mu$                       d)  $30\mu$
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) 140kmph    d) 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) 15-25mm    d) None of the above
1828. In HHP Locomotive duration of scavenging period is ( c )  
a)  $43.5^\circ$       b)  $113^\circ$       c)  $110.5^\circ$     d)  $138^\circ$
1829. In HHP Locomotive duration of exhaust period is ( d )  
a)  $87^\circ$       b)  $113^\circ$       c)  $16.6^\circ$       d)  $138^\circ$
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 choked b) Fuel oil primary filter is choked  
c) Fuel oil suction strainer is choked 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 ( a )  
the same axle?  
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 ( a )  
on the same bogie?  
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