SYLLABUS FOR SELECTION TO THE POST OF CHIEF LOCO INSPECTOR in SC Division (In LEVEL – 7 in 7th CPC OF PAY MATRIX, GRADE PAY Rs. 4600/-):

Sl. No.	Subject
01	Knowledge in General Rules for Indian Railway with SRs & Special instructions of SCR 2020 and its amendments (latest). Safety literature issued by Divisional & Hqrs. Safety organization, SOBs & technical instructions issued by SC division.
02	Duties of Loco inspectors/Fuel Inspectors/Instructors (Technical training).
03	Knowledge in Accident manual and Disaster management rules/instructions.
04	Knowledge in Crew Management System and its application and modifications
05	Knowledge of Control organization at Divisional & Zonal level and its function.
06	Knowledge of preventive maintenance schedule of Locomotives/Particulars of KMs at which these schedules are to be carried out and major items to be attended in these schedules. Knowledge of Pump motors & its working & hydraulic data.
07	Knowledge of time trails, knowledge in RCDs & its working/operation.
08	Knowledge & preparation of engine links, crew links, crew review, handicapped section, pilot sections, power plan/requirement statistics etc.,
09	Basic knowledge in engine/Loco statistics, Utilization & outage of locomotives. EKMs, GTKMs, SEC/SFC, haulage/load charts etc., and measure to reduce ineffective percentage of Locos.
10	Knowledge of load-trials/haulage capacity of different AC/DSL locomotives.
11	Knowledge of OHE traction, substations, switching stations, PSIs & its latest rules/instructions.
12	Basic Knowledge in Fire fighting& precautions/preventive measures.
13	Knowledge of electrical and safety rules and rendering in First Aid to Electrocuted person.
14	Knowledge in AC traction maintenance & operation (ACTM Vol. III) and Diesel Loco operations & maintenance.
15	Knowledge in 3-phase AC locomotives and conventional locomotives & MEMU /EMU /DEMU/DHMU locomotives, modifications and troubleshoot techniques.
16	Knowledge in working Air brake trains and various components/equipment function, its modifications and different types of coaches/wagons & its specifications etc.,
17	Knowledge in Working Time Table of SC division (Latest WTT No. 77)
18	Knowledge in station working rules of major stations in SC division viz., PRLI, VKB, LPI, SC, SNF, HYB, MLY, KZJ, RDM, BPA, DKJ, BDCR, MUGR, MTMI, etc., and siding station working rules.
19	Knowledge in Store matters, Tenders, outsourcing contracts etc.,
20	Knowledge in Contract Labour (Regulation & Abolition) Act, 1970 and Rules 1971.
21	Knowledge in various outsourcing contracts & its implementation in SC division pertain to TRSO department.
22	Knowledge in various welfare measure/benefits/allowances to running staff.
23	Guidelines/Instructions on Drunken (Alcoholic) policy to running staff.
24	Knowledge in the following Rules (applicable part to Railway servant). a. Railway Servant Discipline & Appeal rules, 1968 & conducting departmental enquiries. b. Railway services Conduct Rules, 1966. c. HOER rules, 2005. d. Payment of wages Act, 1936 & Minimum wages Act, 1948. e. Workmen Compensation Act, 1923. f. Leave and Pass rules applicable to Railway servants. g. Factory Act, 1948. h. Railway Act, 1989. i. Official Language policy in Indian Railway, Act 1963, Rules – 1976
25	Working knowledge on Latest modifications in Locomotives i.e., TCAS (Kavach), RTIS, HOG etc.,

(Sr.DEE/TRSO/SC)

(01) Knowledge in General Rules (03) Knowledge in Accident Manual

Note: *This question bank is for guidance only. These model questions are prepared as per the syllabus.*

1. Approved special instructions are issued or approved by ---------- (C)
   (A) COM (B) DRM
   (C) CRS (D) Sr DOM
2. Special instructions are issued by _____ (A)
   (A).Authorized Officer (B).Controlling officer
   (C).Supervisor in charge (D).All the above
3. _____ is the authorized officer of G&SR of South Central Railway. (B)
   (A).CRS (B) COM
   (C).DRM (D).CSO
4. _____ _ is the normal authority to proceed on Single Line token / token less sections. (C)
   (A)Starting Memo (B).T/409
   (C) Token/off aspect of LSS (D) None
5. On Double line or on Single Line when block instrument is defective
   _____ is given as ATP for the LP. (D)
   (A).T/A 912 (B).T/511
   (C).T/512 (D) T/C-D 1425
6. Block stations under Absolute Block System are sub-classified as _____ (C)
   _____, _____ & _____.
   (A).FLAG , CROSSING,NON CROSSING ,RUN THROUGH
   (B).REPORTING,NON REPORING ,CLASSIFIED,UNCLSSSIFIED
   (C). CLASS A,B,C&D
   (D). ALL OF THE ABOVE
7. BOL in TAS and MAS is _____ and _____ meters,
   which shall be reckoned from _____ (B)
   (A).200-180-LSS (B).400 -180-FSS
   (C).120-120-LSS (D).200-180 -FSS
8. SOL in TAS and MAS is _____ and _____ meters. (C)
   (A). 120-120 (B).400-180
   (C).180-120 (D).180-180
9. SOL is measured on Single Line from _____ and on Double Line from_____. (A)
   (A). Trailing Points-Shunting Limit Board
   (B).BSLB-SLB
   (C).Trailing Points -BSLB
   (D). LB-PB
10. The distance from Home signal to BSLB shall not be less than ___meters. (A)
    (A).180 (B).120
    (C).400 (D).580
11. At Standard-I (R) interlocking station the maximum speed (B)
    permitted for the train on ML is not more than _____ kmph.
    (A).15 (B).50
    (C).75 (D).MPS
12. At Standard-III (R) interlocking station the maximum speed
    permitted for the train on ML is above _____ kmph. (C)
    (A) 15 (B) 50
    (C) 140 (D) MPS
13. The maximum speed permitted on loop line is _____ kmph. (B)
    (A) 15/25 (B) 15/30

(C) 8/10 (D) 10/15

14. Isolation is necessary where the trains are permitted to go above _____ kmph at a station. (B)
    (A) 15 (B) 50
    (C) 75 (D) MPS
15. _____ is the best positive method of isolation. (D)
    (A) Cut Point (B) Catch Siding
    (C) Slip Siding (D) Sand Hump
16. Point indicator, wherever available shall show _____ during day and _____ light during night when point is set for Main line . (B)
    (A) Red Target-Red (B) White Target-White light
    (C) Green Target-Green (D) No Target-Green
17. Point indicator, wherever available shall show _____ during day and _____ light during night when point is set for Loop line. (D)
    (A) White Target-White (B) Green Target – Green light
    (C) No Target – White (D) No Target - Green
18. When Trap indicator is provided, it shall show _____ during day and _____ light during when it is in open position (B)
    (A) White Disc - White (B) Red Disc - Red light
    (C) No Target – White (D) None of the above
19. Station limits are available between _____ signals at a BlockStation (B)
    (A) Inner Most (B) Outer Most
    (C) Home (D) LSS
20. At Class „D" station, station limits are available between ---------- (A)
    (A) Platform Ends (B) BSLB
    (C) Fog Signal Posts (D) FSS
21. On Double line, class „B" station two aspect signaling, station section lies between _____ signal to ____signal in either direction. (B)
    (A) Home - Starter (B) Home - LSS
    (C) Distant - LSS (D) Distant-Home
22. On Double line class „B" station Multiple Aspect Signaling station section lies between _____ to _____ signal in either direction. (C)
    (A) SLB-LSS (B) Home-LSS
    (C)BSLB-LSS (D) BSLB-HOME
23. Station Section is available only at _____ Station. (B)
    (A)CLASS A (B) CLASS B
    (C)CLASS C (D) CLASS
24. Sub-Rules are framed by _____. (A)
    (A) Authorized Officer (B) Reporting Officer
    (C) Competent Authority (D) DRM
25. General Rules can be amended by (A)
    (A)Railway Board (B) Railway Tribunal
    (C)Joint consultant machinery (D) GM
26. South Central Railway is divided into _____ Zones for the purpose of Weather Warning. (A)
    (A) 8 (B) 7
    (C) 9 (D) 1
27. Heavy winds above _____ kmph is considered as dangerous for running trains.. (A)
    (A) 65 (B) 45
    (C)30 (D) 25
28. Rainfall above _____ cross in 24 hours is considered as dangerous for running trains. (A)

(A) 5CM (B)6 CM
(C) 7CM (D)8CM

29. When there is severe storm endangering the safety of passenger trains, SM shall not _____ or _____ (C)
(A)Exchange of all right signal (B) Take OFF LSS or Take off Starter
(C) Grant LC or Give LC (D) None of the above

30. If train parting is observed by any Railway Servant _____ signal should not be exhibited. (B)
(A) Right (B) Danger
(C) No (D) None

31. At non-interlocked station, speed of the trains on main line shall not exceed _____ kmph. (A)
(A)15 (B)20
(C)35 (D) 45

32. Block forward and Block back is permitted only on _____ (B)
(A)Single Line (B) Double Line
(C) Triple Line (D) None

33. Axle counters and track circuits are treated as authorized----------. (A)
(A)Means of Communication (B) Means of Knowledge
(C)Means of Transportation (D) None

34. A train, which as started under as ATP and has not completed its journey, is called _____. (C)
(A)SOL (B) POL
(C) TOL (D) None

35. A fixed stop signal of a station controlling the entry of trains into next block section is called _____. (C)
(A) FSS (B) STARTER
(C) LSS (D) None

36. Signals used for controlling movement of trains as per G & SR are _____ and _____. (A)
(A)Fixed, Hand, Detonating, Flare (B) FSS, HOME, LSS
(C)Shunt Signals and Calling ON (D) None

37. An independent Warner signal will have a _____ light above the signal at a distance of _____ (B)
(A) 1.2 MTS (B) 1.5MTS
(C) 2.0 MTS (D) 1.0 MTS

38. In double distant territory if ID showing proceed aspect indicates (A)
(A)Next Block section is clear and passing through station mainline
(B)Station Section is clear
C) Main Line Occupied
(D) None

39. At a class „B" station, Warner signal is required only when the speeds of trains exceeds _____ kmph. (D)
(A) 40 (B) 25
(C) 15 (D) 50

40. In colors light area distant signals are identified by (D)
(A)S-Marker (B) T marker
(C) G marker (D) P marker

41. Distant signal tells about the aspect of _____ signal ahead. (A)
(A)STOP (B) PROCEDE
(C) ATTENTION (D) DANGER

42. In semaphore distant signal, the distant between two yellow lights in "attention" aspect is _____. (A)

(A) 1.5 METERS (B) 2.0METERS
(C) 3.0 METERS (D) 4.5 METERS

43. Distant signal location is _____ meters before the stop signal. (A)
(A)Not less than 1000 meters (B) not less than 500 meters
(C)Not less than 200 meters (D) Not less than 1500 meters

44. Wherever double distant signal is provided, distant signal location is _____ meters before the stop signal. (A)
(A)Not less than 2000 meters (B) not less than 500 meters
(C)Not less than 200 meters (D) Not less than 1500 meterss

45. The normal aspect of distant signal on double distant signal area is _____aspect. (B)
(A) Caution (B) Attention
(C) Danger (D) Proceed

46. _____is not required wherever double distant signal is provided. (A)
(A)Signal warning board (B) Outer
(C) Distant (D) LSS

47. When colour light distant is combined with Gate / LSS, the normal aspect of that signal is _____. (B)
(A)Proceed (B) Danger
(C) Caution (D) Attention

48. Outer signal is available only at _____ station with _____ type of signals (B)
(A) Class A-MAS (B) Class B-TAS
(C) Class D-MAS (D) Class C-TAS

49. At a class „B" station, Single line with MAS, the distance form Home signal to outermost facing point shall be not less than _____ meters. (A)
(A) 300 (B) 200
(C) 500 (D) 180

50. In MAS, a single arm home signal is sufficient (common Home) as long as the train speed does not exceed _____ kmph. (C)
(A) 50 (B) 65
(C) 75 (D) 15

51. Starter signal protects _____ (B)
(A) Facing Points (B) Trailing Points
(C) Block Section (D) Station section

52. Advanced Starter signal protects _____ (B)
(A)Station section (B) Block section
(C) Signaling section (D) None

53. To start a train from a station having common starter, the LP shall be given _____ + _____+ _____. (A)
(A)T/ 512, ATP, PHS (B) T/511, ATP, PHS
(C)T/409, ATP, PHS (D)T/369 3(b),ATP,PHS

54. Emergency telephone point is located at every _____ meters in OHE area. (A)
(A) 1000 (B) 1500 (C) 1200 (D) 1600

55. General target time for turning out MRV with direct /indirect despatch facility is ---minutes (B)
A)30/45 **B) 15/20** C) 20/15 D)5/10

56. Accidents are classified into ------- categories and they are (C)
A)2 B)3 **C)5** D)4

57. General target time for turning out ART during day / night is ------ minutes. (A)
A)30/45 B) 15/20 C) 20/15 D)5/10

58.. Except _____ signal, the calling ON signal can be placed below any stop signal. (B)
(A)FSS (B) LSS

(C) Starter (D) Calling on

59. Except _____ signal, shunt signal can be placed below any stop signal. (A)
A)FSS (B) LSS (C) Starter (D) Calling on

60. Calling ON signal will show _____ light in "ON" position. (D)
(A) Red (B) Green (C) White (D) No

61. Calling ON signal is to be used only on two occasions, they are (A)
_____ and_____.
(A) Signal is defective, Line is occupied (B) Point failure, on inter locking working
(C) Derailments, accidents (D)None of the above

62.. Signal sighting committee comprises of ____, ____, and _____**.** (B)
(A)TI,LI,PWI (B)LI,SI,TI
(C)LI,PWI,SI (D)SS,LI,TI

63. Signal sighting committee will go on footplate inspection once in---------months (A)
(A) 3 (B) 2
(C) 4 (D) 5

64. Calling ON signal cannot be taken "OFF" during _____ failure. (C)
(A) Signal (B) Track
(C) Point (D) Block instruments

65. Shunt signal below starter will show _____ light in "ON"position. (D)
(A)Red (B) Green
(C) White (D) No

66. Shunt signal protects _____. (A)
(A)Points (B) Track
(C) Signal (D) None

67. Independent shunt signal or shunt below stop signal when defective (A)
_____ is the authority to pass at "ON" for LP.
(A)T/369 3(b)+PHS (B) (B)T/409
(C)T/512 (D)T/511

68. Shunt signal is of _____ types, and they are _____ and------- (B)
(A) 2, Colour Light, semaphore (B) 3, Miniature Arm, Disk, Position
(C) 1, Color light (D) none of the above

69. _____Type of shunt signals are provided only in colour light area. (A)
(A)Position (B) Disk
(C) Miniature arm (D) All the above

70. Detailed working instructions about Shunting Permitted Indicator (A)
are available in _____.
(A)SWR (B) TSR
(C) CO (D) None

71. When Shunting Permitted Indicator is defective, _____ is the (A)
authority for the LP.
(A)T/369 3(b)+PHS (B)T/409
(C)T/512 (D) PHS

72. Co-acting signals are also known as _____ signals. (A)
(A)Duplicating (B) Repeating
(C) Calling on (D) All of the above

73. _____ Type of signal will not show any light in (A)
any position at any time.
(A)Banner type repeating (B) Calling ON
(C)Co acting (D) All the above

74. When LP finds that the repeating signals in any way defective, (C)
he shall report the matter to _____.
(A)Next reporting station (B) Rear Station
(C)Next Stopping Station (D) Crew Lobby

75. At the end of semaphore arm having a black ring denotes, that signal is for _____. (A)
(A) Goods lines (B) Passenger Lines
(C) Loop lines (D) None

76. IB signal is identified by _____ (C)
(A)ID Marker (B)P marker
(C) IB Marker (D)C Marker

77. IB signal will have _____ facility. (A)
(A)Phone Facility (B) Calling ON
(C)Axle counter (D) All the above

78. Gate signal is identified by _____. (A)
(A) G Marker (B) P marker
(C) IB Marker (D) ID Marker

79. Route indicators are treated as _____. (B)
(A) Permissive (B) Stop Signals
(C) Duplicating (D) Repeating

80. Route indicators are of _____types and they are (a) _____ (b)_____ (c) _____ _____. (A)
(A) 3, multiple, stencil, Junction (B) 2 colour light, semaphore
(C) All the above (D) none of the above

81. There are four types of Electric repeaters and they are (a)_____ (b) _____ (c) _____ (d) _____. (A)
(A) Signal arm-Signal light -Miniature light -Light emitting diode type
(B) Stencil-junction-multiple-Semaphore
(C) Reception-dispatch-admission-junction
(D) None of the above

82. The electrical repeaters of a departure signal when defective, the corresponding _____shall also be treated as _____ immediately. (B)
(A) Points -defective (B) signal-defective
(C) line-defective (D) track -defective

83. The backlight of the signal is visible only in _____ position. (A)
(A)ON (B) OFF
(C) Defective (D) working

84. Shunting limit board is provided at ----------. (A)
(A) Class-B (B) Class-A
(C) Class-C (D) Class-D

85. Block Section Limit Board is provided at _____ station with signals where the first point is a trailing point or where there are ____ (B)
(A)Class B, TAS, No signals (B) Class B, MAS, No points
(C) Class A, TAS, No signals (D) none of the above

86. Outlying siding points are identified by _____ mark board. (B)
(A) P (B) S
(C) IB (D) G

87. Detailed working instructions about outlying siding are incorporated in-------. (A)
(A) SWR (B) TSR (C) PNR (D) None of the above

88. A signal which is taken "OFF" for a train will be put to "ON" position only to _____ or when information about engine failure is received. (B)
(A) Issue emergency caution order (B) Avert accident
(C) give precedence to other train (D) none of the above

89. .Home signal lever / switch will be normalized after the passage of_____. (C)
(A) Goods train (B) Passenger Train
(C) Whole train (D) none of the above

90. The reception stop signal shall be tested by SM _____ and pass the remarks in _____. (C)
(A) Monthly, SWR (B) Weekly, SWR
(C)Daily, Station Dairy (D) All the above

91 .Whenever signal inspector is testing the signal, the remark shall be recorded _____. (C)
(A) SWR (B) SR
(C) Station Diary (D) All the above

92. _____ No. of detonators shall be placed at a distance of _____ meters from the in Automatic Block System to stop a train "Out of Course". (B)
(A) 3,120 (B) 2,180
(C) 1,120 (D) none of the above

93. Normal setting of points is for _____. (A)
(A) Main Line (B) Loop Line
(C) common loop (D) Branch line

94. On single line, immediately after the arrival of a stopping train, the points in _____ and in _____ shall be set against the ----------. (A)
(A) front, rear, line train occupied (B) front, rear, loop line
(C) Front, rear, mainline (D) none of the above

95. On double line after the arrival the stopping train, the point's _____ will be set against the _____. (C)
(A) Front, rear, mainline (B) front, rear, loop line
(C) Rear, line train occupied (D) none of the above

96. When all the lines at a station are blocked by passenger carrying trains, and still line clear is granted for a train, the points shall be set for ____. (C)
(A) Turnout preferably express (B) turnout preferably passenger
(C) Turnout preferably engine facing (D) none of the above

97. To receive a stopping train on loop line having sand hump or buffer stop, the points must be set for _____ only. (B)
(A) Main line (B) sand hump
(C) None of the above D) A & B

98. _____, _____, _____ signals are prohibited to be used for shunting purpose. (C)
(A) Calling ON, Starter and LSS (B) Calling ON, Home and Starter
(C) LSS, Home and Outer (D) None of the above

99. When _____ glass roundel is broken in semaphore stop signal, the signal is treated as defective during _____ only. (B)
(A) Green-Night (B) Red-Night
(C) Red- Day (D) Green-Day

100. During power block _____ trains are only permitted to run. (D)
(A) Passenger (B) Goods
(C) Sub-Urban (D) Diesel

101. Catch siding is intended to protect ---------- (C)
(A) Block section (B) Station limits

(C) Station section (D) none of the above

102. Slip siding is intended to protect---------- (A)
(A) Block section (B) Station limits
(C) Station section (D) none of the above

103. When there is a falling gradient of _____ towards station section the provision of catch siding is compulsory. (B)
(A) 1 IN 100 (B) 1 IN 80
(C) 1 IN 200 (D) 1 IN 150

104. When there is a falling gradient of _____ towards block section the provision of slip siding is compulsory. (A)
(A) 1 IN 100 (B) 1 IN 80
(C) 1 IN 200 (D) 1 IN 150

105. Catch / Slip siding points key can be extracted from the Block Instrument, only when the block instrument is in _____. (C)
(A) Open position (B) Locked position
(C) Closed position (D) none of the above

106. Normal setting of points wherever catch / slip sidings are provided is for _____. (C)
(A)Main line (B) Loop line
(C) Catch/Slip sidings (D) none of the above

107. Catch siding length shall be suitable to ---------- (B)
(A)Shortest Train in section (B) Lengthiest Train in section
(C) None of the above (D) A & B

108. Catch and Slip siding not be used for _____ and _____ purposes. (A)
(A) Stabling-Shunting (B) passenger-express
(C) Goods-passenger (D) none of the above

109. Whenever points / signals / block instrument is disconnected by SI/ ESM, SM shall ensure that _____ is issued by SI / ESM. (B)
(A) Reconnection notice (B) Disconnection notice
(C) None of the above (D) A & B

110. SM shall inform cabin man / CASM / SWM under exchange of _____whenever the points / signals / block instrument is disconnected. (C)
(A) TN (B) PC
(C) PN (D) none of the above

111. When the disconnected signal / point is reconnected, SM shall test ------- (B)
(A) Twice (B) Thrice
(C) Once (D) none of the above

112. From the time of disconnection to reconnection, the trains shall be admitted by _____ method. (A)
(A) Piloting (B) Taking of reception signals
(C) A & B (D) none of the above

113. A green flag by day and a white light by night moved vertically as high and as low as possible indicate _____. (B)
(A) Train stalling (B) Train parting
(C)Shunting (D) none of the above

114. Violently waving a white light horizontally across the body of a person indicates _____. (C)
(A) Proceed (B) go slowly
(C) Stop dead (D) none of the above

116. Detonators are known as _____. (A)

(A) Audible signals (B) Visible signals
(C) Fixed signals (D) none of the above

117. VTP is painted _____ alternatively. (D)
(A) White & green (B) White & green
(C) Red & green (D) yellow

118. FSP is painted _____ alternatively. (A)
(A) Yellow & black (B) White & green
(C) Red & green (D) white & yellow

119. VTP is located at _____ meters from either side of--------- (A)
(A) 180-station building (B) 180-outer most facing points
(C) 270-station building (D) 270-outer most signals

120. FSP is located at ____ meters from _____ signal. (D)
(A) 180-station building (B) 180-outer most facing points
(C) 270-station building (D) 270-from FSS

121. Give one example of indicative accident _____. (B)
(A) Loss of human life (B) Passing signal at ON
(C) Collision (D) Fir on Train

122. When pre-warning is given about foggy weather by SM in rear, the caution order contains the restriction of __kmph to be observed after passing _. (B)
(A) 25 -facing points (B) 10-outer most signals
(C) 60-Home (D) 15- Home

123. When LP observes foggy weather in the block section, a speed restriction of _____ kmph in Absolute Block System. (A)
(A) 60 (B) 45 - 25
(C) 30 - 45 (D) none of the above

124. Normal life of a detonator is _____. (B)
(A) 10 years (B) 5 years
(C) 12 years (D) 15 years

125. Testing of detonator shall be done by moving an empty wagon at a speed of _____ kmph. (D)
(A) 10 (B) 12
(C) 15 (D) 8

126 The detonators manufactured during 2010 After testing the detonator, the life can be increased for one year subject to a maximum of _____ extensions. (C)
(A) 4 (B) 5 (C) 3 (D) 7

127. After rear SLR _____ coaches can be attached excluding one inspection carriage other than Londa-Vasco section. (B)
(A) 3 (B) 2 (C) 1 (D) 4

128. Fog signalman shall retain at FSP for a period of _____ hours on Main line section. (C)
(A) 4 (B) 5 (C) 3 (D) 10

129. For signal men's assurance will be taken in ___ register by SM (C)
(A) SWR (B) TN
(C) Station Dairy (D) none of the above

130. The knowledge of the staff that is required to use detonators shall be tested by the testing officials once in _____. (A)
(A) 3 months (B) 4 months
(C) 5 months (D) 6 months

131. _____ shall prescribe the No. of detonators which (B)

shall be kept in stock at a station.

(A) TSR (B) SWR

(C) TN (D) PN

132. If the night petrol man does not turn up even after _____ minutes beyond the schedule arrival time, SM shall stop all the trains and issue caution order restricting the speed to _____ kmph. (A)

(A) 15,40 (B) 15,25 (C) 20,15 (D)30,45

133. "Danger zone" means the zone lying within _____ meters of any live equipment. (A)

(A) 2.0 (B) 2.5 (C) 1.5 (D) 3.0

134. Dead engine must be manned minimum by ___ rank employee. (B)

(A) LP (B) ALP (C) Guard (D) SS

135. Whenever a signal which is detecting a point becomes defective, these points are treated as _____. (B)

(A) Working (B) defective

(C) clamped (D) padlocked

136. Whenever a signal/point/block instrument is defective, SM shall make an entry in _____. (C)

(A) SWR (B) PN (C) TSR (D) TN

137. Pre-warning about defective reception signal is not required when there is_____signal provision or when _____ is provided. (B)

(A) Repeating - clamping (B) Calling ON - telephone

(C) Co acting - VHF (D) none of the above

138. Pre-warning, when given it will be given in _____ authority. (A)

(A) T/369(1) (B) T/369 3(b) (C) T/512 (D) T/511

139. When Home is defective and pre-warning is given, the train shall be admitted by _____. (D)

(A) Taking off Calling ON (B) taking off Shunt signal

(C) Taking of Co acting signal (D) Piloting

140. When train is received on Calling-ON, in podanur panel, Calling-ON cancellation takes _____ seconds. (D)

(A) 220 (B) 240 (C) 150 (D) 120

141. When LP passes starter at "ON" partly and stopped before Advanced starter subsequently line clear is taken. _____will be given (A)

(A) PLCT & T/369 3(b) (B) taking off LSS

(C) Taking of Co acting signal (D) none of the above

142. When LP finds a reception stop signal in semaphore area in " OFF" condition without light, he shall observe _____. (C)

(A) Night aspect (B) taking off Shunt signal

(C) Day aspect (D) none of the above

143. When Warner / Distant failed in "OFF" position, SM shall arrange to depute one competent railway Servant to show ____from the defective signal. (D)

(A) PLCT (B) taking off Shunt signal

(C) Taking of Co acting signal (D) PHS

144. When IBS is defective ____ is the authority to start the train. (A)

(A) PLCT + T/369 3(b) (B) taking off LSS

(C) Taking of Co acting signal (D) PHS

145. On DL when LSS is defective _____ is the authority to start a train. (A)

(A) PLCT (B) taking off Shunt signal

(C) Taking of Co acting signal (D) none of the above

146. When IBS is at "ON" and the telephone is out of order, LP after waiting for _____ minutes shall proceed at speed of _____ when view is clear / not clear up to next stop signal. (B)
(A) 10-10/8 KMPH (B) 5-15/8 KMPH
(C) 25-25/8 KMPH (D) none of the above

147. When LP passes IBS in "OFF" position, _____ indication will appear after which block instrument is to be put in----------position. (B)
(A) K1-SOL (B) K2-TOL
(C) K3-POL (D) none of the above

148. Whenever axle counter of IBS is functioning improperly, SM in rear with the co-operation of SM in advance shall operate ____ buttons to reset axle counter. (A)
(A) PB2 in co-op PB3 (B) PB4 in co-op PB3
(C) A & B (D) none of the above

149. Wherever IBS is provided, LSS is interlocked with _____and IBS is interlocked with _____. (B)
(A) FSS-LSS (B) Axle counters-Block instrument
(C) Calling on-co acting (D) none of the above

150. Whenever color light signal is flickering / bobbing and does not pickup a steady aspect at least for __ time, the signal shall be treated as defective. (A)
(A) 60 seconds (B) 120 seconds
(C) 180 seconds (D) none of the above

151. Signal warning board is located at a distance of _____meters before a stop signal. (C)
(A) 1500 meters (B) 1200 meters (C) 1400 meters (D) none of the above

152. After exploding the detonator, the LP shall proceed cautiously up to a distance of _____ and can pick-up normal speed if there is no obstruction beyond that distance. (B)
(A) 1.2 km (B) 1.5 km (C) 2.0 km (D) none of the above

153. The LP and Guard will be given _____No. of LR trips to work in Ghat area. work in Ghat Area. (C)
(A) 3 (B) 2 (C) 6 (D) none of the above

154. Gate-cum-Distant signal will be located at a distance of _____ meters before the gate. (B)
(A) 120 (B) 180 (C) 240 (D) none of the above

155. The normal aspect of distant signal is _____in double distant area. (C)
(A) Proceed (B) Danger C) Attention (D) none of the above

156 "G" marker on a gate signal is eliminated when there is a _____between Gate stop signal and gate. (B)
(A) Gate (B) Bridge (C) Points (D) none of the above

157. When there is no response from Gateman, the SM shall stop the train and issue _____. (A)
(A) Co to observe gate rules (B) PLCT
(C) Written memo (D) none of the above

158. TI/SM/PWI shall test detonators once in ---------- (B)
(A) four months (B) three months
(C) one month (D) none of the above

159. The speed of train on 1 in 81/2 turnout is _____ kmph. (B)
(A) 8 (B) 10 (C) 15 (D) none of the above

160. The speed of goods train while entering goods terminal yard is restricted to _____ kmph. (C)
(A) 8 (B) 10 (C) 15 (D) none of the above

161. When a signal is newly erected or shifted, it shall be jointly inspected by _____. (A)
(A) SI,TI &LI (B) PWI ,TI&SI (C) PWI ,TI&LI (D) none of the above

162. When a signal is newly erected or shifted, caution order shall be given for a period of _____ days. (B)
(A) 8 (B) 90 (C) 15 (D) none of the above

163. Colour light repeating signal is identified by---------- (C)
(A) A Marker (B) S Marker
(C) illuminated R marker (D) none

164. In Co-acting signal, the top one is known as main arm and the bottom one is known as _____ arm. (C)
(A) Calling on (B) duplicating
(C) Co acting (D) none

165. When IB distant fails in "OFF" position _____ is the authority for trains before dispatching. (A)
(A) PLCT+T/369.3(b) (B) taking off Shunt signal
(C) Taking of Co acting signal (D) none of the above

166. When IBS is at "ON" the LP shall stop the train at IB and contact _____ by IB Phone. (B)
(A) Front station master (B) rear station master
(C) Guard of the train (D) none of the above

167. Inner Distant signal is identified by _____. (A)
(A) ID Marker (B) IB marker
(C) P marker (D) none

168. When points are treated as non-interlocked, the speed of the trains on main line is _____. (B)
(A) 25 (B) 15 (C) 45 (D) none

169. Semaphore distant is painted _____ and the end of the arm is _____. (B)
(A) white-cross tail B) yellow- fish tail
(C) green-rectangular (D) none of the above

170. Station Warner"s "OFF" aspect is interlocked with------- (C)
(A) FSS (B) Shunt signal
(C) LSS (D) none of the above

171. At station where there is common Home or at station where there are no starters, _____ is required. (A)
(A) Point indicators (B) Shunt signals
(C) Co acting signals (D) none of the above

172. At a class "C" station on DL when home signal is defective _____ is the authority to pass at "ON" position. (C)
(A) Calling on signal (B) taking off Shunt signal
(C) PLCT (D) none of the above

173. ODC shall be allowed to be attached by a train for transport only with the prior sanction of _____. (A)
(A) COM/CRS (B) DRM/DOM
(C) DME/DEE (D) none of the above

174. Speed of a class "C" ODC by day shall be _____ kmph. (A)
(A) 25/15 (B) 45/30 (C) 20/10 (D) 75/15

175. When class „C" ODC is attached by a train _____, _____ and _____ shall proceed as a escort. (B)

(A) SLI,TI,SI (B) TXR,TI,PWI
(C) PA,LI,STENO (D) none

176. ODC wagon trains shall as far as possible be received on---------line (B)
(A) Loop Line (B) Main Line
(C) Common Loop (D) none

177. Speed of class „B" ODC on BG shall not exceed _____ kmph. (A)
(A) 40 (B) 25 (C) 15 (D) none of the above

178. Engine pushing is not permitted without the prior permission of ----- (C)
(A) Guard (B) LI (C) Rear Station Master (D) none

179. When engine pushing a train and guard is traveling in brake van, (B)
which is leading, the speed shall not exceed ___ kmph, when guard is not travelling in leading vehicle, the speed shall not exceed __ kmph.
(A) 15/10 (B) 25/8 (C) 40/25 (D) none of the above

180. When engine pushing is permitted, reception shall be made on single line by (A)

(A)Taking off signals (B) Piloting (C)Hand signals (D)None of these

181. When head light is defective after putting marker light the train (A)
can go with a restricted speed of _____ kmph.
(A) 40 (B) 25 (C) 15 (D) none of the above

182. Side lights are dispensed for _____ and _____train. (C)
(A)mail-express (B) passenger- express
(C)sub-urban-goods (D)none of the above

183. An engine exclusively deployed for shunting purpose shall put on (B)
_____ colour marker lights on both sides.
(A) Yellow (B) Red (C) No light (D) none of the above

184. Light engines or coupled light engines shall have -------- (C)
(A) BV (B) CBC (C) LV Board (D) none of the above

185. When leading compartment of electric engine is defective and the (B)
train is driven from trailing cab by Asst LP, the speed shall not exceed _____ kmph.
A) 50 (B) 40 (C) 25 (D) none of the above

186. When leading compartment of electric engine is defective and the train (C)
is driven from trailing cab by LP, the speed shall not exceed _____ kmph.
(A) 50 (B) 40 (C) 15 (D) none of the above

187. In emergency a goods train without brake van or without guard is (A)
ordered by _____.
(A) Sr DOM (B) COM (C) CEE (D) none of the above

188. Running of goods train without brake van or without guard is (B)
strictly prohibited during _____.
(A) TSL (B) TIC (C) WINTER (D) none of the above

189. The speed of the train while passing through Neutral Section not be less than (D)
_____ kmph.
(A) 45 (B)20 (C) 60 (D) 30

190.Running of train without guard is not permitted in _____ (B)
sections of Hubli Division.
(A) 1 in 100 or steeper gradient (B) Ghat
(C) Pilot (D) handicapped

191. When hot axle is reported by rear SM that train shall preferably be admitted on _____ line. (B)
(A) Loop line (B) Main line (C) Common Loop (D) none

192._____ Number of damaged vehicles are permitted to be attached in rear of Brake van during _____ only. (C)
(A) 2- night (B) 1- night (C) 1-day (D) none

193. Fresh BPC is required whenever _____ No. and more vehicles are attached or detached. (C)
(A) 25 FWU (B)15 FWU (C) 10 FWU (D) none of the above

194. When non-CC rake train is stabled for more than _____ hours fresh BPC is required. (B)
(A) 52 (B) 24 (C) 12 (D) none of the above

195. A goods train having 56 wagons, the BP pressure in engine shall be _____ and in BV _____. (A)
(A) 5.0 Kg./cm2-4.8 kg/cm2 (B) 5.2 Kg./cm2-5.0 kg/cm2
(C) 5.3 Kg./cm2-4.6 kg/cm2 (D) none of the above

196. FP pressure in loco shall be _____ and in BV -------- (B)
(A) 6.2 kg/cm2-5.7 kg/cm2 (B) 6.0 kg/cm2-5.8 kg/cm2
(C) 6.1 kg/cm2-5.0 kg/cm2 (D) none of the above

197. A goods train having 58 wagons. The BP pressure in loco shall be _____ and in BV _____. (A)
(A) 5.0 kg/cm2-4.7 kg/cm2 (B) 5.2 kg/cm2-5.0 kg/cm2
(C) 5.2 kg/cm2-5.1 kg/cm2 (D) none of the above

198. All cut off angle cocks must be in _____ position except front side of loco and rear side of LV to ensure _____. (B)
(A) closed-open (B) open-closed
(C) isolate-open (D) none of the above

199. Empty / Load handle shall be kept in load position when the gross load is above _____ tones. (C)
(A) 45.5 (B) 44.5 (C) 42.5 (D) none of the above

200. DV isolating handle in vertical position indicates DV is in ----position. (A)
(A) Working (B) isolate (C) running (D) none of the above

201. DV isolating handle in horizontal position indicates DV is in----position. (B)
(A) Working (B) isolate (C) running (D) none of the above

202. Reduction in BP pressure causes _____. (C)
(A) Brake binding (B) wheel skidding
(C) Brake application (D) none of the above

203. Creation of BP pressure causes _____. (A)
(A) Brake release (B) wheel skidding
(C) Brake binding (D) none of the above

204. All _____ trains shall have Twin Pipe working. (B)
(A) Goods (B) Coaching
(C) siding (D) none of the above

205. Within station limits where gradient is steeper than 1 in 600, to detach the loco of goods train without BV _____ No. of wagons hand brakes are to be put ON. (B)
(A)6 (B) 12 (C) 18 (D) none of the above

206. To detach loco of a goods train having BOX N / BCN / BRH, etc., minimum _____ no. of vehicles hand brake are to be applied from both ends excluding BV. (B)
(A) 15 (B) 10 (C) 5 (D) 12

207. When SM / Station staff does not exchange „all-right" signals, the LP shall give _____ engine whistle code. (C)
(A) Two long (B) two long, one short
(C) Two short (D) none of the above

208. Even though FSS is in OFF position, still if a LP of an incoming train stops at FSS and gives - 0 - 0 engine whistle it indicates _____. (B)
(A) Train stalled (B) Train arrived incomplete
(C) Train running late (D) none of the above

209. Engine whistle code 0 0 - indicates _____. (C)
(A) Train arrived incomplete (B) Train stalled
(C) Less vacuum/Air pressure (D) none of the above

210. When engine whistle fails on run, after clearing block section, the loco shall be attended or it shall be _____. (B)
(A) Worked further (B) replaced
(C) Removed (D) none of the above

211. AC SLR guard shall show all right signal to SM by ------ (A)
(A) Putting on /off side lights (B) no exchange
(C) Showing green light (D) none of the above

212. In token less section SM shall arrange points man to show all right signals for a run through train from _____side. (B)
(A) Station building side (B) off side
(C) No exchange (D) none of the above

213. When a train is held up at FSS for more than _____ minutes, the LP shall depute Asst LP to go to station. (D)
(A) 10 (B) 12 (C) 15 (D) 5

214. While at a station, the LP is to obey _____ orders. (B)
(A) CLI (B) SM (C) GUARD+SM (D) none of the above

215. Normally, the material train shall be ordered by _____ time only. (B)
(A) Night (B) Day (C) summer (D) none of the above

216.Material train shall be ordered to work with the permission of --------- (C)
(A) DME (B) DSO (C) DRM (D) none of the above

217. The BPC of a material train with UIC Bogie.Airbrake stck is valid for _____ days subject to examination of the train by TXR once in _____ days. (A)
(A)30-15 (B) 15-5 (C) 25-10 (D) none of the above

218. The required brake power of material train shall not be less than ---------- (C)
(A) 100% (B) 80% C) 90% (D) none of the above

219. The required brake power of passenger carrying train shall be _____ and for a CC rake goods train shall be _____ at originating station. (A)
(A) 100%-100% (B)85%-100% (C) 90%-50% (D) none

220. Whenever BPC is invalid or while clearing a stabled load, before starting _____ check shall be conducted for which _____ time is given for one four wheeler. (C)
(A) Brake power-60 seconds (B) GDR- 150 Seconds
(C)) GDR-30 seconds (D) none of the above

221. While stabling a material train at a station, the responsibility lies with the--- (B)
(A) LP (B) SM/Guard (C)Points man (D) none of the above

222. To dispatch the material train for working in the block section ATP under the system of working and _____ should be given. (A)
(A) Memo counter signed by Guard (B) Memo from PWI

(C) Memo from SS (D) none of the above

223. Dividing of material train in the block section where the gradient is steeper than _____ is prohibited. (C)
(A) 1 IN 150 (B) 1 IN 200 (C) 1 IN 100 (D) none

224. The maximum speed of TTM is _____ kmph. (B)
(A) 15 (B) 40 (C) 25 (D) none of the above

225. TTM is permitted to work in the block section only during --------- (C)
(A) Day (B) Night (C) Line block (D) none of the above

226. NIL caution order form no. is _____. (A)
(A) T/A 409 (B) T/409 (C) T/512 (D) none of the above

227. Caution order form no. is _____. (A)
(A) T/ 409 (B) T/409 (C) T/512 (D) none of the above

228. All existing caution order shall be brought forwarded by SM on every ------- (B)
(A) Night (B) Day (C) mid night (D) none of the above

229. On completion of caution order book, it shall be preserved for a period of ------- (A)
(A) 12 months (B) 15 months (C) 6 months (D) 18 months

230. As per G&SR control of shunting is done through ---------,-----,------ and---------. (C)
(A) detonating-flare signals (B) visible signals
(C)Fixed signals, hand signals-verble instructions (D) none of the above

231. For shunting purpose _____, _____ and _____ signals are not to be used. (B)
(A) starter, Warner-distant (B) outer, home-LSS
(C) Calling on, co-acting-distant (D) none of the above

232. While shunting wagons containing explosives, the supervision for shunting shall be done by _____. (B)
(A) Guard (B) SS
(C) Points man (D) none of the above

233. While backing a full train from one line to another via main line the shunting supervision is done by _____. (B)
(A) Guard (B) SS
(C) Points man (D) none of the above

234. Shunting speed of explosive and POL products shall be -------- kmph. (C)
(A) 10 (B) 5 (C) 8 (D) none of the above

235. For the purpose of shunting the points, which are not protected by signals, they must be locked by _____ or _____ method. (B)
(A) Electrical-electronic (B) padlocking-clamping
(C) mechanical-electrical (D) none of the above

236. While performing shunting with passenger running trains, the shunting engine or train engine with or without slip coaches, before coming on to the formation it should be stopped _____ meters before the formation. (B)
(A) 45 (B) 20 (C) 45 (D) 30

237. To receive a train on to an obstructed line, the LP shall be given _____ Authority where there is no calling ON signal and signal post telephone. (B)
(A) T/369.3(b) (B) T/509
(C) T/512 (D) T/511

238. While received a train on obstructed line, SM shall arrange to post one competent Railway servant to show _____ hand signal from _____ meters before the obstruction. (C)
(A) Red-30 (B) Green-35 (C) Stop-45 (D) none of the above

239. To dispatch a train from unsignalled line where tangible authority is not given as ATP, _____ authority should be given. (A)
(A) T/511+PHS+ATP (B) T/512

(C) T/409 (D) none of the above

240. To start a train from a station having common starter signal, in addition to ATP _____ authority should be given. (A)
(A) T/512 (B) T/511 (C) T/409 (D) T/509

241._____ Gradient is considered as dangerous for shunting roller bearing wagon and _____gradient for non roller bearing wagons. (A)
(A) 1 in 400-1 in 260 (B) 1 in 100-1 in 150
(C) 1 in 300- 1 in 450 (D) none of the above

242. When 10 BOX wagons are shunted having Transition Couplers, the shunting impact speed should not exceed -----kmph. (B)
(A) 10-15 (B) 2-3 (C) 20-25 (D) none of the above

243. Maximum Hand shunting speed is _____ kmph. (C)
(A) 10 (B) 15 (C) 5 (D) none of the above

244. When „Lurch" is reported by LP, the SM shall issue caution order restricting the speed to _____ kmph. (A)
(A) 10 (B) 15 (C) 8 (D) none of the above

245. When „Lurch" is reported on DL by LP, SM shall give caution order for adjacent line trains to proceed with _____. (A)
(A) Special caution order (B) memo
(C) PWI (D) none of the above

246. Rail fracture of less than 30 mm, the speed of first train shall be ____ kmph, the speed of second and subsequent trains shall be--------kmph. (A)
(A) 10-15 (B) 25-8 (C) 15-40 (D) none of the above

247. Rail fracture of more than 30 mm or multiple fractures, certification shall be given by _____ and above rank. (C)
(A) DEN (B) AEN (C) SSE.P.Way (D) none of the above

248. During TIC on DL _____ is the ATP authorizing the LP to proceed with a restricted speed of _____ kmph. (A)
(A) T/C 602-25/10 (B) T/D 609-15/8
(C) T/A 611-10/8 (D) none of the above

249. When enquiry is made for more than one train _____ authorities are required for the light engine which is going to open communication. (B)
(A) T/C 603+T/D611 (B) T/B 602+T/E 602
(C) T/A 602+T/G 645 (D) none of the above

250. When trains are dealt on T/C 602, the time interval between two trains shall be _____ minutes. (B)
(A) 60 (B) 30 (C) 45 (D) none of the above

251. During TIC on SL / DL and TSL working except _____ signal, all other signals can be taken OFF. (C)
(A) FSS (B) Starter (C) LSS (D) none of the above

252. After opening the communication, the train speed shall be---------. (A)
(A) Booked speed (B) MPS
(C) Cautious (D) none of the above

253. After opening communication _____ is ATP for the Light engine to come back. (A)
(A) T/G 602/T/H 602 (B) T/A602/T/I 609
(C) T/H 602/T/H 611 (D) none of the above

254. If enquiry is made for more than one train and reply is also received, the second train can be allowed to go with a restricted speed of --------kmph. (A)
(A) 25/10 (B) 15/8 (C) 10/5 (D) none of the above

255. After block telephone, _____ tele phone is the authorized means of communication in absolute block system. (B)
(A) VHF (B) Station to station fixed telephone (C) Walkie-Talkie (D) Control

256. Light engine, which is going for opening communication, shall proceed with a restricted speed of _____ kmph. (B)
(A) 25/15 (B) 15/10 (C) 20/8 (D) none of the above

257. When there is even flow of trains, enquiry and reply messages are sent through _____. (A)
(A) Train LPs/guards (B) SS (C) Points man (D) none of the above

258. On T/E 602 _____ number of trains enquiry can be made. (A)
(A) More than one (B) less than one (C) One (D) none of the above

259. Form No. of UP/DN CLCT is _____. (A)
(A) T/G 602/T/H 602 (B) T/A602/T/I 609
(C) T/H 602/T/H 611 (D) none of the above

260.When motor trolley / tower car is sent for opening communication, it shall be accompanied by _____. (C)
(A) PWI/TI (B) SSE.PWI/SI
(C) Guard/ASM (D) none of the above

261. When goods train is dispatched on T/J 602 the speed shall not exceed _____ kmph. (C)
(A) 25/8 (B) 45/25
(C) 15/8 (D) none of the above

262. During TSL working, the speed of first train shall be ____ kmph. (A)
(A) 25 (B) 50 (C) 15 (D) none of the above

263. During TSL working the speed of second and subsequent trains ----shall be (A)
(A) Booked speed (B) 25 KMPH (C) 15 KMPH (D) 45 KMPH

264. _____ is the authority for trains working on TSL working. (B)
(A) T/A 602 (B) T/D 602
(C) T/C 602 (D) T/B 602

265. During TSL working the block instrument shall be kept and locked in _____ position. (A)
(A) TOL (B) SOL (C) POL (D) none of the above

266. If LP enters block section without authority and subsequently sends his Asst LP with a memo to SM in rear / SM in advance that SM shall give _____ and _____ respectively. (B)
(A) Signals-Signals (B) PLCT-Caution order
(C) Memo-signals (D) none of the above

267. When explosion sound is heard by SM and location is not known and light engine could not be sent for testing purpose, the whole train shall be allowed to go with a restricted speed of _____ kmph. (B)
(A) 15 (B) 10 (C) 25 (D) 40

268. In case of fire accident in a passenger train, the first objective to be achieved is to _____. (C)
(A) Clear the section (B) detach the vehicle
(C) Safety of the passengers (D) ask for relief

270. The light engine which is coming on T/609 to pick up the second portion shall come with a restricted speed of _____ kmph. (C)
(A) 40 (B) 15 (C) 25 (D) 50

271. One important essential required for automatic block system is that it shall be provided with continuous _____or _____. (B)
(A) track-signals (B) track circuit-axle counters
(C) points-signals (D) none of the above

272. The line between the block stations, when required, be divided into series of _____ sections. (A)
(A) Signalling (B) Track
(C) Continuous (D) none of the above

273. Fully automatic stop signal is identified by _____ board. (C)
(A) S- marker (B) illuminated A-marker
(C) A-Marker (D) none of the above

274. Semi-automatic stop signal is identified by _____ light. (B)
(A) S- marker (B) Illuminated A-Marker
(C) A-Marker (D) none of the above

275. All Guards, LPs, Asst LPs, Motor men who are required to work in automatic block system shall undergo one day intensive training a certificate shall be given once in _____months. (C)
A) 12 (B) 5 (C) 6 (D) 36

276. When LPs finds an automatic stop signal at ON, after Stopping for _____ minutes Day / Night shall proceed with a restricted speed of _____ kmph up to next stop signal or up to the obstruction. (A)
(A) 1/2-10 (B) 2/4-15/8 (C) 5/10-12/8 (D) 3/4-25/10

277. The automatic stop signal shall not assume OFF aspect unless the line is clear not only up to the next automatic signal but also for an adequate distance of not less than _____ meters. (C)
(A) 240 (B) 150 (C) 120 (D) 180

278. After passing an automatic signal at ON the LP of the following train hauled by any locomotive shall ensure that a minimum distance of _____ meters is maintained between his train and preceding train. (B)
(A) 240 (B) 150 (C) 120 (D)180

279. The minimum equipment of fixed signals in automatic system on SL shall be _____ and _____ signals. (B)
(A) Distant-Home (B) Automatic-Semi automatic
(C) home-LSS (D) Outer- Home

280. The gate signal in automatic system is identified by---------- (D)
(A) A-Marker (B) P-Marker
(C) G-Marker (D) illuminated A-Marker & G-Marker

281. When LSS failed on SL automatic block system _____ is the ATP for the train and the first train, which shall go with a restricted speed of _____ kmph. (A)
(A) PLCT-25 (B) T/602-15
(C)T/A602-45 (D) none of the above

282. In automatic block system single line, when LSS fails, _____ authority is given to the Loco Pilot (A)
(A) PLCT T/A 912 (B) T/D-912
(C) T/C912 (D) T/P 912

283. During prolonged failed of signals on DL the authority given in automatic signalling is _____ which authorizes the LP to go a restricted speed of _____ kmph. (B)
(A) T/A912-30 (B) T/D912-25
(C)T/C912-45 (D) T/B912-60

284. When signals and communication fails on DL, the authority given to the LP is _____. (A)
(A) T/B912 (B) T/C912 (C) T/D912 (D) T/A912

285. The time interval between two trains during signal and (C)

communication failure on DL shall be _____ minutes.
(A) 30 (B) 25 (C) 15 (D) 45

286. The light engine, which is going to open communication, shall proceed with a restricted speed of _____ kmph. (D)
(A) 12-15 (B) 10-8 (C) 15-20 (D) 15-10

287. During TSL working in automatic section the first train proceeding on right line when signal and communication are working shall proceed on _____ authorities. (B)
(A) T/D 912 (B) PLCT+T/A912 (C) T/C912 (D) T/B 912

288. During TSL working when signals and communication are working the second and sub-sequent train proceeding on right line shall proceed on--------. (C)
(A) Cautiously (B) whistling (C)signalaspects (D) written memo

289. All trains from wrong line during TSL working shall proceed on-------asATP. (D)
(A) Written memo (B) caution order
(C) cautiously (D) PLCT

290. When train meets with an accident in automatic block system on DL and the adjacent line is obstructed, the adjacent line shall be protected as per _____ rule. (D)
(A) GR 6.06 (B) GR6.12 (C) GR6.09 (D) GR 6.03

291. In Automatic block system when the train is unable to proceed further due to accident or obstructed or due to the failure of loco, the Guard shall protect the train in rear by placing one detonator at _____ meters and two detonators at _____ meters from the point of obstruction. (A)
(A) 90-180 (B) 120-150 (C) 150-300 (D)120-180

292. To stop of a train out of course in automatic block system _____ no. of detonators are placed at _____ meters from the end of platform in direction of the train. (B)
(A) 3-120 (B) 2-180 (C) 1-120 (D) 4-600

293. In automatic block system to dispatch a relief loco / train into the occupied block section _____ is given as the ATP for the relief loco / train. (C)
(A) T/A 912 (B) T/B 912 (C) T/C 912 (D) T/D 912

294. In automatic block system Relief loco / train shall proceed with a restricted speed of ____ kmph. (D)
(A) 25/15 (B) 45/25 (C) 60/30 (D)15/10

295. Secunderabad, Kachiguda, Falaknuma, Moula Ali, Vijayawada and Krishna Canal stations are known as stations. (C)
(A) Flag (B) Non-Block (C) Reporting (D) Notice

296. Engineering indicators are (a) _____ (b) _____ (c) _____ (d) _____ (A)
(A) Caution Indicators, Speed Indicators, Stop Indicators, Termination Indicators
(B) Coasting Boards, Warning Boards, Whistle boards, LV boards
(C) A&B
(D) none of the above

297. Caution indicator is located at _____ meters before the spot on BG. (B)
(A) 1300 (B) 1200 (C)1500 (D)2000

298.Stop indicator is located _____ meters before the stop dead and proceed speed restriction. (C)
(A) 50 (B) 20 (C) 30 (D) 60

299. After stopping at the stop indicator, LP shall sign in the ER-7 (C)

book and proceed with _____ kmph.

(A) 15 (B) 20 (C) 8 (D) 25

300. “W/L” board before level crossing shall be provided at distance of------metres. (A)

(A) 600 (B) 1200 (C) 1300 (D)1600

301. When water over tops the rail _____ shall certify by walking over and probing that the track is safe and allow the train to go at a speed not exceeding _____ kmph. (A)

(A) PWI-8 (B) DEN-15 (C) SrDEN-20 (D) Sr DOM

302.Neutral section lies between _____ (C)

(A) Two Block Sections (B) Two Station Sections

(C) Two Sub-Stations (D) Two Junctions hall

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(02) Duties of Loco Inspectors (05) Knowledge of Control Organization

1. The duties of Loco inspector are summarized as under____
a)Inspection b) Field work c) General d) All of the above (d)

2. Loco Inspector has to foot plate inspection of the Locomotive for monitoring ____
a) Performance of Crew b) Performance of Locomotive c) a& b d) None of the above (C)

3. Loco Inspector has to conduct joint signal sighting with _____
a) Traffic Inspector b) Signal Inspector C) a &b d) None of the above (c)
4. Loco Inspector duty on foot plate inspection during day and night to------ (c)
a) To check the abnormalities on Line b) Rectification of abnormalities c)a &b d) None of the above
5. Loco inspector has to inspection the Running Room for ____ (a)
a) Facilities available for Running Staff b) Facilities available for Running Room bearers

c)Facilities available for cooks d) none of the above

6)Loco inspector will collect and scrutinise the speedometer charts regularly for (a)

a) 100% for Passenger trains b)35% for Goods trains c) 50 % of Goods trains d) 75% of passenger trains

7. Loco Inspector has to conduct Joint check of_____ (d)

a) Loco failures b) Loco met with accident c) brake power of trains losing time d) all of the above

8. Loco Inspector has to conduct/coordinate fact finding enquiries for (d)

a) DAR b) investigate cases of accidents involving Locomotives c) SPAD d) all of the above

9. Periodicity of the signal sighting committee in absolute block system _____(a)

a) Once in 3 months b) once in 2 months c) once in one month d) once in 6 months

10. Loco inspector has arrange to issue competency certificate to Running staff for working of __(b)

a) Loco b) Automatic section c) Absolute block section d) none of the above

11.Duty of Instructor___ (a)

a) To prepare course material as per Rly Board module
b) To prepare course material as per Zonal Hqtrs
c) To prepare course material as per Divisional Instructions
d) None of the above

12. Full form of AAC_____ (a)

a)Average annual consumption b)Average accountable consumption

c) Approximate annual consumption d) Average annual comparison

13.What is the form F-12_____ (a)

a) Supply HSD oil to running Locos b) Oil tank wagons placement Memo c) daily stock register

d) none of the above

14.Decanting of HSD oil at RCD is to be done by_____ (d)

a) CLI (fuel) b) OS (fuel) c) SSE d) a&b

15. Whether dip readings of oil tank lorries taken by (d)

a)CLI(fuel) b) OS(fuel) c) SSE (fuel) d) a&b

16. Stock verification and inspections in RCD done by Sr DEE------ (a)

a) once in year b)twice in year c) Thrice in year d) None of the above

17. To identify the water content in HSD oil_____tests to be conducted (d)

a) Water soluble test b) Crackling Test c) Bucket Test d) a & b

18) Duties of Fuel Inspector_____ (d)

a) Decanting of RTT's b) Keeping liaison with Oil companies

c) To keep inventory and attend the maintenance problems d) all of the above

19. What are the measuring instruments available at RCD (d)

a) Dip Stick b) Dip tape c) Flow meter d)all of the above

20. Engine links and crew links are prepared by (c)

a) CLI & Instructor b) HOER clerk c) CLI d) TI & CLI

21. Ex-cadre post is (a)

a) Instructor b) Fuel inspector C) CLI d) all the above

22. KMA allowance is allowed for (d)

a). Instructor b) Fuel inspector c) CLI d) b & c

23. In charge of divisional control office is

a. Sr. DEE b. Sr. DOM c. Sr. DEN d. Sr. DPO

Ans: b

24.Loco pilot should report mid section Loco failures to

a.TPC b. TLC/PCOR c. Section controller d. Punctuality controller

Ans: b

25. Unusual occurrences pertain to Loco are report to zonal hqrs by

a. TLC b. CTLC c. Punctuality controller d. none

Ans: a

26. Cooling period of TLC/PCOR is

a. 3 months b. 3 years c. equivalent to tenure period d. no limit

Ans: c

27. Engine statistics are maintained at

a. divisional control office b. statistical department c. zonal control office d. Account department

Ans: b

28. ART/SPMRV ordered by

a. divisional control office b. Hq control office c. CRS d. PCSO

Ans: a

29. Load tables of freight trains are prepared & sent to hqrs by

a. Sr. DOM b. Sr. DEE/TRSO c. Sr. DFM d. a & b

Ans: d

30. WTT of SC division are prepared & issued by

a. Sr.DOM b. Sr. DEE/TRSO c. a & b d. by Hqrs.

Ans: d

04. Knowledge in Crew Management System

1	CMS is aimed to provide _____ a Position of crew at HQ/OS b Maintain status wise records c PR,maintaining LR,PME details d All of the above Ans: d
2	What is TA_____ a Traffic Apprentices b Traffic Advice c Train AcknowledgementTrain Application d None of the above Ans: b
3	CMS can work in _____ a Online mode b Offline mode c Both A and B d None of the above Ans: c
4	CMS application works on _____ network a FOIS b Internet c Railnet d Both A and B Ans: a
5	CMS reports can be viewed on _____ network a FOIS b Internet c Both A and B d None of the above Ans: c
6	Multiple TA is applicable for _____ a working b spare c Spare/working d None of the above Ans: c
7	Browser for viewing the CMS reports on Internet. a cms.indianrail.com b cms.indianrailways.gov.in c cms.indianrail.gov.in d 10.60.200.168/cms report Ans:c
8	For SUP/TNC the maximum number of users _____ a 19 b 15 c 25 d 17 Ans: b
9	User password should not contain_____ a User name and user ID b Crew ID c Special Character

	d All the above Ans: d
10	_____is responsible for Crew booking in CMS a TNC b Supervisor c Both d CCC Ans: a
11	Routes can be created at _____ a Depot level b Division level c Zonal level d CRIS/NDLS Ans: d
12	Who is authorized for crew grading. a CCC b CLI c Any one of A & B d Branch officer Ans: b
13	User password contains_____ digits a 5 b 6 c 7 d 8 Ans: b
14	Password validity period____ months a 3 b 5 c 6 d 4 Ans: c
15	When crew booked in coal pilot section KIOSK is directed to signoff in _____ a Normal b Manual data entry c Any one of A & B d Not required to sign-off in KIOSK Ans: b
16	In CMS LR due time can be configured at _____ level as per logic. a Zonal level b Division level c Lobby d Both A & B Ans: b
17	Road Learning is to be updated in CMS through _____ type of Duty. a Road Learing b Working c Spare d None Ans: a
18	_____ no. of round trips to performed for updation of Road Learning in CMS. a 3 (2 Day / 1 Night)

	b 4 (2 Day / 2 Night) c 3 (1 Day / 2 Night) d 6 (3 Day / 3 Night) Ans: a
19	_____ no. of round trips to performed for updation of Road Learning in Automatic Section in CMS. a 3 b 4 c 2 d 6 Ans: d
20	LR details of a crew in a route has to be checked in_____ a Biodata –LocoComp b Biodata - Road Learning c Biodata -others d Biodata -training Ans: b
21	For cancellation of TA_____ is the mandatory. a Time of cancellation b Entering the proper reasons c Ordering time d. Crew booked time Ans: b
22	Process of sign on crew will be shifted to new TA is called as___ a Swapping of crew b Swapping of TA c Resetting of TA d Both B & C Ans: b
23	What is FAFO? a First Arrival First Out b First Available First Off c First Available First Out d First Arrival First Off Ans: c
24	Parameters to be checked in “Fetch crew as per Rule” is _____ a PME and G & SR b Traction, Tech training c LR, Rest and Loco competency d All of the above Ans: d
25	Supervisor SignON can be done on behalf of _____ a CCC b Crew c Branch officer d Both A and B Ans:a
26	If crew failed in BA test, then the crew status goes to_____ a SYSLT b SYSRF c SYSBAF d. SYSNF Ans:c

27	Difference between “Train arrival” and “Sign ON” is called _____ a PAD b PDD c PCDO d None of the above Ans:a
28	Difference between “Train Departure” and “Sign ON” is called _____ a PAD b PDD c PCDO d None of the above Ans: ca
29	REFD indicates____ a Reference Drawing b Reference Drafting c Refresher Diesel d None of the above Ans: c
30	SFCM indicates____ a Safety Camp b Safety Meeting c Safety Counselling d None of the above Ans: a
31	PRTG indicates____ a Periodical training b Promotional training c Practical training d None of the above Ans: c
32	If the crew reports late by 30 mins from the TA ordering time, crew status turns to ___ a SYSRF b SYSNF c SYSLT d Pending Ans:c
33	The circulars are updated in _____ only a Lobby configuration b Division configuration c Zonal configuration d Branch officers Ans: b
34	In CMS conservation of energy under regeneration of energy will be captured only for run with _____ LOCOs a Conventional b 3 Phase c Both A and B d Tower car Ans: b
35	While working as Co-Loco Pilot in coaching trains_____ option to be selected in EMR status of energy details in CMS. a Meter Working

	b Meter Defective c Co-Pilot d None of above Ans: c
36	Energy meter reading should be recorded during _____ . a Changing of Load b Change of Service c Change Loco/Section (Up &DN) d All the above Ans: d
37	During signoff MU or an additional LOCO energy reading will be fed on _____ a KIOSK b Manual data entry (CTR) c Not possible d Both in KIOSK and CTR feeding Ans: d
38	Who monitor the evaluated performance of LOCO crew in CMS a LI b CCC c CC/ALF d Both A and B Ans: a
39	Crew monitoring details can be updated through_____ a KIOSK b Registered Mobile c Chalk Dal d All the above Ans: d
40	In which report CLI can monitor his nominated crew gradation/counseling particulars? a Manage- Loco Inspector b Crew-Loco Inspector c Nonrun- Loco Inspector d Run- Loco Inspector Ans: b
41	CLI nomination can be modified at _____ field in CMS application a Freight – Bio data b Coaching – Bio data c Bio data – Others d Shunters – Bio data Ans: a
42	In _____ report we can check crew working longer hours a RUN- SignON >9 hours b Crew - SignON X hours c Manage - SignON X hours d. MISC - SignON X hours Ans: a
43	To know the Status of a particular crew _____ is required. a Crew ID b Crew Name c Emp No. d None of the above

	Ans: a
44	Status of a crew can be view by selecting _____ . a Zone-Division-Depot and Crew Name b Zone-Division-Depot and EMP No c Both a & b d None of the above Ans: c
45	Crew not returned to Hqrs details can be view in _____ report. a RUN- Crew Not Return To HQ Report b Manage - Turnaround Report c Both a & b d None of the above Ans: a
46	Abnormalities notice during run can be enter by _____. a Crew b CLI c Both a & b d None of the above Ans: c
47	Periodical course details can be viewed _____. a Crew – Periodical Courses b Manage - Periodical Courses c Run- Periodical Courses d None of the above Ans: a
48	Periodical course details can be viewed _____. a Crew – Periodical Courses b Manage - Periodical Courses c Run- Periodical Courses d None of the above Ans: a
48	Status of Crew of a lobby is avaialbe in_____ report. a Crew Details b Crew Accountal c Availability Summary d None of the above Ans: b
49	Status of Crew of with personal mobile report is avaialbe in_____ report. a Crew – Personal Mobile b Manage - Personal Mobile c Run- Personal Mobile d None of the above Ans: a
50	Integrated BA device test in KIOSK to be tested daily with_____. a Supervisor ID b Crew ID c Device testing ID d None of the above Ans: b

(06) Knowledge of preventive maintenance schedule of locomotives

AC loco maintenance schedule	
Q.NO.	subject
1	Trip inspection of Conventional AC loco (coaching) to be carried out for every a. 3500 KMs b. One trip c. 3000 KMs d. b or c (whichever is later) Ans: d
2	periodicity of IA schedule for AC conventional coaching locos a. 60 days b. 45 days c. 90 days d. 30 days Ans: a
3	IC2 schedule periodicity for 3 phase AC locos a. 270 days b. 240 days c. 300 days d. None Ans: d
4	Trip inspection schedule periodicity of WAG9 loco a. 3000 Kms b. 45 days c. 90 days d. 30 days Ans: b
5	IT-1 schedule periodicity of WAG9 loco a. 3000 kms b. 45 days c. 90 days d. 30 days Ans: b
6	time duration of IT-2 schedule for coaching 3-phase loco a. 2 hrs b. 4 hrs c. 90 days d. 30 days Ans: a
7	POH Schedule periodicity of conventional coaching AC loco is a. 6 years b. 10 years c. 12 lac Kms d. 9 years Ans: a
8	MOH is re-designated as a. IOH b. TOH

	c. POH d. ROH Ans: b
9	Periodicity of TOH of conventional coaching loco a. 540 days b. 720 days c. 2 Years d. 600 days Ans: a
10	Periodicity of TOH of WAG9 loco a. 540 days b. 720 days c. 2 years d. 600 days Ans: c
11	Duration of TOH of conventional coaching loco a. 4 days b. 6 days c. 3 days d. One week Ans: b
12	Schedule sequence of AC 3 phase locos a. IT 1 – IA b. IT1-IT2 c. IT2-IA d. IT3-IB Ans: a
13	Normally POH of conventional AC locos carried out at a. PER b. BSL c. KPA d. All the above Ans: d
14	As per latest RB guidelines (issued on 31.07.20) the trip schedule of all type of locomotives to be under taken at a. Any of loco shed over zone only b. Any of Trip shed over zone only c. Any of loco shed/trip shed of Indian Railways d. Only at trip shed of ownership division Ans: c
15	Schedule sequence of convention goods AC locos a. Minor-TOH-Minor-TOH-Minor-IOH b. Minor-IOH-Minor-TOH-Minor-POH c. a & b d. none Ans: c

DSL Loco maintenance schedule:

1	Monthly schedule periodicity of Alco loco is ----- a. 30 days b. 45 days c. 60 days d. 90 days Ans: c
2	Half yearly schedule periodicity of ALCO Loco is ----- a. 12 months b. 18 months c. 6 months d. 24 months Ans: a
3	3 yearly schedule periodicity of ALCO locos is --- a. 24 months b. 36 months c. 48 months d. 30 months Ans: c
4	POH periodicity of ALCO locos is --- a. 96 months b. 72 months c. 84 months d. 60 months Ans: a
5	Name of schedule of Half yearly of ALCO locos a. M-12 b. M-24 c. M-4 d. M-6 Ans: a
6	name of Fortnight schedule inspection of ALCO locos is a. T1 b. T2 c. FN d. Trip inspection Ans: b
7	Name of Trip inspection of ALCO locos is a. T1 b. T2 c. Weekly/Trip d. FN Ans: c
8	Name of POH schedule inspection of ALCO locos is a. M-96 b. M-72 c. M-84 d. 8 years inspection Ans: a
9	T2 schedule periodicity of WDM3D having Roller suspension bearing is a. 15 days b. 20 days c. 30 days d. 40 days Ans: d
10	T1 periodicity of WDM 2 locos with plain suspension bearing is a. 15 days b. 20 days c. 30 days d. 40 days Ans: a
11	T1 periodicity of WDM3A & WDG 3A locos with plain suspension bearing is a. 15 days b. 20 days c. 30 days d. 40 days Ans: a
12	periodicity of Trip schedule inspection of HHP locos (RDSO MP Misc. 285 of Aug'12) is a. 30 days b. 45 days c. 90 days d. 15 days Ans: a
13	Periodicity of POH schedule inspection of HHP locos (Ref: RDSO MP Misc. 285 of Aug'12) is a. 9 years b. 12 years c. 18 years d. 16 years Ans: c
14	T1 periodicity of ALCO locos fitted with MBCS is a. 15 days b. 20 days c. 30 days d. 40 days Ans: c
15	T1 periodicity of ALCO locos fitted with additionally REMMLOT is

	a. 15 days b. 20 days c. 30 days d. 40 days Ans: d
16	T1 periodicity of ALCO locos fitted with CCE, FPM, DEBM is a. 15 days b. 20 days c. 30 days d. 40 days Ans: d
17	Monthly schedule periodicity of locos fitted (ALCO) with REMMLOT is after ---- a. 45 days b. 80 days c. 65 days d. 90 days Ans: b
18	Quarterly schedule periodicity of locos fitted (ALCO) with REMMLOT is after ---- a. 160 days b. 180 days c. 145 days d. 400 days Ans: a
19	Half yearly schedule periodicity of locos fitted (ALCO) with REMMLOT is after ---- a. 160 days b. 180 days c. 145 days d. 400 days Ans: d
20	Quarterly schedule periodicity of locos fitted (ALCO) with CCE, FPM, DEBM & REMMLOT is after ---- a. 160 days b. 180 days c. 145 days d. 400 days Ans: d
21	1400HP BG DEMU periodicity of Trip schedule of Engine, Air brakes (ref. RDSO MP Misc. 157 (rev.04) dt. Aug'20) is a. 15 days b. EKM 3500 c. a or b whichever is earlier d. none Ans: c
22	1400HP BG DEMU periodicity of Monthly schedule of engine, Air brake (ref. RDSO MP Misc. 157 (rev.04) dt. Aug'20) is a. 30 days b. 30 +/- 3 days c. 30 +/- 7 days d. 30 +/- 1 day Ans: b
23	1400HP BG DEMU periodicity of yearly schedule of Engine, Air brakes (ref. RDSO MP Misc. 157 (rev.04) dt. Aug'20) is a. 360 days b. 360+/-1 month c. 360+/-20 days d. 360+/-15 days Ans: c
24	1400HP BG DEMU periodicity of Eighteen monthly schedule of Engine, Air brakes (ref. RDSO MP Misc. 157 (rev.04) dt. Aug'20) is a. 540 days b. 540+/- 30 days c. 540 +/- 15 days d. 540 days +/-45 days Ans: b
25	1400HP BG DEMU periodicity of Half yearly schedule of Engine, Air brakes (ref. RDSO MP Misc. 157 (rev.04) dt. Aug'20) is a. 180 days b. 180 +/-10 days c. 180+/- 5 days d. 180 +/- 15 days Ans: b

(06) Knowledge of Pump motors & hydraulic

Q.NO.	subject
1	Overall efficiency of centrifugal pump is the ratio of a. Energy available t the impeller to the energy supplied to the pump by the prime mover b. Actual work done by the pump to the energy supplied to the pump by the prime mover c. Energy supplied to the pump to the energy available at the impeller d. Mano-metric head to the energy supplied by the impeller per Newton of water Ans: c
2	Multi stage centrifugal pumps are used to a. Give high discharge b. Produce high heads c. Pump viscous fluids d. All the above Ans: b
3	Discharge of a centrifugal pump is a. Directly proportional to N b. Inversely proportional to N c. Directly proportional to 2N d. Inversely proportional to 3N Ans: a
4	In a reciprocating pump, air vessels are used to a. Reduce the flow b. Increase the delivery head c. Smoothen the flow d. Reduce the acceleration head Ans: d
5	A turbine is a device which converts a. Kinetic energy in to mechanical energy b. Mechanical energy in to hydraulic energy c. Hydraulic energy into mechanical energy d. None of the above Ans: c
6	An impulse turbine is used for a. Low head of water b. High head of water c. Medium head of water d. High discharge Ans: b
7	pump flow measured in a. GPM b. LPM c. GPH d. LPH Ans: a
8	the multiplication factor used ------- to convert Litres into Cubin Centimetres

	a. 1000 b. 10000 c. 100000 d. 1000000 Ans: a
9	The multiplication factor used ------ to convert Watts into Horsepower a. 0.01341 b. 0.001341 c. 0.0001341 d. 0.1341 Ans: b
10	multiplication factor used---- to convert square feet into square inches a. 122 b. 100 c. 144 d. 114 Ans: c
11	PSI full form a. Pressure per square inch b. Pounds per square inch c. Pressure scale indicator d. None of the above Ans: b
12	Division factor used ---- to convert BTU per minute to Horsepower a. 42.44 b. 44.24 c. 44.44 d. 42.22 Ans: a
13	multiplication factor used ----- to convert PSI into Inches of Mercury a. 2.036 b. 2.306 c. 2.630 d. 2.360 Ans: a
14	Division factor used ---- to convert Inches into Microns a. 400000 b. 0.00004 c. 4000000 d. 0.0000004 Ans: b
15	The intensity of pressure expressed as a. N/m2 b. N/Cm2 c. N-m2 d. N-mm2 Ans: a

(07) Knowledge in RCDs

RCD	
1	RTT full form a) Rail train tankers b) Road truck tankers c) Rail tankers train d) None Ans: b
2	Vent hole cover to be kept ------ at the time of taking dip a) Open b) Close c) Open & close once d) None Ans: a
3	Normally RTT should be decanted a) While fueling to locos b) Day time c) Night time only d) Not specified Ans: b
4	Painting of tanks done by a) Aluminium b) White paint c) a or b d) yellow paint Ans: c
5	Fuel meters are a) Negative displacement type b) Positive displacement type c) Neutral type d) None Ans: b
6	Calibration of flow meters done for a) Six monthly b) Yearly c) Two years d) 10 years Ans: b
7	Calibration of flow meter done by a) Railway administration only b) Oil company only c) Out side agency d) None Ans: b
8	Changing of Flow meters a) 15 years after installation b) Dispensing of 4 lakh kilo liters c) a or b d) every 4 years Ans: c

9	The supplier will prepare a statement in Form No. ------ in respect of each bill and sent two copies to consignee and one copy to FA&CAO a) Form No.1 b) Form No.2 c) Form No.3 d) Form No.4 Ans: a
10	Form No.3 i.e., placement of tanks in the RCD prepared by a) RCD in-charge b) Transportation department c) Commercial department d) None Ans: b
11	In the event of sample showing contamination the impurities should be allowed to settle down for a period of a) 12 hrs b) 24 hrs c) 6 hrs d) 3 hrs Ans: b
12	Monthly statement of missing tank wagons of HSD oil filled in form Number---- a) Form No.10 b) Form No.9 c) Form No.11 d) Emergency Form Ans: b
13	Issue notice filled in Form No.----- to obtain signature of Loco pilot (for foreign railway locos) a) Form No. 10 b) Form No.1 c) Form No. 11 d) Form No. 13 Ans: c
14	Other than Loco purposes,------ form filled in RCDs a) Form No.11 b) Form No.1 c) Form No.12 d) Form No. 2 Ans: c
15	Tank register details are mentioned in form number ---- a) Form No. 11 b) Form No. 14 c) Form No. 15 d) Form No. 10 Ans: b
16	Stock ledger maintained in form number----- at RCD a) Form No. 11 b) Form No.14 c) Form No.15 d) Form No.10 Ans: c
17	Form No.13 prepared in -------

	a) quadruplicate b) triplicate c) duplicate d) original (single) Ans: b
18	Monthly HSD oil Account prepared in a) Form No. 15 b) Form No.14 c) Form No.16 d) Form No.10 Ans: c
19	Triplicate copy of Form No.2 sent to a) Commercial department b) For record at RCD c) FA& CAO d) Station Master Ans: d
20	A high Viscosity Index oil causes a) Less starting resistance b) High starting resistance c) No starting resistance d) Medium starting resistance Ans: a
21	Crackle test indicates a) Presence of water in oil b) Presence of wax in oil c) Presence of lubricant oil d) None Ans: a
22	Minimum number of sand buckets at Major RCD installation a) 8 b) 20 c) 14 d) 12 Ans: a
23	Joint inspection with Oil Firm's representative should be done a) Once in six months b) Once in a Quarter c) Once in a year d) Once in bi-monthly Ans: b
24	The higher the Neutralization number the larger in a) Ash content b) Acid content c) Evaporation loss d) Both a and b Ans: b
25	54.5 degree C is equal to a) 100 degree F b) 130 degree F c) 120 degree F

	d) none Ans: b

(08) Links (09) Utilization & Outage (10) Haulage capacity

Links, outage, engine statistics, pilot/handicapped sections, haulage capacity of locos etc.,	
01	Leave Reserve' for Loco inspector is provided in the category of a. LP goods b. LP Pass c. LP Mail & Exp. d. None of the above Ans: b
02	Crew links are to be prepared based on a. Sanctioned strength b. WTT c. Loco link d. Rake link Ans: b
03	Running staff review should be carried out for every a. Year b. Six months c. Two years d. None of the above Ans: b
04	Loco Outage means: a. Loco outage = Engine Hours for traffic use/ 24 hrs. b. Loco outage = Engine KMs for traffic use/24 hrs. c. Both a & b d. None of the above Ans: a
05	Basic duty of TLC/Power controller a. To arrange motive power b. To guide running staff c. Planning of locos to home shed for maintenance d. All the above Ans: d
06	Trip schedule periodicity of HHP locos (Diesel): a. 30 days b. 15 days c. 45 days d. None Ans: a
07	Diesel loco maintenance is based on a. Preventive maintenance schedule b. Reactive maintenance schedule c. Condition monitoring schedule d. None Ans: a
08	As per RDSO load table NO. G5H/8; Tractive effort of WAG5H (3 step weak field) GR-18:64 at speed 40 KMPH is a. 21.0 tonne b. 20.0 tonne c. 22.0 tonne d. 19.7 tonne Ans: a

09	As per RDSO load table NO. G7/2; Tractive effort of WAG7 (3 step weak field) GR-16:65 at speed 50 KMPH is a. 30.8 tonne b. 27.0 tonne c. 22.6 tonne d. None Ans: b
10	Trailing load in tonnes of WAG7 locomotive to haul BOXN air brake stock in 1 in 150 gradient in dry condition (ref. table G7/2 for one degree curve; GR 16:65). a. Negotiate upto 4532 tonnes with a speed of 40 kmph b. Negotiate upto 5000 tonnes with a speed of 40 kmph c. Negotiate upto 3593 tonnes with a speed of 40 kmph d. Negotiate upto 2524 tonnes with a speed of 40 kmph Ans: c
11	Trailing load in tonnes of WAG7 locomotive to haul BOXN air brake stock in 1 in 200 gradient in dry condition (ref. table G7/2 for one degree curve; GR 16:65). a. Negotiate upto 4532 tonnes with a speed of 40 kmph b. Negotiate upto 5000 tonnes with a speed of 40 kmph c. Negotiate upto 3593 tonnes with a speed of 40 kmph d. Negotiate upto 2524 tonnes with a speed of 40 kmph Ans:a
12	Trailing load in tonnes of WAG7 locomotive to haul BOXN air brake stock in 1 in 100 gradient in dry condition (ref. table G7/2 for one degree curve; GR 16:65). a. Negotiate upto 4532 tonnes with a speed of 40 kmph b. Negotiate upto 5000 tonnes with a speed of 40 kmph c. Negotiate upto 3593 tonnes with a speed of 40 kmph d. Negotiate upto 2524 tonnes with a speed of 40 kmph Ans: d
13	Trailing load in tonnes of WAG7 locomotive to haul BOXN air brake stock in 1 in 100 gradient in wet condition (ref. table G7/8 for one degree curve; GR 16:65). a. Negotiate upto 2304 tonnes with a speed of 40 kmph b. Negotiate upto 3035 tonnes with a speed of 50 kmph c. Negotiate upto 3596 tonnes with a speed of 50 kmph d. Negotiate upto 1297 tonnes with a speed of 40 kmph Ans: a
14	Trailing load in tonnes of WAG7 locomotive to haul BOXN air brake stock in 1 in 150 gradient in wet condition (ref. table G7/8 for one degree curve; GR 16:65). a. Negotiate upto 2304 tonnes with a speed of 40 kmph b. Negotiate upto 3035 tonnes with a speed of 50 kmph c. Negotiate upto 3596 tonnes with a speed of 50 kmph d. Negotiate upto 1297 tonnes with a speed of 40 kmph Ans: b
15	Trailing load in tonnes of WAG7 locomotive to haul BOXN air brake stock in 1 in 200 gradient in wet condition (ref. table G7/8 for one degree curve; GR 16:65). a. Negotiate upto 2304 tonnes with a speed of 40 kmph b. Negotiate upto 3035 tonnes with a speed of 50 kmph c. Negotiate upto 3596 tonnes with a speed of 50 kmph d. Negotiate upto 1297 tonnes with a speed of 40 kmph

	Ans: c
16	Trailing load in tonnes of WAG9 locomotive to haul BOXN air brake stock in 1 in 200 gradient in wet condition (ref. table G9/7 for tangent track; GR 15:57). a. Negotiate upto 4018 tonnes with a speed of 50 kmph b. Negotiate upto 3370 tonnes with a speed of 50 kmph c. Negotiate upto 2539 tonnes with a speed of 50 kmph d. Negotiate upto 1391 tonnes with a speed of 50 kmph Ans: a
17	Trailing load in tonnes of WAG9 locomotive to haul BOXN air brake stock in 1 in 150 gradient in wet condition (ref. table G9/7 for tangent track; GR 15:57). a. Negotiate upto 4018 tonnes with a speed of 50 kmph b. Negotiate upto 3370 tonnes with a speed of 50 kmph c. Negotiate upto 2539 tonnes with a speed of 50 kmph d. Negotiate upto 1391 tonnes with a speed of 50 kmph Ans: b
18	Trailing load in tonnes of WAG9 locomotive to haul BOXN air brake stock in 1 in 100 gradient in wet condition (ref. table G9/7 for tangent track; GR 15:57). a. Negotiate upto 4018 tonnes with a speed of 50 kmph b. Negotiate upto 3370 tonnes with a speed of 50 kmph c. Negotiate upto 2539 tonnes with a speed of 50 kmph d. Negotiate upto 1391 tonnes with a speed of 50 kmph Ans: c
19	Tractive effort in tonnes for WAG 9H with GR 15: 77 at a speed of 90 kmph (ref RDSO table NO. G9H/12) a. 23.75 tonne b. 20.69 tonne c. 18.34 tonne d. 16.60 tonne Ans: c
20	Tractive effort in tonnes for WAP-7 with GR 20:72 at a speed of 120 kmph (ref RDSO table NO. P7/10) a. 11.80 tonne b. 12.70 tonne c. 13.80 tonne d. 15.0 tonne Ans: c
21	Trailing load capacity of WDG3A (3100 HP) in wet rail condition on tangent track of BOXN/BCN wagons in 1 in 100 gradient at 50 kmph is a. negotiate 920 tonne b. negotiate 1355 tonne c. negotiate 1745 tonne d. negotiate 2960 tonne Ans: a
22	Trailing load capacity of WDG3A (3100 HP) in wet rail condition on tangent track of BOXN/BCN wagons in 1 in 150 gradient at 50 kmph is a. negotiate 920 tonne b. negotiate 1355 tonne c. negotiate 1745 tonne d. negotiate 2960 tonne Ans: b

23	Trailing load capacity of WDG3A (3100 HP) in wet rail condition on tangent track of BOXN/BCN wagons in 1 in 200 gradient at 50 kmph is a. negotiate 920 tonne b. negotiate 1355 tonne c. negotiate 1745 tonne d. negotiate 2960 tonne Ans: c
24	Trailing load capacity of WDG3A (3100 HP) in dry rail condition on tangent track of BOXN/BCN wagons in 1 in 200 gradient at 40 kmph is a. negotiate 1230 tonne b. negotiate 1805 tonne c. negotiate 2325 tonne d. negotiate 3990 tonne Ans: c
25	Trailing load capacity of WDG3A (3100 HP) in dry rail condition on tangent track of BOXN/BCN wagons in 1 in 150 gradient at 40 kmph is a. negotiate 1230 tonne b. negotiate 1805 tonne c. negotiate 2325 tonne d. negotiate 3990 tonne Ans: b
26	Trailing load capacity of WDG3A (3100 HP) in dry rail condition on tangent track of BOXN/BCN wagons in 1 in 100 gradient at 40 kmph is a. negotiate 1230 tonne b. negotiate 1805 tonne c. negotiate 2325 tonne d. negotiate 3990 tonne Ans:a
27	Trailing load capacity of WDG4 (4000 HP) in wet rail condition on tangent track of BOXN/BCN wagons in 1 in 150 gradient at 50 kmph is a. negotiate 4185 tonne b. negotiate 2490 tonne c. negotiate 1945 tonne d. negotiate 1335 tonne Ans: c
28	Trailing load capacity of WDG4 (4000 HP) in wet rail condition on tangent track of BOXN/BCN wagons in 1 in 100 gradient at 50 kmph is a. negotiate 4185 tonne b. negotiate 2490 tonne c. negotiate 1945 tonne d. negotiate 1335 tonne Ans: d
29	Trailing load capacity of WDG4 (4000 HP) in wet rail condition on tangent track of BOXN/BCN wagons in 1 in 200 gradient at 50 kmph is a. negotiate 4185 tonne b. negotiate 2490 tonne c. negotiate 1945 tonne d. negotiate 1335 tonne Ans: b
30	Trailing load capacity of WDG4 (4000 HP) in dry rail condition on tangent track of BOXN/BCN wagons in Level gradient at 90 kmph is a. negotiate 3930 tonne b. negotiate 4980 tonne c. negotiate 5400 tonne

	d. None Ans: a
31	The adhesion values in case of wet rail condition is likely to drop maximum by ----- as compared to dry un-sanded condition as per RDSO Report no. TFC - 77, January '2002. a. 20% b. 25% c. 30% d. 40% Ans: a
32	Specific starting resistance of loaded BOXN / BCN wagon has been taken as ---- on mainline service. a. 5 kg/tn b. 4 kg/tn c. 4.9 kg/tn d. 5.9 kg/tn Ans: b
33	The curve resistance is of the order of ----- per tonnes per degree of curvature. a. 0.5 kg b. 0.4 kg c. 0.3 kg d. 1.0 kg Ans: b
34	The following are the handicapped section (s) over SC division, for the period from 01.04.2019 to 31.03.2019. a. BPA-BPQ b. MITMI-RRPM-MTMI c. MTMI-MACU-MTMI d. All the above Ans: d
35	The following are the handicapped section (s) over SC division, for the period from 01.04.2019 to 31.03.2019. a. BPA-BPQ b. RDM-MMZ-RDM c. MTMI-JPTN-MTMI d. TDU-CT Ans: a
36	The following are the handicapped section (s) over SC division, for the period from 01.04.2019 to 31.03.2019. a. MUGR-BDCR b. RDM-MMZ-RDM c. MTMI-JPTN-MTMI d. none Ans: d
37	The following are the Pilot section (s) over SC division, for the period from 01.04.2019 to 31.03.2019 for computation of minimum guaranteed KMs. a. MUGR-BDCR b. RDM-MMZ-RDM c. MTMI-JPTN-MTMI

	d. All the above Ans: d
38	The following are the Pilot section (s) over SC division, for the period from 01.04.2019 to 31.03.2019 for computation of minimum guaranteed KMs. a. MUGR-BDCR b. BPQ-BPA c. KZJ-RDM d. MUGR-KCHP-KTPS-BDCR Ans: a
39	The following are the Pilot section (s) over SC division, for the period from 01.04.2019 to 31.03.2019 for computation of minimum guaranteed KMs. a. BDCR-KTPS-BDCR b. BDCR-KTPS-KCHP-MUGR c. KZJ-RDM d. BDCR-KTPS-RUSG-BDCR Ans: d
40	The following are the Pilot section (s) over SC division, for the period from 01.04.2019 to 31.03.2019 for computation of minimum guaranteed KMs. a. MUGR-BDCR b. BDCR-DKJ c. MUGR-KCHP-MUGR d. All the above Ans: d
41	Total duty hours for running staff should not exceed (signing On to Off), as per accepted recommendations of High power committee as per RBE No. 120/2016 & 143/2016. a. 11 hrs. b. 12 hrs c. 13 hrs d. 9 hrs Ans: a
42	Running duty hours for running staff should not ordinarily exceed, as per accepted recommendations of High power committee as per RBE No. 120/2016 & 143/2016. a. 9+2+1 hrs. b. 14 hrs c. 9 hrs d. 9+2 hrs Ans: d
43	In case of crew changing point is 1 hr away, the duty hours should not exceed, as per accepted recommendations of High power committee as per RBE No. 120/2016 & 143/2016. a. 12 hrs. b. 10 hrs c. 9 hrs d. 13 hrs Ans: a
44	For mail/Exp. Trains, duty hours should not exceed----- from departure to arrival, as per accepted recommendations of High power committee as per RBE No. 120/2016 & 143/2016. a. 8 hrs. b. 9 hrs

	c. 10 hrs d. 7 hrs Ans: a
45	Continuous night duty for Running staff should be limited to ----- nights, as per accepted recommendations of High power committee as per RBE No. 120/2016 & 143/2016. a. 2 nights b. 3 nights c. 4 nights, with fourth night towards headquarters d. none Ans: c
46	No. of locos required (as per loco link to maintain continue trip in the circuit) to work Train No. 12723/12724 from HYB-NDLS-HYB. a. 2 locos b. 3 locos c. 4 locos d. 1 loco Ans: b
47	while preparing loco link the following criteria should be checked a. Km/day/loco b. Trip inspection/day c. Km/loco d. None Ans: a
48	As per loco link, 3 WAP-7 locos --------- shed to work train 12723/12724. a. ELS/BZA b. ELS/LGD c. ELS/TKD d. ELS/RPM Ans: b
49	Loco links are prepared by zonal hqrs. based on a. WTT b. Rake link c. Owner ship locos d. None Ans: c
50	Territorial outage of SC division is calculated based on a. Total No. of locos available at 00:00 hrs in SC division b. Total No. of owner ship locos available in division c. a & b d. none Ans: a
51	Ownership outage of SCRailway is calculated based on a. Total no.of locos available at 00:00 hrs in SCR b. Total No. of locos of Loco sheds of SCR available at 00:00 hrs over SCR c. Total no. of locos of loco sheds of SCR available at 00:00 hrs over IR d. None Ans: c
52	Loco outage is calculated, if one loco is worked for 4 hrs/day a. 4/24 b. 24/4 c. 20/24

	d. 24/20 Ans: a
53	The distance between BDCR and RUSG is 10 kms. What is the route KMs of these two stations. a. 20 kms b. 10 kms c. None d. 100 kms Ans: b
54	There is a double track running between SC-KZJ and the distance between these two stations is 130 kms. The running track KMs of these two stations. a. 130 kms b. 260 kms c. 200 kms d. None Ans: b
55	The distance between BDCR and RUSG is 10 kms. What is the running track KMs of these two stations. a. 20 kms b. 10 kms c. None d. 100 kms Ans: b
56	The distance between BDCR and RUSG is 10 kms and both stations have extra lines for crossings a distance of 12 kms. What is the running track KMs of these two stations. a. 20 kms b. 10 kms c. 22 kms d. 44 kms Ans: c
57	Average Gross Load per Train = a. Gross Tonne Kms /Gross Train Kms b. Gross train Kms/Gross Tonne Kms c. Gross Kms/Gross load d. b & c Ans: a
58	Average Net Load per Train= a. Net Tonne Kms / Goods Train Kms b. Goods Train Kms/ Net Tonne Kms c. Gross Tonne Kms/Gross train Kms d. Gross train Kms/Gross Tonne Kms Ans: a
59	The most important document with regarding Operating statistics is a. WTT b. Operating manual c. CTR d. G&SR and Accident manual Ans: c
60	Loco can be shown as 'Spare' for statistical purpose when a. when engine awaiting utilisation (traffic demand) i.e. spare hrs of loco after repairs

	b. spare being surplus retained for stabling at nominated points/shed over a minimum period of continuous 12 hrs or more. c. Link spare for passenger trains. d. All the above Ans: d
61	Load fact is the ratio of a. Average power required in service/maximum power of locomotive b. Maximum power of locomotive/Average power required in service c. Average load/average power d. None of the above Ans: a
62	Normally load trails are to be conducted, when a. Before WTT issue b. PSR lifted/imposed c. Topography changed d. All the above Ans: d
63	while conducting load trails, the following are to be followed a. Use of sanders to be avoided b. Banker engine c. Conduct trails in adverse weather conditions d. All the above Ans: d
64	Normally, to fix a load ----- trails to be conducted a. Two b. Three c. Four d. Six Ans: b
65	EBD test to be conducted in ------- load trail test a. First b. Second c. Third d. b or c Ans: d

41	The flow rate of a pump (Q) is measured in a. m 3/sec b. m3/hr c. litre/min d. all the above Ans: d
42	Advantage of centrifugal pump a. high efficiency b. simple construction c. uniform and continuous flow d. all the above Ans: d

(11) Over Head Equipment/PSI sub stations/switching stations

01	IRCON Ans: a. (a) **Indian Railway Construction Company Ltd**. (b) Indian Railway Committee on Negotiation (c) Indian Railway Container Company Ltd. (d) Indian Railway Communication On line service
02	IRFC Ans: c (a) Indian Railway Finance Committee (b) Indian Railway Finance Council (c) **Indian Railway Finance Corporation** (d) Indian Railway Foreign Committee
03	IRIATT, Pune Ans: a (a) **Indian Railway Institute for Advanced Track Technology** (b) Indian Railway Institute for Advanced Train Technology (c) Indian Railway Institute for Accident Treatment Training (d) Industrial Research in Automobile & Transport Technology
04	IRIEEN Ans: d (a) Indian Railway Institute of Entertainment Engineer (b) Indian Railway Institute of Education Expert (c) Indian Railway Institute of Electrical Expert (d) **Indian Railway Institute of Electrical Engineer, Nasik**
05	Main line interrupter is denoted by B.M. i.e Ans:b (a) Bus Main (b) Breaker Main (c) Bus Machine (d) Blocking Main
06	Yard line interrupter is denoted by B.S. i.e. Ans: c (a) Bus Switch (b) Breaker Switch (c) Breaker Siding (d) Blocking Siding
07	Main line isolator switch is denoted by S.M. i.e. Ans: b (a) State Main (b) Switch Main (c) Sectioning Main (d) Siding Main
08	Normally, power generation & transmission system of the supply authorities are of three phase type & incoming supply is taken in consecutive 25 kV ac traction sub stations is of different phase in rotation , due to Ans: a (a) Balance the traction load on each phase (b) Unbalance the traction load on each phase (c) Obtained maximum power (d) Minimise voltage drop
09	Normally, two adjacent 25 kV AC traction sub stations works as in Ans: c (a) Parallel (b) Series (c) Independent (d) Cannot say
10	The distance of OHE section, for which "a traction transformer will feed power in emergent condition" is called Ans: a (a) Feeding length (b) Feeding zone (c) Sector (d) Sub sector
11	Distance between two consecutive OHE structures is called Ans:b (a) Tension length (b) Span length (c) Encumbrance (d) Stagger
12	Maximum span length in AC traction on tangent track is Ans:b (a) 67.5 meter (b) 72 meter (c) 63 meter (d) 22 meter

13	On curves , The measurement of span length in even number of track is measured from the centre of formation, is measured from Ans: c (a) Inner rail of the last out side track. (b) Outer rail of the first inside track (c) Inner rail of the first out side track (d) Inner rail of the first inside track
14	In AC traction, minimum height of contact wire under ROB/FOB from rail level to permit "C" class ODC Ans: a (a) 4.92 m (b) 4.80 m (c) 4.65 m (d) 5.03 m
15	In AC traction, height of contact wire at support from rail level (regulated OHE) with 50 mm pre sag in contact wire is Ans: b (a) 5.50 m (b) 5.55 m (c) 5.60 m (d) 5.65 m
16	Contact wire is placed in zig- zag manner in entire span length , why ? Ans: d (a) To avoid formation of groove on pantopan strip (b) Uniform rubbing of pantopan strip within current collection zone (c) To avoid breakdown due to formation of groove in pantopan strip (d) All of the above
17	Which factor affects the stagger of contact wire ? Ans: d (a) Blow-off (b) Versine (c) Track slewing (d) All of the above
18	The displacement of contact wire from its original position due to wind pressure across the track is called Ans: a (a) Blow-off (b) Versine (c) Stagger (d) Super elevation
19	The shortest section of OHE, which can be isolated through remote control by TPC is called. Ans: d (a) Elementary section (b) Feeding zone (c) Sector (d) Sub sector
20	The shortest section of OHE, which can be isolated manually is called Ans: a (a) Elementary section (b) Feeding zone (c) Sector (d) Sub sector
21	Interrupters or circuit breakers (CB's) can be operated through Ans: d (a) Remote control (b) Local control by TSS operator (c) Manually (d) All of the above
22	Isolators can be operated through Ans: c (a) Remote control (b) Local control by TSS operator (c) Manually (d) All of the above
23	When temperature increases, than length of conductors Ans: a (a) Increases (b) Decreases (c) Remains same (d) None of above
24	OHE conductors are terminated on auto tensioning device (ATD) at both end of tension length on anchoring structures . This type of OHE is called Ans: a (a) Regulated OHE (b) Unregulated OHE (c) Tram way OHE (d) Compound OHE
25	In regulated OHE, when temperature increased than tension of OHE conductors

	Ans c (a) Increased (b) Decreased (c) Remains same (d) Cannot say
26	An arrangement of OHE over a track, where two sets of OHE conductors are run parallel to each other for a short distance & provide smooth passage for pantograph, is called Ans: c (a) Turnout (b) Crossover (c) Overlap (d) Neutral section
27	Insulated overlap is required for Ans: a (a) OHE sectioning purpose (b) To kept OHE in current collection zone at curve (c) To maintain height of OHE conductors (d) All of the above
28	Un-insulated overlap is provided in OHE because Ans: b (a) To restrict span length (b) To restrict tension length (c) Quick isolation of OHE (d) All of the above
29	In AC traction, how many spans are required to construct an overlap on tangent track Ans: c (a) One span (b) Two span (c) Three span (d) Four span
30	In AC traction, how many spans are required to construct an overlap on curve track Ans: d (a) One span (b) Two span (c) Three span (d) Four span
31	Normally, insulated overlap are employed at the location Ans:d (a) SSP (b) FP (c) Booster transformer's location (d) All of the above
32	Which is related to mechanical clearance Ans: d (a) At cross over, min track separation for erecting section insulator (b) Implantation (c) ODC (d) all of the above
33	Which type of turn out is best for main line Ans: a (a) Over lap type (b) Knuckle type (c) Cross type (d) None of the above
34	"C" jumper are connected in the direction of traffic with the free end facing due to Ans: a (a) To prevent open the strands of jumper by air pressure which exerted by pantograph (b) To avoid panto entanglement with jumper (c) To avoid hard spot in contact wire (d) To provide un interrupted path for pantograph
35	PG clamp have Ans: b (a) One groove (b) Two parallel groove (c) Three parallel groove (d) Four parallel groove
36	PG clamp is used to Ans:c (a) Hold the contact wires at joint (b) Hold the catenary wires at joint (c) Joined two conductors (d) None of the above
37	Lightning arrester prevents OHE from Ans: a (a) Surge & transient voltage (b) Corrosion of –ve path conductor (c) Back e.m.f. (d) All of the above
38	Excessive voltage due to surge is bypassed by lightning arrester into Ans:c (a) Atmosphere in the form of electromagnetic energy (b)Atmosphere in the form of electro static energy (c) Earth (d) All of the above

39	In AC traction return current flows through Ans:c (a) Traction rail only (b) Earth only (c) Either traction rail or Earth (d) None of the above
40	In AC traction, track bonding is done upto the distance either side from the FP Ans: d (a) 5 km (b) 3 km (c) 2 km (d) 1 km
41	The distance between centre line of the track to the nearest face of the structure is called Ans: c (a) Clear span (b) Track separation (c) Implantation (d) Track clearance
42	Implantation is also known as Ans: b (a) Skip distance (b) Setting distance (c) Clear span (d) Track separation
43	9-Ton insulator is used mainly Ans: b (a) To support catenary & contact on structure (b) Anchoring of OHE conductors (c) Support cross span wire (d) Support in section insulator assembly
44	What do you main by 9- Ton Ans: a (a) It tensile strength is 9- ton (b) It sustain 9000 Volt continuously (c) It prevent the flow of current upto 9000 amps (d) All of the above
45	What do mean by the "regulating ratio" of Auto Tensioning Device (ATD) ? Ans: c (a) Counter weight : pulleys weight (b) Weight of OHE in one span length (c) Tension in OHE : counter weight (d) Tension in contact wire : counter weight
46	Current collection test is carried out in OHE to find out Ans: d (a) Current carrying capacity of catenary wire (b) Current carrying capacity of contact wire (c) Current carrying capacity of different jumpers (d) Location of sparking during movement of pantograph
47	Current collection test is carried out during Ans: d (a) Before monsoon (b) During monsoon (c) After monsoon (d) Night only
48	Places, where sparking takes place during current collection test .What may be the reason of sparking ? Ans: d (a) OHE is not proper (b) Track is not proper (c) Rolling stock is not proper (d) All of the above or either (a) or(b) or (c)
49	Places, where sparking takes place during current collection test .What may be the reason of sparking on account of OHE ? Ans: d (a) Kink in OHE (b) Improper gradient of contact wire (c) Improper tension in OHE conductors (d) All of the above
50	What do you mean by "Electrical Crossing of the Railway tracks" ? Ans: c (a) Underground electrical power line crossing across Rly. tracks (b) Over head electrical power line crossing across Rly tracks (c) Both (a) & (b) (d) OHE

	crossing across LC gate

POWER SUPPLY SYSTEMS

25 Kv Ac Traction System

1. A neutral section is provided in OHE between two 25 kV, single phase , 50 Hz. traction substations due to------

(a)

(a) To separate the zones, which fed by the adjacent substation of different phase
(b) To increases the current carrying capacity of the OHE
(c) To minimise the voltage drop in OHE conductors
(d) All of the above

2. Normally, two adjacent 25 kV AC traction sub stations works as in----

(c)

(a) Parallel (b) Series (c) Independent (d) Cannot say

3. The distance of OHE section between FP & SSP or SSP & SSP or SSP & SP is called.

(d)

(a) Feeding length (b) Feeding zone (c) Sector (d) Sub sector

4. The distance of OHE section between FP & SP is called----

(c)

(a) Feeding length (b) Feeding zone (c) Sector (d) Sub sector

5. The shortest section of OHE, which can be isolated through remote control by TPC is called. (d)

(a) Elementary section (b) Feeding zone (c) Sector (d) Sub sector

6. The shortest section of OHE, which can be isolated manually is called------

(a)

(a) Elementary section (b) Feeding zone (c) Sector (d) Sub sector

7. The no. plate of OHE structures for UP line will be such as------

(c)

(a) 75/12, 75/13, 75/14, ------etc. (b) 75/12A, 75/13A, 75/14A, ------etc.
(c) 75/13, 75/15, 75/17, ------etc.. (d) 75/13A, 75/15A, 75/17A, ------etc..

8. The no. plate of OHE structures for DN line will be such as------

(b)

(a) 75/12, 75/13, 75/14, ------etc. (b) 75/12, 75/14, 75/16, ------etc.
(c) 75/13, 75/15, 75/17, ------etc.. (d) 75/13A, 75/15A, 75/17A, ------etc..

9. How many number of BMs available in SP?

(b)

a) 2 Nos b) 4 Nos c) 5 Nos d) Nil

10. How many number of BMs available in SSP?

(c)

a) 1 No b)2Nos c) 3 Nos d) 4 Nos

11. How many number of sectioning BMs are there in a SSP?

(b)

a) 1 No b)2Nos c) 3 Nos d) 4 Nos

12. How many number of sectioning BMs are there in a SP?
(d)
a) 1 No b)2Nos c) 3 Nos d)Nil

13. How many number of paralleling BMs available in SSP?
(a)
a) 1 No b)2Nos c) 3 Nos d) 4 Nos

14. How many number of paralleling BMs available in SP?
(b)
a) 1 No b)2Nos c) 3 Nos d) 4 Nos

15. What is the height of contact wire above Rail level for Regulated OHE (with pre sag of 10 cm) --------
(b)
(a) 5.50m (b) 5.60m (c) 5.80m (d) 5.80m

16. What is the maximum voltage to be maintained at TSS?
(a)
a) 27.5KV b) 25KV c) 27KV d) 29KV

17. What is the minimum voltage to be maintained at SP for effective operation of trains?
(d)
a) 16KV b) 23.5KV c) 25KV d) 19KV

18. The distance of OHE section between SP & SP is called--------
(b)

(a) Feeding length (b) Feeding zone (c) Sector (d) Sub sector

19. In AC traction, height of contact wire at support from rail level (regulated OHE) with 100 mm pre sag in contact wire is------
(c)
(a) 5.50 m (b) 5.55 m (c) 5.60 m (d) 5.75 m

20. In AC traction, height of contact wire from rail level in Car shed is-------
(d)
(a) 5.60 m (b) 5.65 m (c) 5.75 m (d) 5.80 m

21. In AC traction, minimum height of contact wire under ROB/FOB from rail level to permit “C”class ODC------
(a)
(a) 4.92 m (b) 4.80 m (c) 4.65 m (d) 5.03 m

22. In AC traction, height of contact wire at level crossing from rail level (regulated OHE)—
(a)
(a) 5.50 m (b) 5.55 m (c) 5.60 m (d) 5.65 m

23. At level crossing gate, maximum height of rail height gauge from the road surface is----
(b)
(a) 4.38 m (b) 4.67 m (c) 4.80 m (d) 4.45 m

Stagger

1. The displacement of contact wire with respect to the pantograph axis is called------
(b)

(a) Implantation (b) Stagger of contact wire
(c) Gradient of contact wire (d) Sag

2. Contact wire is placed in Zig- Zag manner in entire span length , why ?
(d)

(a) To avoid formation of groove on pantograph strip
(b) Uniform rubbing of pantograph strip within current collection zone
(c) To avoid breakdown due to formation of groove in pantograph strip
(d) All of the above

3. What will be the contact wire stagger at support on tangent track?
(b)
(a) 300 mm (b) 200 mm (c) 100 mm (d) Zero

4. What will be the contact wire stagger at support on curved track?
(a)
(a) 300 mm (b) 200 mm (c) 100 mm (d) Zero

Regulated OHE

1. When temperature increases, then length of conductors-------
(a)
(a) Increases (b) Decreases (c) Remains same (d) None of above

2. OHE conductors are terminated on auto tensioning device (ATD)
at both end of tension length on anchoring structures . This type of OHE is called--------
(a)
(a) Regulated OHE (b) Unregulated OHE
(c) Tram way OHE (d) Compound OHE

3. In regulated OHE, when temperature increased then tension of OHE conductors------
(c)
(a) Increased (b) Decreased (c) Remains same (d) Cannot say

4. In regulated OHE, how much tension is kept in OHE-----
(c)
(a) As per tension / temperature chart (b) 3000 kg
(c) 2000 kg (d) 1500 kg

5. In regulated OHE, Where anti-creep point is provided ?
(c)
(a) Starting of tension length (b) Finishing of tension length
(c) Midway of tension length (d) All of the above

6. The reason of anti-creep arrangement is “To restrict the OHE movement ……
(a)
(a) Along the track (b) Across the track
(c) Both across & along the track (d) Neither across nor along the track

Neutral Section

1. A short dead section of OHE, which separates two adjoining elementary section & provide smooth passage for pantograph is called-----

(c)

(a) Insulated overlap (b) Un-insulated overlap
(c) Neutral section (d) All of the above

2. Normally, which type of neutral section have been adopted by Indian Railways----------
(d)

(a) Overlap type (b) PTFE type neutral section
(c) Short neutral section comprising section insulator assembly (d) All of the above

3. Which type of neutral section, you prefer in heavily graded or suburban section?`

(b)

(a) Overlap type (b) PTFE type neutral section
(c) Short neutral section comprising section insulator assembly (d) None of the above

4. On tangent track before neutral section, signal location should not be less than----

(c)

(a) 600 m. (b) 500 m. (c) 400 m. (d) 300 m.

5. On tangent track after neutral section, signal location should not be less than-----

(d)

(a) 600 m (b) 400 m (c) 300 m (d) 200 m

Turn Outs, Crossovers & Over Laps

1. At the obligatory location, turn out contact wire is kept ….mm above from the main line contact wire-------

(b)

(a) 100 mm (b) 50 mm (c) 20 mm (d) 5 mm

2. Insulated overlap is required for----

(a)

(a) OHE sectioning purpose
(b) To kept OHE in current collection zone at curve
(c) To maintain height of OHE conductors
(d) All of the above

3. Un-insulated overlap is provided in OHE because----

(b)

(a) To restrict span length (b) To restrict tension length
(c) Quick isolation of OHE (d) All of the above

Section Insulator & 25 KV AC Jumpers

1. A device, which installed in contact wire to separate two elementary section & provide smooth passage for pantograph is called---------

(b)

(a) Insulated overlap (b) Section insulator
(c) Bracket Assembly (d) Cut-in insulator

2. In AC traction , Which jumper distribute the current between catenary wire & contact wire---- (a)

(a) "C" Jumper (b) "F" jumper
(c) "G" jumper (d) "S" jumper

3.. "G" jumper is used at----------

(c)

(a) Insulated overlap (b) Turnout & Cross over
(c) Both un insulated overlap & Turn out & Cross over (d) Un insulated overlap

Bracket Assembly

1. Cantilever assembly, both insulators are located nearer to the mast----------

(a)

(a) To avoid contamination due to steam & diesel locomotives
(b) To hold the tubes in proper tension
(c) To Cantilever assembly is swiveling type
(d) To avoid transferring the weights on OHE

2. The tubes of the cantilever assembly are made out of----------

(d)

(a) Aluminum bronze (b) Aluminum
(c) Electrolyte copper (d) Galvanized steel

3. Which is not a part of the cantilever assembly ?

(d)

(a) Steady arm (b) Adjuster sleeve
(c) Anti wind clamp (d) PG clamp

4. What is the material of normal steady arm (i.e. BFB section) ?

(a)

(a) Aluminum alloy (b) Aluminum bronze
(c) G.I. (d) Cadmium copper

5. Cantilever assembly should be of swiveling types to achieve--------

(d)

(a) Proper height of catenary & contact wire
(b) Stagger of contact wire
(c) Minimum radial tension on tubes
(d) Sag in the contact wire constant in entire tension length

6. Solid core insulators, which are used in OHE mostly made of---------

(a)

(a) Porcelain (b) Glass (c) Fiber (d) P.V.C.

7. In 25 kV AC traction, Stay tube insulator is used in cantilever assembly in between-----

(a)

(a) Mast fitting & stay tube (b) Mast fitting & bracket tube
(c) Bracket tube & register arm (d) Register arm & stay tube.

8. In 25 kV AC traction, Bracket tube insulator is used in cantilever assembly in between-------- (b)

(a) Mast fitting & stay tube (b) Mast fitting & bracket tube
(c) Bracket tube & register arm (d) Register arm & stay tube

Over Dimension Consignment (ODC)

1. A consignment has length, width & height such that one or more of these parameters infringes standard moving dimensions at any point from start to destination , then the consignment is called--------

(b)

(a) Over design consignment (b) Over dimension consignment

(c) Out dimension consignment (d) Over dimension coach

2. In 25 kV AC traction, if clearance between ODC & contact wire is less than 200 mm but more 100 mm ,than ODC permitted with-------

(c)

(a) No speed restriction & with power block

(b) No speed restriction & with out power block

(c) 15 kmph speed & with power block

(d) ODC not permitted

3. In 25 kV AC traction, if clearance between ODC & contact wire is less than 100 mm, than ODC permitted----------

(d)

(a) No speed restriction & with power block

(b) No speed restriction & with out power block

(c) 15 kmph speed & with power block

(d) ODC not permitted

4. In 25 kV AC traction, if clearance between ODC & contact wire is more than 250 mm than ODC permitted with---------

(b)

(a) No speed restriction & with power block

(b) No speed restriction & with out power block

(c) 15 kmph speed & with out power block

(d) None of the above

5. In 25 kV AC traction, if clearance between ODC & contact wire is less than 250 mm but more 200 mm, than ODC permitted with----------

(c)

(a) No speed restriction & with power block

(b) No speed restriction & without power block

(c) 15 kmph speed & without power block

(d) none of the above

Auto Tensioning Device (ATD)

1. What do mean by the “regulating ratio” of Auto Tensioning Device (ATD) ?

(c)

(a) Counter weight **:** pulleys weight (b) Weight of OHE in one span length

(c) Tension in OHE **:** counter weight (d) Tension in contact wire **:** counter weight

2. What will be the “regulating ratio” of winch type Auto Tensioning Device (ATD) ?

(d)

(a) 1:1 (b) 2:1 (c) 3:1 (d) 5:1

3. What will be the “regulating ratio” of 3 pulley block system type ATD ?

(c)

(a) 1:1 (b) 2:1 (c) 3:1 (d) 5:1

4. In 3- pulley block ATD, the measurement ‘Y’ is the distance between-------

(b)

(a) Rail level & bottom of the counter weight

(b) Top of muff & bottom of the counter weight

(c) Centre of fixed pulley & top of the counter weight

(d) None of the above

5. In 3- pulley block system ATD, the measurement ‘X’ is the distance between-------

(d)

(a) Centre of 1’st fixed pulley to centre of movable pulley

(b) Nearest face of the structure to fixed pulley centre

(c) Nearest face of the structure to centre of movable pulley

(d) Centre of middle fixed pulley to movable pulley centre

6. If stain less steel rope breakage, anti falling rod is provided in ATD to prevent------

(a)

(a) OHE falling down to earth

(b) Counter weight falling down to earth

(c) Both OHE & counter weight , falling down to earth

(d) none of the above

7. If SS wire of ATD broken, OHE does not come on ground due to--------

(d)

(a) 9-ton insulator (b) Fixed pulley (c) Movable pulley (d) Hex tie rod

Maintenance Blocks & OHE Breakdowns

1. During traffic block, which type vehicles movement is blocked in traffic block section ?

(d)

(a) Electric hauled (b) Diesel hauled

(c) Steam hauled (d) All of the above

2. During power block, which type vehicles movement is blocked in power block section ?

(a)

(a) Electric hauled (b) Diesel hauled

(c) Steam hauled (d) All of the above

3. Which type of power block is required for daily routine maintenance work of OHE in main line ?

(a)

(a) Pre-arranged power block (b) Local power block

(c) Emergency power block (d) All of the above

4. Which type of power block is required for daily routine maintenance work of OHE in

secondary line ?

(b)

(a) Pre-arranged power block (b) Local power block

(c) Emergency power block (d) All of the above

5. In locally arranged power block, supply of the siding or yard is shut down by---

(d)

(a) TPC (b) Section controller

(c) Yard master (d) OHE in charge, who required power block

6. Which case, TPC arranged emergency power block ?

(d)

(a) A damaged OHE or feeder falling down and or persons or animals or vehicle or falling trees coming in contact with or likely to come in contact with live equipment

(b) A damaged electric loco & driver requires the permit to work

(c) Derailment or any other accident on the electrified section

(d) All of the above

7. Before granting power block in the section, the longitudinal protection and lateral protection in the section is arranged by----

(d)

(a) TPC (b) Section controller (c) TNL (d) Station master

8. A section on which power block has been granted, the longitudinal protection as a protective measure is taken to stop the movement of electric loco running on the-------

(a)

(a) Same track (b) Adjacent track

(c) Diamond crossing (d) All of the above

9. A section on which power block has been granted, the lateral protection as a protective measure is taken to stop the movement of electric loco running on the----

(c)

(a) Same track (b) Adjacent track

(c) Cross over track to the same track (d) All of the above

10. If OHE breakdown or defect in OHE , which are likely to affect the train services noticed by any railway servant, will be reported immediately to------

(d)

(a) TPC (b) Station master (c) Section controller (d) Either (a) or (b) or (c)

General and Safety Rules for OHE

1. Permit To Work (PTW) is essential for working on 25 kV AC OHE or near OHE within---

(b)

(a) 1 m (b) 2 m (c) 3 m (d) 4 m

2. Protection of cross over as per Station Working Rules (SWR), ensure------

(b)

(a) Longitudinal protection (b) Lateral protection

(c) Longitudinal & Lateral protection both (d) none of the above

3. In the vicinity of the 25 kV AC OHE, the heavy induction is developed on ----------

(d)

,which parallel to the 25 kV AC OHE.

(a) Metallic roof of the platform (b) Fencing near the track
(c) Any other conductor (d) All of the above.

4. In the vicinity of the 25 kV AC OHE , which type of induction is developed on metallic structures which parallel to the 25 kV AC OHE ?

(c)

(a) Electro static type ` (b) Electromagnetic type
(c) Both electro static type & electromagnetic type (d) None of the above

25 KV AC Caution Boards

1. Which Caution boards provided before sidings/ sand hump or dead end (un electrified)--- (a)

(a) Electrical Engine Stop Board (b) Caution Un wired Turn Out
(c) DJ Open (d) DJ close

2 .Which Caution boards provided at one location before Un wired Turn Out-----

(b)

(a) Electrical Engine Stop Board (b) Caution Un wired Turn Out
(c) DJ Open (d) DJ close

3. Which Caution boards provided before Neutral Section-------

(c)

(a) Electrical Engine Stop Board (b) Caution Un wired Turn Out
(c) DJ Open (d) DJ Close

4.Which Caution boards provided after Neutral Section-------

(d)

(a) Electrical Engine Stop Board (b) Caution Un wired Turn Out
(c) DJ Open (d) DJ Close

5.Which Caution board is not associated with Neutral Section-------

(a)

(a) Electrical Engine Stop Board (b) 500 Mts
(c) DJ Open (d) DJ Close

6.Which Caution board is not associated with Neutral Section for MEMU------- (d)

(a) DJ Close for MEMU (b) 500 Mts
(c) DJ Open (d) DJ Close

7. Which Caution board is associated with Neutral Section --------

(a)

(a) 250 Mts (b) 400 Mts (c) 300Mts (d) 200Mts

Abbreviations

1. Expand SCADA ?

(a)

(a) Supervisory Control & Data Acquisition
(b) Supervisor y Computer & Data Acquisition
(c) Supervisory Control & Discipline Act
(d) Super Computer & Data Acquisition

2. Main line isolator switch is denoted by S.M. i.e.

(b)

(a) State Main (b) Switch Main (c) Sectioning Main (d) Siding Main

3. Full form of SWR---------

(b)

(a) Section Working Rules (b) Station Working Rules

(c) Safety Working Rules (d) Safety with remote control

4. Expand PTFE?

(d)

(a) Plastic Tetra Fluoro Ethane (b) Poly Thermo Finials Ethane

(c) Poly Tetra Fluoro Ethane (d) Poly Tetra Fluoro Ethylene

5. Expand TPC?

(a)

a)Traction Power Control b) Train Power Control

c) Traction Power Committee d) Traction Power Consumer

6. Expand ODC?

(d)

a) Over Developed Consignment b) Old Dimensional Consignment

c) Outer Dimensional Consignment d) Over Dimensional Consignment

7. Expand ATD?

(d)

a) Auxiliary Tensioning Device b) Alternative Tensioning Device

c) Additional Tensioning Device d)Auto Tensioning Device

8. Expand OHE?

(b)

a) Over Head Erection b) Over head equipment

c) Over Head Engine d) Over head Energy

9. Expand AT?

(c)

a)Auto transformer b)Attenuation transformer

c)Auxiliary Transformer d)Amplifier Transformer

10. Expand TSS?

(c)

a) Track Sub-station b) Transmission Sub-section

c) Traction Sub-station d)Terminal Sub-section

11. Expand SP?

(a)

a)Sectioning and Paralleling Post b) Sectioning Post

c) Section Post d) Sector Post

12.Expand SSP?

(a)

a)Sub-Sectioning and Paralleling Post b) Sub-Sectioning Post

c) Sub-Section Post d) Sub-Sector Post

13. Expand FP?

(b)

a) Front Post b) Feeding Post c) Feeder Post d) First Post

14. Expand PSI?

(c)

a)Power system installations b) Power system implantation

c)Power Supply Installations d) power supply indication

15. Expand CB?

(a)

a)Circuit Breaker b)Circuit Banker

c)Capacitor breaker d)Circuit blocker

POWER SUPPLY SYSTEMS

25 Kv Ac Traction System

1. A neutral section is provided in OHE between two 25 kV, single phase , 50 Hz. traction substations due to------

(a)

(a) To separate the zones, which fed by the adjacent substation of different phase

(b) To increases the current carrying capacity of the OHE

(c) To minimise the voltage drop in OHE conductors

(d) All of the above

2. Normally, two adjacent 25 kV AC traction sub stations works as in----

(c)

(a) Parallel (b) Series (c) Independent (d) Cannot say

3. The distance of OHE section between FP & SSP or SSP & SSP or SSP & SP is called.

(d)

(a) Feeding length (b) Feeding zone (c) Sector (d) Sub sector

4. The distance of OHE section between FP & SP is called----

(c)

(a) Feeding length (b) Feeding zone (c) Sector (d) Sub sector

5. The shortest section of OHE, which can be isolated through remote control by TPC is called. (d)

(a) Elementary section (b) Feeding zone (c) Sector (d) Sub sector

6. The shortest section of OHE, which can be isolated manually is called------

(a)

(a) Elementary section (b) Feeding zone (c) Sector (d) Sub sector

7. The no. plate of OHE structures for UP line will be such as------

(c)

(a) 75/12, 75/13, 75/14, ------etc. (b) 75/12A, 75/13A, 75/14A, ------etc.

(c) 75/13, 75/15, 75/17, ------etc.. (d) 75/13A, 75/15A, 75/17A, ------etc..

8. The no. plate of OHE structures for DN line will be such as------

(b)

(a) 75/12, 75/13, 75/14, ------etc. (b) 75/12, 75/14, 75/16, ------etc.

(c) 75/13, 75/15, 75/17, ------etc.. (d) 75/13A, 75/15A, 75/17A, ------etc..

9. How many number of BMs available in SP?

(b)

a) 2 Nos b) 4 Nos c) 5 Nos d) Nil

10. How many number of BMs available in SSP?

(c)

a) 1 No b)2Nos c) 3 Nos d) 4 Nos

11. How many number of sectioning BMs are there in a SSP?

(b)

a) 1 No b)2Nos c) 3 Nos d) 4 Nos

12. How many number of sectioning BMs are there in a SP?
(d)
a) 1 No b)2Nos c) 3 Nos d)Nil

13. How many number of paralleling BMs available in SSP?
(a)
a) 1 No b)2Nos c) 3 Nos d) 4 Nos

14. How many number of paralleling BMs available in SP?
(b)
a) 1 No b)2Nos c) 3 Nos d) 4 Nos

15. What is the height of contact wire above Rail level for Regulated OHE (with pre sag of 10 cm) --------
(b)
(a) 5.50m (b) 5.60m (c) 5.80m (d) 5.80m

16. What is the maximum voltage to be maintained at TSS?
(a)
a) 27.5KV b) 25KV c) 27KV d) 29KV

17. What is the minimum voltage to be maintained at SP for effective operation of trains? (d)
a) 16KV b) 23.5KV c) 25KV d) 19KV

18. The distance of OHE section between SP & SP is called--------
(b)

(a) Feeding length (b) Feeding zone (c) Sector (d) Sub sector

19. In AC traction, height of contact wire at support from rail level (regulated OHE) with 100 mm pre sag in contact wire is------
(c)
(a) 5.50 m (b) 5.55 m (c) 5.60 m (d) 5.75 m

20. In AC traction, height of contact wire from rail level in Car shed is-------
(d)
(a) 5.60 m (b) 5.65 m (c) 5.75 m (d) 5.80 m

21. In AC traction, minimum height of contact wire under ROB/FOB from rail level to permit "C"class ODC------
(a)
(a) 4.92 m (b) 4.80 m (c) 4.65 m (d) 5.03 m

22. In AC traction, height of contact wire at level crossing from rail level (regulated OHE)— (a)
(a) 5.50 m (b) 5.55 m (c) 5.60 m (d) 5.65 m

23. At level crossing gate, maximum height of rail height gauge from the road surface is---- (b)
(a) 4.38 m (b) 4.67 m (c) 4.80 m (d) 4.45 m

Stagger

1. The displacement of contact wire with respect to the pantograph axis is called------- (b)

(a) Implantation (b) Stagger of contact wire
(c) Gradient of contact wire (d) Sag

2. Contact wire is placed in Zig- Zag manner in entire span length , why ?
(d)

(a) To avoid formation of groove on pantograph strip
(b) Uniform rubbing of pantograph strip within current collection zone
(c) To avoid breakdown due to formation of groove in pantograph strip
(d) All of the above

3. What will be the contact wire stagger at support on tangent track?
(b)
(a) 300 mm (b) 200 mm (c) 100 mm (d) Zero

4. What will be the contact wire stagger at support on curved track?
(a)
(a) 300 mm (b) 200 mm (c) 100 mm (d) Zero

Regulated OHE

1. When temperature increases, then length of conductors-------
(a)
(a) Increases (b) Decreases (c) Remains same (d) None of above

2. OHE conductors are terminated on auto tensioning device (ATD) at both end of tension length on anchoring structures . This type of OHE is called-------- (a)
(a) Regulated OHE (b) Unregulated OHE
(c) Tram way OHE (d) Compound OHE

3. In regulated OHE, when temperature increased then tension of OHE conductors------- (c)
(a) Increased (b) Decreased (c) Remains same (d) Cannot say

4. In regulated OHE, how much tension is kept in OHE-----
(c)
(a) As per tension / temperature chart (b) 3000 kg
(c) 2000 kg (d) 1500 kg

5. In regulated OHE, Where anti-creep point is provided ?
(c)
(a) Starting of tension length (b) Finishing of tension length
(c) Midway of tension length (d) All of the above

6. The reason of anti-creep arrangement is "To restrict the OHE movement ……
(a)
(a) Along the track (b) Across the track
(c) Both across & along the track (d) Neither across nor along the track

Neutral Section

1. A short dead section of OHE, which separates two adjoining elementary section & provide
smooth passage for pantograph is called-----
(c)
(a) Insulated overlap (b) Un-insulated overlap
(c) Neutral section (d) All of the above

2. Normally, which type of neutral section have been adopted by Indian Railways---------- (d)
(a) Overlap type (b) PTFE type neutral section
(c) Short neutral section comprising section insulator assembly (d) All of the above

3. Which type of neutral section, you prefer in heavily graded or suburban section?`
(b)
(a) Overlap type (b) PTFE type neutral section
(c) Short neutral section comprising section insulator assembly (d) None of the above

4. On tangent track before neutral section, signal location should not be less than----
(c)
(a) 600 m. (b) 500 m. (c) 400 m. (d) 300 m.

5. On tangent track after neutral section, signal location should not be less than-----
(d)
(a) 600 m (b) 400 m (c) 300 m (d) 200 m

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1. At the obligatory location, turn out contact wire is kept ….mm above from the main line
contact wire-------
(b)
(a) 100 mm (b) 50 mm (c) 20 mm (d) 5 mm

2. Insulated overlap is required for----
(a)
(a) OHE sectioning purpose
(b) To kept OHE in current collection zone at curve
(c) To maintain height of OHE conductors
(d) All of the above

3. Un-insulated overlap is provided in OHE because----
(b)
(a) To restrict span length (b) To restrict tension length
(c) Quick isolation of OHE (d) All of the above

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(a) "C" Jumper (b) "F" jumper
(c) "G" jumper (d) "S" jumper

3.. "G" jumper is used at----------

(c)

(a) Insulated overlap (b) Turnout & Cross over

(c) Both un insulated overlap & Turn out & Cross over (d) Un insulated overlap

Bracket Assembly

1. Cantilever assembly, both insulators are located nearer to the mast----------

(a)

(a) To avoid contamination due to steam & diesel locomotives
(b) To hold the tubes in proper tension
(c) To Cantilever assembly is swiveling type
(d) To avoid transferring the weights on OHE

2. The tubes of the cantilever assembly are made out of----------

(d)

(a) Aluminum bronze (b) Aluminum
(c) Electrolyte copper (d) Galvanized steel

3. Which is not a part of the cantilever assembly ?

(d)

(a) Steady arm (b) Adjuster sleeve
(c) Anti wind clamp (d) PG clamp

4. What is the material of normal steady arm (i.e. BFB section) ?

(a)

(a) Aluminum alloy (b) Aluminum bronze
(c) G.I. (d) Cadmium copper

5. Cantilever assembly should be of swiveling types to achieve--------

(d)

(a) Proper height of catenary & contact wire
(b) Stagger of contact wire
(c) Minimum radial tension on tubes
(d) Sag in the contact wire constant in entire tension length

6. Solid core insulators, which are used in OHE mostly made of---------

(a)

(a) Porcelain (b) Glass (c) Fiber (d) P.V.C.

7. In 25 kV AC traction, Stay tube insulator is used in cantilever assembly in between---- (a)

(a) Mast fitting & stay tube (b) Mast fitting & bracket tube
(c) Bracket tube & register arm (d) Register arm & stay tube.

8. In 25 kV AC traction, Bracket tube insulator is used in cantilever assembly in between------- (b)

(a) Mast fitting & stay tube (b) Mast fitting & bracket tube

(c) Bracket tube & register arm (d) Register arm & stay tube

Over Dimension Consignment (ODC)

1. A consignment has length, width & height such that one or more of these parameters
infringes standard moving dimensions at any point from start to destination , then the consignment is called--------
(b)
(a) Over design consignment (b) Over dimension consignment
(c) Out dimension consignment (d) Over dimension coach

2. In 25 kV AC traction, if clearance between ODC & contact wire is less than 200 mm
but more 100 mm ,than ODC permitted with-------
(c)
(a) No speed restriction & with power block
(b) No speed restriction & with out power block
(c) 15 kmph speed & with power block
(d) ODC not permitted

3. In 25 kV AC traction, if clearance between ODC & contact wire is less than 100 mm, than
ODC permitted----------
(d)
(a) No speed restriction & with power block
(b) No speed restriction & with out power block
(c) 15 kmph speed & with power block
(d) ODC not permitted

4. In 25 kV AC traction, if clearance between ODC & contact wire is more than 250 mm
than ODC permitted with---------
(b)
(a) No speed restriction & with power block
(b) No speed restriction & with out power block
(c) 15 kmph speed & with out power block
(d) None of the above

5. In 25 kV AC traction, if clearance between ODC & contact wire is less than 250 mm
but more 200 mm, than ODC permitted with----------
(c)
(a) No speed restriction & with power block
(b) No speed restriction & without power block
(c) 15 kmph speed & without power block
(d) none of the above

Auto Tensioning Device (ATD)

1. What do mean by the "regulating ratio" of Auto Tensioning Device (ATD) ?
(c)

(a) Counter weight **:** pulleys weight (b) Weight of OHE in one span length

(c) Tension in OHE **:** counter weight (d) Tension in contact wire **:** counter weight

2. What will be the "regulating ratio" of winch type Auto Tensioning Device (ATD) ?

(d)

(a) 1**:**1 (b) 2**:**1 (c) 3**:**1 (d) 5**:**1

3. What will be the "regulating ratio" of 3 pulley block system type ATD ?

(c)

(a) 1**:**1 (b) 2**:**1 (c) 3**:**1 (d) 5**:**1

4. In 3- pulley block ATD, the measurement 'Y' is the distance between-------

(b)

(a) Rail level & bottom of the counter weight
(b) Top of muff & bottom of the counter weight
(c) Centre of fixed pulley & top of the counter weight
(d) None of the above

5. In 3- pulley block system ATD, the measurement 'X' is the distance between-------

(d)

(a) Centre of 1'st fixed pulley to centre of movable pulley
(b) Nearest face of the structure to fixed pulley centre
(c) Nearest face of the structure to centre of movable pulley
(d) Centre of middle fixed pulley to movable pulley centre

6. If stain less steel rope breakage, anti falling rod is provided in ATD to prevent------

(a)

(a) OHE falling down to earth
(b) Counter weight falling down to earth
(c) Both OHE & counter weight , falling down to earth
(d) none of the above

7. If SS wire of ATD broken, OHE does not come on ground due to--------

(d)

(a) 9-ton insulator (b) Fixed pulley (c) Movable pulley (d) Hex tie rod

Maintenance Blocks & OHE Breakdowns

1. During traffic block, which type vehicles movement is blocked in traffic block section ? (d)

(a) Electric hauled (b) Diesel hauled
(c) Steam hauled (d) All of the above

2. During power block, which type vehicles movement is blocked in power block section ? (a)

(a) Electric hauled (b) Diesel hauled
(c) Steam hauled (d) All of the above

3. Which type of power block is required for daily routine maintenance work of OHE in main

line ?

(a)

(a) Pre-arranged power block (b) Local power block

(c) Emergency power block (d) All of the above

4. Which type of power block is required for daily routine maintenance work of OHE in secondary line ?

(b)

(a) Pre-arranged power block (b) Local power block

(c) Emergency power block (d) All of the above

5. In locally arranged power block, supply of the siding or yard is shut down by---

(d)

(a) TPC (b) Section controller

(c) Yard master (d) OHE in charge, who required power block

6. Which case, TPC arranged emergency power block ?

(d)

(a) A damaged OHE or feeder falling down and or persons or animals or vehicle or falling trees coming in contact with or likely to come in contact with live equipment

(b) A damaged electric loco & driver requires the permit to work

(c) Derailment or any other accident on the electrified section

(d) All of the above

7. Before granting power block in the section, the longitudinal protection and lateral protection in the section is arranged by----

(d)

(a) TPC (b) Section controller (c) TNL (d) Station master

8. A section on which power block has been granted, the longitudinal protection as a protective measure is taken to stop the movement of electric loco running on the------- (a)

(a) Same track (b) Adjacent track

(c) Diamond crossing (d) All of the above

9. A section on which power block has been granted, the lateral protection as a protective measure is taken to stop the movement of electric loco running on the--- (c)

(a) Same track (b) Adjacent track

(c) Cross over track to the same track (d) All of the above

10. If OHE breakdown or defect in OHE , which are likely to affect the train services noticed by any railway servant, will be reported immediately to------

(d)

(a) TPC (b) Station master (c) Section controller (d) Either (a) or (b) or (c)

General and Safety Rules for OHE

1. Permit To Work (PTW) is essential for working on 25 kV AC OHE or near OHE within---

(b)

(a) 1 m (b) 2 m (c) 3 m (d) 4 m

2. Protection of cross over as per Station Working Rules (SWR), ensure------
(b)
(a) Longitudinal protection (b) Lateral protection
(c) Longitudinal & Lateral protection both (d) none of the above

3. In the vicinity of the 25 kV AC OHE, the heavy induction is developed on ----------
--- (d)
,which parallel to the 25 kV AC OHE.
(a) Metallic roof of the platform (b) Fencing near the track
(c) Any other conductor (d) All of the above.

4. In the vicinity of the 25 kV AC OHE , which type of induction is developed on metallic structures which parallel to the 25 kV AC OHE ?
(c)
(a) Electro static type ` (b) Electromagnetic type
(c) Both electro static type & electromagnetic type (d) None of the above

25 KV AC Caution Boards

1. Which Caution boards provided before sidings/ sand hump or dead end (un electrified)--- (a)
(a) Electrical Engine Stop Board (b) Caution Un wired Turn Out
(c) DJ Open (d) DJ close

2 .Which Caution boards provided at one location before Un wired Turn Out-----
(b)
(a) Electrical Engine Stop Board (b) Caution Un wired Turn Out
(c) DJ Open (d) DJ close

3. Which Caution boards provided before Neutral Section-------
(c)
(a) Electrical Engine Stop Board (b) Caution Un wired Turn Out
(c) DJ Open (d) DJ Close

4.Which Caution boards provided after Neutral Section-------
(d)
(a) Electrical Engine Stop Board (b) Caution Un wired Turn Out
(c) DJ Open (d) DJ Close

5.Which Caution board is not associated with Neutral Section-------
(a)
(a) Electrical Engine Stop Board (b) 500 Mts
(c) DJ Open (d) DJ Close

6.Which Caution board is not associated with Neutral Section for MEMU-------
(d)
(a) DJ Close for MEMU (b) 500 Mts
(c) DJ Open (d) DJ Close

7. Which Caution board is associated with Neutral Section --------
(a)
(a) 250 Mts (b) 400 Mts (c) 300Mts (d) 200Mts

Abbreviations

1. Expand SCADA ?
(a)
(a) Supervisory Control & Data Acquisition
(b) Supervisor y Computer & Data Acquisition
(c) Supervisory Control & Discipline Act
(d) Super Computer & Data Acquisition

2. Main line isolator switch is denoted by S.M. i.e.
(b)
(a) State Main (b) Switch Main (c) Sectioning Main (d) Siding Main

3. Full form of SWR---------
(b)
(a) Section Working Rules (b) Station Working Rules
(c) Safety Working Rules (d) Safety with remote control

4. Expand PTFE?
(d)
(a) Plastic Tetra Fluoro Ethane (b) Poly Thermo Finials Ethane
(c) Poly Tetra Fluoro Ethane (d) Poly Tetra Fluoro Ethylene

5. Expand TPC?
(a)
a)Traction Power Control b) Train Power Control
c) Traction Power Committee d) Traction Power Consumer

6. Expand ODC?
(d)
a) Over Developed Consignment b) Old Dimensional Consignment
c) Outer Dimensional Consignment d) Over Dimensional Consignment

7. Expand ATD?
(d)
a) Auxiliary Tensioning Device b) Alternative Tensioning Device
c) Additional Tensioning Device d)Auto Tensioning Device

8. Expand OHE?
(b)
a) Over Head Erection b) Over head equipment
c) Over Head Engine d) Over head Energy

9. Expand AT?
(c)
a)Auto transformer b)Attenuation transformer
c)Auxiliary Transformer d)Amplifier Transformer

10. Expand TSS?
(c)
a) Track Sub-station b) Transmission Sub-section
c) Traction Sub-station d)Terminal Sub-section

11. Expand SP?

(a)

a)Sectioning and Paralleling Post b) Sectioning Post

c) Section Post d) Sector Post

12.Expand SSP?

(a)

a)Sub-Sectioning and Paralleling Post b) Sub-Sectioning Post

c) Sub-Section Post d) Sub-Sector Post

13. Expand FP?

(b)

a) Front Post b) Feeding Post c) Feeder Post d) First Post

14. Expand PSI?

(c)

a)Power system installations b) Power system implantation

c)Power Supply Installations d) power supply indication

15. Expand CB?

(a)

a)Circuit Breaker b)Circuit Banker

c)Capacitor breaker d)Circuit blocker

(12) Safety Management & First aid rules/fire fighting etc.,

Q. No.	Safety Management & First aid rules/fire fighting etc.,
1	As per Indian Electricity Rules, 1956, certification of electrical installations in shed to be done for every a. 3 years b. Yearly c. 5 years d. 6 years Ans: c
2	Full form of SEM a. Safety & Electrical Management b. Safety & Environment Management c. Safety & Ecological Management d. Safety & Earthing Management Ans: b
3	Safety review committee in a shed should conduct thorough inspection once in a a. Month b. Daily c. Three months d. Quarterly Ans: a
4	The nature of action required for 'Trivial risk' is a. No action is required but documentary records need to be kept for data analysis b. Monitoring is required to ensure that the controls are maintained c. Risk reduction measures should be implemented within a definite period d. All the above Ans: a
5	The nature of action required for 'Acceptable risk' is a. No action is required but documentary records need to be kept for data analysis b. Monitoring is required to ensure that the controls are maintained c. Risk reduction measures should be implemented within a definite period d. All the above Ans: b
6	The nature of action required for 'Moderate risk' is a. No action is required but documentary records need to be kept for data analysis b. Monitoring is required to ensure that the controls are maintained c. Risk reduction measures should be implemented within a definite period d. All the above Ans: c
7	Proactive monitoring includes a. Systematic inspection of workplace as per planner interval b. Internal audit findings c. Analysis and action d. b & c Ans: a
8	Reactive monitoring includes a. Systematic inspection of workplace as per planner interval

	b. Internal audit findings c. Analysis and action d. b & c Ans: d
9	Safety management certification for 'Occupational Health and Safety Management System (OHSAS) is a. ISO: 18001 b. ISO:14001 c. ISO: 15000 d. ISO: 9001 Ans: a
10	Safety management certification for 'Environmental Management System (EMS) is a. ISO: 18001 b. ISO:14001 c. ISO: 15000 d. ISO: 9001 Ans: b
11	------No. of Fire extinguishers fit in all respects to be available in the Loco pilots cab. a. 4 b. 8 c. 12 d. None Ans: a
12	ensure cleaning of ------- in loco to avoid catching of fire a. Oil b. Grease c. Muck d. All the above Ans: d
13	Class 'C Fires are caused by a. Combustible materials b. Flammable liquids c. Flammable gasses d. None Ans: c
14	CO2 Fire extinguishers are mainly used for a. Gas fires b. Electrical fires c. Metal fires d. None Ans: c
15	During Artificial respiration process, Expiration includes a. Kneel over the patient b. Rock yourself gently backwards c. a & b d. none Ans: a
16	The treatment for electric shock a. Inspiration b. Expiration c. a & b

	d. none Ans: c
17	All accidents arising out of the use of electricity within the railway premises are required not only to be dealt with under the provisions of the a. 'Rules for Reporting Accidents' of the Zonal Railway b. Section 33 of Indian Electricity Act, 1910 c. Rule 44 A of I.E. Rules, 1967 d. All the above Ans: d
18	First aid box deficiencies shall provide by a. User department b. Medical department c. RPF department d. Mechanical department Ans: b
19	Fire Pressure testing of Fire Extinguishers to a pressure test of --- lbs per square inch should also be carried out once in every two years. a. 350 b. 230 c. 150 d. 300 Ans: a
20	In case of Fire accident, the inquiry committee also consists a representative from a. Medical department b. Security department c. Commercial department d. Personnel department Ans: b

(12) Basics of Electricity

1) Current through each resistor when they are connected in series is (b)
   a) Different b) Same
   c) can be both A and B d) Decreasing

2) Three resistances 20 Ω, 30 Ω and 60 Ω are connected in parallel, their combined resistance is given by (d)
   a) 110 Ω b) 50 Ω
   c) 20 Ω d) 10 Ω

3) Combined resistance of 5 Ω and 10 Ω are connected in series is equal to (c)
   a) 10 Ω b) 16 Ω
   c) 15 Ω d) 20 Ω

4) Current flows in a circuit (c)
   a) When no voltage b) The switch is either open or close
   c) When switch is close d) When switch is open

5) A circuit breaker is a (d)
   a) Switch b) Fuse
   c) Resistor d) Resettable protective device

6) A two-terminal variable resistor is known as a (d)
   a) Thermister b) Wiper
   c) Potentio meter d) Rheostat

7) Which of the following is not a type of energy source? (b)
   a) Battery b) Rheostat
   c) Generator d) Solar cell

8) A material that does not allow current under normal conditions is (a)
   a) Insulator b) Semiconductor
   c) Conductor d) Valence

9) An ammeter is an electrical instrument used to measure (c)
   a) Voltage b) Resistance
   c) Current d) None of the above

10) Resistances can be measured with the help of a (a)
   a) Ohmmeter and resistance bridge b) Wattmeter
   c) Voltmeter d) Ammeter

11) The statement which Correctly represents Ohm's law (a)
   a) V = IR b) V = R/I
   c) R = VI d) I = R/V

12) If V = 50 V and I = 5 A, then R = ___ (d)
   a) 50 Ω b) 5 Ω
   c) 2 Ω d) 10 Ω

13) Unit of voltage is (a)
   a) Volt b) Watt
   c) Coulomb d) Ampere

14) Unit of current is (d)
   a) Volt b) Watt

c) Coulomb d) Ampere

15) Unit of power is: (b)
a) Volt b) Watt
c) Coulomb d) Ampere

16) Unit of resistance is: (b)
a) Ampere b) Ohms
c) Volt d) Watt

17) Which of the following quantity remains same in parallel circuit (a)
a) Voltage b) Current
c) Power d) Both current & voltage

18) In Series Circuit, which of the following quantity remains same throughout the circuit (b)
a) Voltage b) Current
c) Power d) Both current & voltage

19) The unit of power in S.I. units is (c)
a) Newton meter b) Joule
c) Watt d) Kilogram meter/sec

20) Which of the following does not change in a transformer? (c)
a) Current b) Voltage
c) Frequency d) All of the above

21) In a transformer the energy is conveyed from primary to secondary (c)
a) through cooling coil b) through air
c) by the flux d) none of the above

22) Which of the following is not a part of transformer installation? (d)
a) Conservator b) Breather
c) Buchholz relay d) Exciter

23) A transformer transforms (d)
a) Voltage b) Current
c) Frequency d) Power

24) Primary winding of a transformer (a)
a) Could either be a low voltage or high voltage winding b) Is always a high voltage winding
c) Is always a low voltage winding d) None of the above

25) Which winding in a transformer has more number of turns ? (d)
a) Low voltage winding b) Primary winding
c) Secondary winding d) High voltage winding

26) The chemical used in breather for transformer should have the quality of (b)
a) ionizing air b) absorbing moisture
c) cleansing the transformer oil d) cooling the transformer oil.

27) The chemical used in breather is (d)
a) Asbestos fibre b) Silica sand
c) Sodium chloride d) Silica gel

28) The transformer ratings are usually expressed in terms of (d)

a) volts b) Amperes

c) kW d) kVA

29) A Buchholz relay can be installed on (c)

a) Auto-transformers b) Air-cooled transformers

c) Oil cooled transformers d) Welding transformers

30) Buchholz's relay gives warning and protection against (a)

a) Electrical fault inside the transformer itself b) Electrical fault outside the transformer in outgoing feeder

c) For both outside and inside faults d) none of the above

31) Which of the following is the main advantage of an auto-transformer over a two winding transformer? (a)

a) Saving in winding material b) Hysteresis losses are reduced

c) Copper losses are negligible d) Eddy losses are totally eliminated

32) The transformer oil should have _____ volatility and _____ viscosity. (b)

a) High,high b) Low,low

c) Low,high d) High,low

33) Transformer breather used …….. (d)

a) To evaporate oil b) To cool the coils during reduced load

c) To cool the transformer oil d) For destroying the vacuum created inside the conservator

34) The noise produced by a transformer is termed as (c)

a) Zoom b) Ringing

c) Hum d) Buzz

35) The direction of rotation of a D.C. series motor can be changed by (b)

a) Interchanging supply terminals b) Interchanging field terminals

c) Either of (a) and (b) above d) None of the above

36) According to Fleming's left-hand rule, when the forefinger points in the direction of the field or flux, the middle finger will point in the direction of (a)

a) current direction in the field b) Magnetic field direction

c) resultant force on conductor d) none of the above

37) Which of the following law/rule can he used to determine the direction of rotation of D.C. motor? (d)

a) Lenz's law b) Faraday's law

c) Coulomb's law d) Fleming's left-hand rule

38) The speed of a D.C. series motor is (d)

a) Proportional to Square of the field current b) Proportional to square of the armature current

c) Proportional to field current d) Inversely proportional to the field current

39) The unit of capacitance is (c)

a) Henry b) Ohm

c) Farad d) farad/m

40) Kirchhoff s current law states that (b)

a) Net current flow at the junction is positive b) Algebraic sum of the currents meeting at the junction is zero

c) No current can leave the junction without some current entering it. d) Total sum of currents meeting at the junction is zero

41) According to Kirchhoffs voltage law, the algebraic sum of all IR drops and e.m.fs. in any closed loop of a network is always (d)

a) Negative b) Positive

c) Determined by battery e.m.fs. d) Zero

42) Kirchhoffs current law is applicable to only (a)

a) junction in a network b) closed loops in a network

c) electric circuits d) electronic circuits

43) Potential energy and kinetic energy are types of (d)

a) Electrical energy b) Magnetic energy

c) Thermal energy d) Mechanical energy

44) (Force × displacement) is equal to (b)

a) Distance b) Work

c) Momentum d) Inertia

45) Energy obtained from electric cells and batteries as a result of chemical reaction is called (d)

a) Chemical energy b) Nuclear energy

c) Heat energy d) Electrical energy

46) One horse power is equal to (d)

a) 790 watts b) 700 watts

c) 720 watts d) 746 watts

47) Energy possessed by a body due to its motion is called its (b)

a) Potential energy b) Kinetic energy

c) Heat energy d) Chemical energy

48) Electric generators convert mechanical energy into (c)

a) Light energy b) Sound energy

c) Electrical energy d) Chemical energy

49) Direction of work done is (c)

a) The direction of friction b) The direction of resistive force

c) The direction of applied force d) None of above

50) A step up transformer increases (a)

a) Voltage b) Current

c) Power d) Frequency

51) Ratio of required form of energy obtained from a system as output to total energy given to it as input is called its (a)

a) Efficiency b) Power

c) Stress d) Strain

52) Condition for maximum efficiency in transformer (b)

a) Cu loss > iron loss
b) Cu loss = iron loss
c) Cu loss < iron loss
d) None of the above

53) Rate of doing work is called (d)

a) efficiency
b) Stress
c) Strain
d) Power

54) The capacity of battery is expressed in terms of (c)

a) Current rating
b) Voltage rating
c) Ampere-hour rating
d) None of the above

55) In battery, cells are connected in series in order to (a)

a) Increase the voltage rating
b) Increase the current rating
c) Increase the life of the cells
d) None of the above

56) During charging of a battery, specific gravity of the electrolyte of a lead-acid battery (a)

a) Increases
b) Decreases
c) Remains same
d) Becomes zero

57) Trickle charging of a storage battery helps to (d)

a) Maintain proper electrolyte level
b) Increases it's reserve capacity
c) Prevent sulphation
d) Keep it fresh and fully charged

58) Electrolyte used in lead-acid cell is (d)

a) NaOH
b) Only H_2SO_4
c) Only water
D Dilute H_2SO_4

59) A Single phase transformer has 500 turns in primary and 1200 turns in secondary . Primary winding connected to 500 V, Voltage induced in secondary is (c)

a) 12000V
b) 208V
c) 1200V
d) 120V

60) In lead-acid cell, L=lead is called as (b)

a) Positive active material
b) Negative active material
c) Passive material
d) None of the above

61) Lead acid cell should never be discharged beyond (a)

a) 1.8 V
b) 1.9 V
c) 2 V
d) 2.1 V

62) 48 ampere-hour capacity of Battery would deliver a current of (d)

a) 4 amperes for 8 hours
b) 8 amperes for 4 hours
c) 48 amperes for 2 hours
d) 6 amperes for 8 hours

63) The frequency of the induced EMF in stator in an induction motor is (c)

a) Greater than the supply frequency
b) Lesser than the supply frequency
c) Same as the supply frequency
d) None of these

64) Regarding skewing of motor bars in squirrel Cage induction motor which statement false

a) It increases starting torque
b) It prevents cogging
c) It reduces motor hum during operation
d) It produces uniform torque

(a)

65) The rotor of an induction motor runs at
a) Synchronous speed
b) Below synchronous speed
c) Above synchronous speed
d) Any of the above

(b)

66) The direction of rotation of a 3-phase induction motor can be reversed by
a) Transposing any two leads from supply
b) Transposing any two leads from slip rings
c) Transposing all the three leads from the supply
d) Disconnecting any one phase

(a)

67) **A** voltmeter is connected in a …….. with the circuit component across which potential difference is to be measured
a) Parallel
b) Series
c) Series or parallel
d) None of the above

(a)

68) An ammeter is connected in …….. with the circuit element whose current we wish to measure
a) Series
b) Parallel
c) Series or parallel
d) None of the above

(a)

69) Megger meter is an instrument used for the measurement of
a) High resistance and insulation resistance
b) Medium resistance
c) Low resistance
d) Leakage current

(a)

70) The potential transformers are used to measure large voltage using
a) High range voltmeter
b) Low range voltmeter
c) High range ammeter
d) Low range ammeter

(b)

(14) ACTM

ACTM	
SL. No.	Question & answers
1	The type of Traction Motor suspension system in WAG-5 loco motives a) Fully Suspended b) Axle hung Nose suspended c) Both a&b d) None Ans: b
2	The type of Traction Motor suspension system in WAG-7 Loco motives a) Fully Suspended b) Axle hung Nose suspended c) Both a&b d) None Ans: b
3	The type of Bogie arrangement in WAG-5 locos a) B-B b) Co-Co c) Bo-Bo-Bo d) None Ans: b
4	The type of Bogie arrangement in WAG6A locos a) B-B b) Co-Co c) Bo-Bo-Bo d) None Ans: c
5	Length over couplers in mm of WAG-7 locomotive a) 20394 b) 20928 c) 19974 d) 20600 Ans: a
6	Length over couplers in mm of WAG-5 locomotive a) 20394 b) 20928 c) 20600 d) None Ans: d
7	Tests and Trials are described in para ------- of AC traction manual –Vol.III a) 30200 b) 30207 c) 30208 d) 30214 Ans: b
8	Unusual occurrence reports are described in para ------- of AC traction manual –Vol.III a) 30200 b) 30207 c) 30208

	d) 30214 Ans: d
9	Shed organization are described in para ------- of AC traction manual –Vol.III a) 30200 b) 30207 c) 30208 d) 30214 Ans: a
10	Proforma Number of Unusual occurrence report for electric locos/EMUs a) Proforma 2.01 b) Proforma 2.02 c) Proforma 2.03 d) Proforma 2.04 Ans: b
11	Proforma Number of Daily position of EMU coaches a) Proforma 2.01 b) Proforma 2.02 c) Proforma 2.03 d) Proforma 2.04 Ans: d
12	Engine fitness certificate' described in para ------- of AC traction manual –Vol.III a) 30303 b) 30304 c) 30301 d) 30300 Ans: b
13	Proforma Number of Engine fitness certificate (joint checks by Running and Maintenance staff) a) Proforma 3.01 Part A b) Proforma 3.02 Part B c) Proforma 2.04 d) None Ans: b
14	The details in Vision test register shall update once in ------- by CCC/TFR a) 3 months b) 6months c) Every month d) Yearly Ans: b
15	The sand used in the locomotives should be a) Dry b) Free from clay, loam & mica c) a or b d) a and b Ans: d
16	The pre-monsoon precaution are detailed in para No. ------- of ACTM vol.III a) 30511 b) 30514 c) 30512 d) 30513 Ans: b

17	The instructions in para No. 30608 authorize persons to travel in the locomotive a) More than 5 members b) A Driver (Loco pilot)who is Off duty c) Drivers (Loco pilots) not certified to drive the locos d) None Ans: b
18	Duties of LP & ALP while stabling the locomotive a) Drain all reservoirs b) Put on the hand brake c) Trip circuit breaker d) All the above Ans: d
19	The following checks are to be done while preparation of locomotives a) Bowers and Traction test b) Brake test c) Examination of Loco log book d) All the above Ans: d
20	Sanction is required from CRS in respect of a) Introduction of electric traction on any railway or section of railway b) Introduction of diesel traction on any railway or section of railway c) Any alteration in the traction electrical system which is likely to interfere with signaling system. d) All the above Ans:d
21	Items to be checked on electric loco after derailment/accident mentioned in------- of ACTM Vol.III a) Annexure 9.01 b) Annexure 9.02 c) Annexure 9.03 d) Annexure 9.04 Ans: a
22	Items to be checked on Pantograph mentioned in ------ of ACTM Vol.III a) Annexure 9.01 b) Annexure 9.02 c) Annexure 9.03 d) Annexure 9.04 Ans: b
23	Proforma for recording measurement/observation in respect of OHE in case of Panto entanglement as mentioned in ------ of ACTM Vol.III a) Annexure 9.01 b) Annexure 9.02 c) Annexure 9.03 d) Annexure 9.04 Ans: c
24	Annual statement of 'Engine hours' prepared under a) Statement 17 b) Statement 18 c) Statement 22

	d) Statement 23 Ans: b
25	Annual statement of 'Train & Engine Km' prepared under a) Statement 17 b) Statement 18 c) Statement 22 d) Statement 23 Ans: a
26	Annual statement of 'Loads of train' prepared under a) Statement 17 b) Statement 18 c) Statement 22 d) Statement 23 Ans: d
27	Annual statement of 'Engine usage' prepared under a) Statement 17 b) Statement 18 c) Statement 22 d) Statement 23 Ans: c
28	Fuel and Power statistics statement prepared under a) Statement 4A b) Statement 5A c) Statement 8 Part I d) Statement 8 Part II Ans: b
29	TR-11 certificate issued for a) Assistant Loco Pilots b) Loco pilots c) Motor man d) Shunter/Engine turner Ans: a
30	TR-13 certificate issued for a) Assistant Loco Pilots b) Loco pilots c) Motor man d) Shunter/Engine turner Ans: d
Diesel Traction Maintenance	
1	QAG full form a) Quantity Account Grade b) Quality Assurance Group c) Quality Accountal Group d) Quantity Assurance Group Ans: b
2	Power plan provides information for planning ---------- trains on a division for each section a) Goods b) Passenger

	c) All trains d) None Ans: a
3	If the loco fails to work its booked train to destination or causes a delay in arrival at destination of 30minutes or more for mail/express/passenger train, this is classified as a) Statistical failure b) Non-statistical failure c) Adjusted failure d) None Ans: a
4	Whenever the loco develops some problem during its course of journey but the loss of time is less than 30 minutes in case of mail/express/passenger train, this is classified as a) Statistical failure b) Non-statistical failure c) Adjusted failure d) None Ans: b
5	Sequence of repair operations: i) Cleaning & washing of under gearing and body ii) Sanding iii) Fueling iv) Inspection and topping of lube oil and cooling water a) i), ii), iii) & iv) b) iv), iii), ii), i) c) iv), i), ii), iii) d) iii), ii), iv) & i) Ans: a
6	Illumination levels at sanding, fueling points a) 30 lux b) 3000 lux c) 300 lux d) 1000 lux Ans: c
7	Fuel injection room should provide a) Anti-skid oil proof flooring b) Arrangement for expelling fumes c) Fuel pump calibration stand d) All the above Ans: d
8	DLSC full form a) Diesel loco service centre b) Diesel loco statistic centre c) Diesel loco sand centre d) Diesel lube oil service centre Ans: a
9	DTTC full form a) Diesel technical training centre b) Diesel traction training centre c) Diesel training technical centre d) None Ans: a

10	The following is/are the basis of maintenance a) Time b) KM c) Engine hours d) All the above Ans: d
11	MIS full form a) Material inspection system b) Management information system c) Material inspection schedule d) Management inspection survey Ans: b
12	ISO certification number of 'Family of standard for Information Security Management Systems' a) ISO 25000 b) ISO 27000 c) ISO 19000 d) None Ans: b
13	The stores officer should regularly review PL directory to close inactive PLs a) Once in six months b) Once in three months c) Yearly d) Monthly Ans: a
14	Instructions for verification of stock by Stock verifiers of the Account department are contained in the a) Establishment code b) Stores code c) Account code d) Establishment manual Ans: b
15	RSP plan head a) 21 b) 41 c) 42 d) None Ans: a
16	Plan head under demand No.16 a) 21 b) 41 c) 42 d) All the above Ans: d
17	Minor head 300 pertains to a) Diesel locomotive b) Electric locomotive c) Offices d) None Ans: a
18	In diesel loco defect codification for MIS, the parameter number ------ pertains to loco

	number a) Parameter No.1 b) Parameter No.2 c) Parameter No.3 d) Parameter No.4 Ans: d
19	Sub head for running repairs in sheds is a) 310 b) 320 c) 330 d) 340 Ans: a
20	Demand No.----- pertains to expenditure incurred on fuelling of locos a) 12K b) 8F c) 10H d) 7E Ans: c
21	Codal life of various components of diesel loco specified in a) Para 219 of IR Finance code b) Para 220 of IR Finance code c) Para 300 of IR Finance code d) None Ans: a
22	------ method of overhauling/repairs shall be followed in the Diesel sheds a) Unit exchange b) Preventive c) Pro active d) None Ans: a
23	For data analysis, the following reports are maintained in diesel sheds a) Loco Master defect b) Component defect c) a or b d) a and b Ans: d
24	Unserviceable items that have scrap value are a) written off with approval of competent authority b) are returned to stores department c) repaired d) none Ans: b
25	Condition monitoring of component parameters are a) Temperature b) Vibration c) Insulation resistance d) All the above Ans: d

(15) 3 PHASE -EMU BIT BANK

1. In 3 phase EMU, DCS having _____positions.	
a) On,auto,off	b) D,OFF,C.
c) On ,off/insert, RDM	d) C, Off, RDM.
2. In 3 phase EMU, One basic unit consists of_____	
a) MC,TC,TC	b) MC,TC,TC,TC
c) DTC,NDTC,MC	d) DTC/NDTC,MC,TC
3. In 3 phase EMU, to maintain constant speed _____ method will be used.	
a) RDM mode.	b) CRUISE control.
c) Special RDM.	d) Failure mode.
4. In 3 phase EMU, MCH having _____ positions.	
a) Powering, "0", braking, emergency.	b) Powering, "0", emergency.
c) Powering, braking, emergency.	d) Forward, reverse.
5. In 3 phase EMU, holding brake pressure is_____ kg/cm^2 (in DTC)	
a) 1.2 kg/cm^2	b) 1.6 kg/cm^2
c) 0.8 kg/cm^2	d) 1.8 kg/cm^2
6. In 3 phase EMU, while entering neutral section _____ button to be operated at 250m warning board.	
a) RDM	b) SB_1
c) MAC	d) ENS
7. In 3 phase EMU; DMH will come into service when speed is _____ kmph.	
a) 5 or more	b) 10 or more
c) 15 or more	d) Stand still (speed 0)
8. In 3 phase EMU, in RDM mode DMH will come into service when speed is _____kmph.	
a) 5 or more	b) Stand still (speed 0)
c) 15 or more	d) 10 or more
9. In 3 phase EMU, TM output current _____ Amps, voltage is_____ volts.	
a) 175A,1171V	b) 1171A,175V
c) 1100A,750V	d) 1300A,750V
10. In 3 phase EMU, in RDM mode V-max shows _____ kmph.	
a) 15 kmph	b) 60 kmph

c) 110 kmph	d) 30 kmph
11. In 3 phase EMU, in SPECIAL RDM mode V-max shows _____ kmph.	
a) 15 kmph	b) 60 kmph
c) 110 kmph	d) 30 kmph
12. In 3 phase EMU, V max showing 15 kmph indicates _____	
a) Rear DTC driving	b) Reverse Movement.
c) Not logged properly from maintenance mode.	d) Any one of the above.
13. In 3 phase EMU, in shunting mode V-max shows _____ kmph.	
a) 15 kmph	b) 60 kmph
c) 110 kmph	d) 30 kmph
14. In 3 phase EMU, if maintenance mode not logged properly. V-max shows _____kmph.	
a) 60 kmph	b) 15 kmph
c) 110 kmph	d) 30 kmph
15. In 3 phase EMU, auxiliary motors will get _____ volts supply.	
a) 266 single phase AC	b) 141 single phase AC
c) 415 three phase AC	d) DC.
16. In 3 phase EMU, TCN lamp glowing and V max showing 110 kmph means in _____ mode we can work.	
a) RDM mode.	b) Shunting mode
c) Reverse mode	d) Special RDM mode.
17. In 3 phase EMU, TCN lamp glowing and V max showing “0” kmph means in _____ mode we can work.	
a) RDM mode.	b) Shunting mode
c) Reverse mode	d) Special RDM mode.
18. In 3 phase EMU, total capacity of the passengers_____.	
a) 3060	b) 6030
c) 6300	d) 3600
19. In 3 phase EMU, normal position switch is_____ position , isolation position is _____ Position.	
a) 11^0clock, 9^0clock	b) 1^0clock, 11^0clock
c) 11^0clock, 1^0clock	d) 9^0clock, 11^0clock

20. In 3 phase EMU, BN (battery normal) switches provided in _____.	
a) DTC,NDTC	b) DTC,TC
c) MC,TC	d) DTC,MC
21. In 3 phase EMU, BD (battery direct) switch is provided in _____.	
a) MC	b) TC
c) DTC	d) NDTC
22. In 3 phase EMU, flasher light, tail lamp, cab emergency lights will get supply from _____	
a) BN (battery normal)	b) BD (battery direct)
c) CHBA	d) 1 phase AC
23. In 3 phase EMU, to feed OHE voltmeter _____ is provided on roof.	
a) ET-1	b) ET-2
c) High voltage potential transformer.	d) Low voltage potential transformer.
24. In 3 phase EMU, what are the indications/lamps glows in RDM mode_____.	
a) RDM lamp	b) MIN.1 PANTO UP
c) MIN.1 MC ON	d) All of the above.
25. In 3 phase EMU, if cab occupancy icon not glowing even after DCS,ICS keys turn on _____ to be operated for cab occupancy.	
a) ICS by pass switch	b) Emergency brake loop by pass switch.
c) Brake applied loop isolation switch.	d) Emergency off loop by pass switch.

26. In 3 phase EMU, if cab occupancy icon not glowing even after DCS, ICS keys turn on and ICS by pass switch kept in 1^0 clock positon _____ to be operated for cab Occupancy.	
a) Emergency brake loop by pass switch.	b) CAB occupy selector switch.
c) Brake applied loop isolation switch.	d) Emergency off loop by pass switch.
27. In 3 phase EMU, if any one coach EP brake isolated, the V max will reduce to _____ kmph.	
a) 60 kmph	b) 15 kmph
c) 101 kmph	d) 105 kmph.
28. In 3 phase EMU, if any one bogie EP brake isolated, the V max will reduce to _____ kmph.	
a) 60 kmph	b) 15 kmph

c) 101 kmph	d) 105 kmph.
29. In 3 phase EMU, if ORD (over reaching detector) acts _____ happens.	
a) All pantos will lower	b) All MC VCBs will open.
c) Emergency brakes will apply	d) Only concern MC panto lower.
30. In 3 phase EMU, if ADD(auto dropping device) acts _____happens.	
a) All MC VCBs will open.	b) All pantos will lower.
c) Emergency brakes will apply	d) Only concern MC panto lower.
31. In 3 phase EMU, in RDM mode _____ signal bell only will work.	
a) SB-1	b) SB-2.
c) SB-1 Stand by.	d) SB-2 Stand by.
32. In 3 phase EMU, while conducting JBT we have to release _____ brake.	
a) Parking Brake.	b) Service brake.
c) Regenerative brake.	d) Holding brake.
33. In 3 phase EMU, the DC link voltage_____ volts.	
a) 1800V	b) 1200V
c) 800V	d) 415V
34. In 3 phase EMU, Maximum braking force is_____ KN.(12car)	
a) 263KN.	b) 773KN.
c) 510KN.	d) 536.8KN.
35. In 3 phase EMU, Maximum Regenerative force is_____ KN. (12car)	
a) 263KN.	b) 773KN.
c) 510KN.	d) 536.8KN.
36. In 3 phase EMU, Maximum tractive effort while starting is_____ KN. (12car)	
a) 263KN.	b) 773KN.
c) 510KN.	d) 536.8KN.
37. In 3 phase EMU, parking brakes are provided in _____ coach.	
a) DTC/NDTC.	b) MC
c) TC.	d) In all coaches.
38. In 3 phase EMU, maximum no 3 phase auxiliary motors provided in one basic unit are _____	
a) 19.	b) 21

c) 17	d) 23

39. In 3 phase EMU, to start all main compressors _____ switch to be pressed.	
a) ENS.	b) MAC Switch in end panel of Dtc/Ndtc
c) START all MAC switch.	d) CRUIS Control switch.
40. In 3 phase EMU, even if all brakes are released still MIN 1 BR Applied lamp glowing, keep _____ switch in to isolation position.	
a) Emergency brake loop by pass.	b) CAB occupied selector.
c) Emergency off loop by pass.	d) Brake applied loop.
41. In 3 phase EMU, if emergency push button operated _____ Actions take place.	
a) VCB trip, Panto lower.	b) VCB trip, BP drop.
c) VCB trip,panto lower, BP drop.	d) Only BP drop.
42. In 3 phase EMU, if any one of the MC pantograph not raised_____ lamp will glow in DTC.	
a) Not All Mc On.	b) Not All Panto Up.
c) TCN failure.	d) Emergency off.
43. In 3 phase EMU, if any one of the MC VCB not closed_____ lamp will glow in DTC.	
a) TCN failure.	b) Not All Panto Up.
c) Not All Mc On.	d) Emergency off.
44. In 3 phase EMU, location DMH valve and its coc _____.	
a) Under shunting desk in MC.	b) In end panel in MC.
c) Under LP seat, behind cattle guard.	d) Under guard desk in DTC.
45. In 3 phase EMU, in DTC maximum pressure shows in BC gauge _____ kg/cm^2.	
a) 1.2 kg/cm^2.	b) 1.6 kg/cm^2
c) 0.8 kg/cm^2.	d) 1.8 kg/cm^2
46. In 3 phase EMU, if any one coach air suspension failure speed will reduce to _____ kmph.	
a) 101	b) 60
c) 105	d) 15
47. In 3 phase EMU, if DDU display showing dark check _____ mcb	
a) ECN-1 mcb.	b) ECN-2 mcb.

c) TCMS mcb	d) CCC-1 mcb.
48. In 3 phase EMU, to deactivate cruise control _____ to be operated.	
a) Operate ECN switch.	b) Operate MAC switch.
c) Operate fault reset switch.	d) Press cruise control again or MCH disturb.
49. In 3 phase EMU, in case of panto raised and no tension, panto icon indicates _____ on DDU.	
a) White back ground.	b) Blue back ground.
c) Red back ground.	d) Yellow back ground.
50. In 3 phase EMU, in case of VCB trip and panto lowered condition , VCB icon Indicates_____ on DDU.	
a) White back ground.	b) Gray back ground.
c) Red back ground.	d) Yellow back ground.

51. In 3 phase EMU, in case of any unit isolated ,that icon indicates_____ on DDU.	
a) White back ground with yellow.	b) Blue back ground with yellow.
c) Black back ground with yellow.	d) Red back ground with yellow.
52. In 3 phase EMU, after inserting DCS & ICS key _____ icon will indicates Blue, system ready.	
a) VCB icon	b) Panto icon
c) MAC icon.	d) Cab occupancy icon.
53. In 3 phase EMU, _____ protection is provided to safe guard the panto graph in Un wired turn out.	
a) ORD.	b) ADD
c) ECN	d) RDM.
54. In 3 phase EMU, _____ protection is provided to safe guard the panto graph , In case of panto pan damage.	
a) ORD.	b) ADD
c) ECN	d) RDM.
55. In 3 phase EMU, cross connection of BP and MR pipes lines provided between _____.	

a) DTC and MC	b) MC and TC.
c) Two TCs	d) TC and NTDC.
56. In 3 phase EMU, individual CP (MAC) can be isolated by _____ and _____.	
a) DDU, Fault reset switch	b) CCU, start all MAC
c) CCU,MAC Selector switch	d) DDU, MAC selector switch in DTC.
57. In 3 phase EMU, individual CP (MAC) switch location _____.	
a) End panel of DTC/NDTC.	b) End panel of MC.
c) End panel of TC.	d) Under truck be side CP(MAC).
58. In 3 phase EMU, individual CP (MAC) switch positions _____.	
a) Off ,on	b) Auto, off, on
c) Manual, auto, off.	d) Auto, off.
59. In 3 phase EMU, holding brake will release automatically when MCH move to_____.	
a) Braking	b) “0” position
c) Powering (traction)	d) Regeneration.
60. In 3 phase EMU, MIN-1brake applied lamp extinguish means _____ brakes are in Release condition.	
a) Auto brake.	b) EP brake.
c) Parking brake.	d) All of the above
61. In 3 phase EMU, on run, when MCH moved to braking side which brake will come first in MC _____.	
a) Regeneration.	b) EP brake.
c) Parking brake.	d) Auto brake.

62. In 3 phase EMU; individual basic unit can be isolated by _____ and _____.	
a) DDU, Battery supply switch.	b) DDU, BASIC UNIT switch in DTC
c) CCU, BASIC UNIT switch in DTC	d) CCU, Battery supply switch.
63. In 3 phase EMU, if emergency off button is not able to reset put _____ Switch in to isolation position.	
a) Emergency brake loop by pass.	b) CAB occupied selector.
c) Emergency off loop by pass.	d) Brake applied loop.

64. In 3 phase EMU, ensure _____ in case of emergency brake lamp Glowing.	
a) MCH in "0" position.	b) BCH in release position
c) Guard emergency in closed position.	d) All of the above.
65. In 3 phase EMU, the output supplies from auxiliary converters are _____	
a) 1 phase AC, 3 phase AC, DC	b) 3 phase AC, DC.
c) 1 phase AC, DC.	d) 1 phase AC, 3 phase AC.
66. In 3 phase EMU, after _____switch operated the auxiliary compressor (APC) Will starts if pressure is less.	
a) ICS key on	b) BN (battery normal) switch.
c) DCS on.	d) BD switch on.
67. In 3 phase EMU, location of auxiliary compressor (APC) _____.	
a) In DTC under truck.	b) In MC under shunting desk.
c) In MC in HT compartment.	d) In DTC under guard desk.
68. In 3 phase EMU, the speed is control (supply to TMs) through _____ method.	
a) Variable voltage	b) Constant voltage
c) Variable frequency.	d) Variable voltage variable frequency.
69. In 3 phase EMU, location of battery box under _____.	
a) Under DTC/NDTC	b) Under MC
c) Under TC.	d) In HT compartment in MC.
70. In 3 phase EMU, location of transformer oil pump _____.	
a) Under DTC/NDTC	b) Under MC near TFP tank.
c) Under TC.	d) In HT compartment in MC.
71. In 3 phase EMU, location of CIC coc _____.	
a) Under MC, after MR reservoir.	b) Under TC.
c) Under DTC/NDTC, after two MR reservoirs.	d) In HT compartment in MC.
72. In 3 phase EMU, MR Sensors available in _____.	
a) In all coaches under truck.	b) In HT compartment in MC.
c) In MC Under shunting desk	d) DTC under guard desk.
73. In 3 phase EMU, BP Sensor available in _____.	

a) DTC,MC	b) In DTC/NDTC only.
c) In MC only.	d) In all coaches.

74. In 3 phase EMU, air suspension Sensors available in _____.	
a) DTC/NDTC,MC	b) In all coaches.
c) In MC only.	d) In DTC/NDTC only
75. In 3 phase EMU, ACP boater facility available in _____ compartment Roof.	
a) All general coaches	b) First class compartments.
c) Ladies compartment/ disable.	d) Venders compartment.

Technical Objective Bit bank

1 In 3Ø loco, to isolate panto No. 2 keep panto selector switch in ……..…… position and close……..… coc. (C)

A Auto , PAN-1 & 2 B II , PAN-1

C I , PAN-2 D I or II , PAN-1 or 2

2 In 3Ø dead loco, ……. coc should be open for charging BP pressure into auxiliary reservoir. (B)

A 70 **B 47**

C 74 D 136

3 While 3Ø loco working as banker, put on ……. switch and close 70 cut out cock. (B)

A ZTEL **B ZBAN**

C BLHO D None of the above

4 For resetting VCD in WAG 9 or WAP 7 loco, wait for …….seconds. (D)

A 120 B 100

C 240 **D 160**

5 In 3Ø loco, SS-17 belongs to …… sub system. (C)

A Fire detection B Memotel

C Processor FLG-1 D Processor FLG-2

6 To perform shunting with 3Ø loco, keep ……. switch in ……. position. (C)

A 154 ; 0 B 154 ; 1

C 160 ; 0 D 160 ; 1

7 While working with WAP-7 or WAG-9 with light load, if Harmonic filter is isolated, work with normal speed after isolating …… (D)

A Auxiliary converter-1 B Traction converter-1 & 2

C Auxiliary converter-2 **D Traction converter-1**

8 In 3Ø loco, Battery charger is getting supply from …… (C)

A Auxiliary converter No. 1 B Auxiliary converter No. 2

C Auxiliary converter No. 3 D Traction converter No. 1

9 While energizing 3Ø loco, if UBA meter is showing "0" and corridor lights also not glowing check, MCBs No. …….. (C)

A 100,110 B 110,112

C 112, 112.1 D 100,112.1

10 In 3Ø loco, for charging of BP pressure …… coc to be kept open. (B)

A A-8 **B 70**

C 74 D 47

11 In 3Ø loco, if battery voltage drops below …….. volts, loco will shut down. (A)

A 82 B 87

C 90 D 92

12 In 3Ø loco, Battery charger output MCB No. is ……. and its location is at…… (B)

A 110 ; SB1 **B 110 ; SB2**

C 100 ; HB1 D 100 ; HB2

13 In 3Ø loco, VCD is required to be acknowledged from ……..... kmph of speed. (C)

A 5 B 1

C 1.5 D 15

14 During loco brake testing of WAG-9 or WAP-7, loco should not to move up to …….. KN. (B)

A 100 **B 150**

C 300 D 125

15 In 3Ø loco, continuous pressing of PSA for more than 60 seconds is called as ……..mode. (B)

A VCD isolation **B Dead man**

C VCD acknowledgement D None of the above

16 In 3Ø loco, Constant speed control (CSC) can be activated above …….. kmph of speed. (A)

A 5 B 1

1.5 D 15

17 In 3Ø loco, Auxiliary converter No.2 feeds ……motors (D)

A Traction motor blower-1 & 2 B Transformer oil pump-1 & 2

C SR Oil pump-1 & 2 **D all of the above**

18 While clearing 3Ø loco (provided with Knorr brake) as dead, mode switch position in both cabs is …… (D)

A HLPR B Lead

C Test **D Trail**

19. In 3Ø loco, Constant speed control (CSC) will be de-activated automatically if BP pressure drops (with or without A9) more than …….. Kg/cm^2 . (C)

A 1 B 1.5

C **0.25** D 0.6

20 In 3Ø loco, SS-10 belongs to …… sub system (B).

A Battery **B** **Brake system**

C Auxiliaries HB1 D Auxiliary converter No. 3

21 In 3Ø loco, location of TM Blower-1 is …… (B)

A Machine room No.1(near cab-2) **B** **Machine room No.2(near cab-1)**

C Under machine room No.1 D Under machine room No.2

22 In 3Ø loco, if vigilance penalty brakes are applied BP pressure drops to …… kg/cm^2 . (Gauge reading) (B)

A 2 **B** **2.5 to 3.0**

C 2.5 to 3.5 D 0

23 When ZTEL is switched ON Tractive Effort(TE) is limited to …….. KN in WAG-9. (B)

A 0.8 to 1.5 **B** **300**

C 150 D 458

24 Maximum permissible speed of WAG-9 loco is ……. Kmph. (A)

A **100** B 130

C 140 D 160

25 In 3Ø loco, on moving BL key from 'D' to 'OFF' position, ……..….. brakes will apply automatically. (C)

A Direct brakes B Auto brakes

C **Parking brakes** D All brakes

26 In 3Ø loco, parking brakes are applied and released through …….. switch in Panel 'A'. (C)

A Solenoid valve B BPCS

C **BPPB** D None of the above

27 In 3Ø loco, SS-14 belongs to …… sub system. (B)

A Cab 1 **B** **Cab 2**

C Fire detection D Auxiliaries in HB 2

28 In 3Ø loco, If ZBAN is switched ON in working cab, …….. Happens. (A)

A **BP pressure drops to '0'** B FP pressure drops to '0'

C BC pressure raises to 3.5 kg/cm^2 D None of the above

29 Hotel load facility is available in ……. loco(s). (C)

A WAP-5 B WAP-7

C All WAP-5 and modified WAP-7 D All three phase locos

30 Three phase loco is having …… number of auxiliary Converter (s). (C)

A 1 B 2

C 3 D 4

31 In 3Ø loco, SS-18 belongs to …… sub system. (D)

A Fire detection B Memotel

C Processor FLG-1 **D Processor FLG-2**

32 In 3Ø loco, to close the DJ, ensure …… node information on screen (in driving mode). (B)

A FLG-504 **B FLG-550**

C FLG-570 D FLG-590

33 Total oil /coolant points in WAG 9 or WAP 7 locos are …… (C)

A 7 B 6

C 13 D 8

34 To apply parking brakes in 3Ø dead loco, press. …..… side plunger of solenoid valve. (A)

A Left B Right

C Any plunger D None of the above

35 Three phase loco is having …… no. of three phase auxiliary motors. (C)

A 16 B 22

C 12 D 13

36 In 3Ø loco, UBA meter needle deviates when BL key is in …… mode(s) of BL key. (C)

A Driving B Cooling

C Driving or Cooling D None of the above

37 If speed of the train is increased more than …… than loco MPS, emergency brake will apply in 3Ø loco. (C)

A 0.5% B 5%

C 10% D 50%

38 In 3Ø loco, battery charger input MCB No. is …… and located in …… (B)

A 100 , HB-1/BUR2 **B 100 , HB-2/BUR2**

C 112.1 ,SB-2/SR2 D 112 , SB-1/SR1

39 In 3Ø loco, if speed is more than …… % than loco MPS, only audio visual indications will appear. (B)

A 0.50 **B 5**

C 15 D 50

40 Parking brake is provided to ……wheels in WAG-9 loco. (B)

A 1, 4, 5 & 8 **B 2, 6, 7 & 11**

C 2 & 11 D 1, 6, 7 & 12

41 Over current relay in 3Ø loco is …… (C)

A OCR-86 B MVR-86

C OCR-78 D None of the above

42 In ……. gradient area and terminal goods yards Constant speed control (CSC) of 3 phase loco should not be used. (C)

A Up B Down

C Undulating D Steep down

43 In WAG-7 or WAP-4, ……. out put is given to all TMs fields during RB. (B)

A RSI-1 **B RSI-2**

C Both RSI-1 & RSI-2 D None of the above

44 While working 3Ø loco as banker, close …… cocs in pneumatic panel. (A)

A 70& 136 B 70&74

C 74&136 D All the above

45 In 3Ø loco, to reset the Fire detection unit (FDU) press the ……..……button. (B)

A BPFA **B Press Reset button on FDU**

C ESPB D BPVR

46 In 3Ø loco,……auxiliary motors works only in cooling mode. (C)

A All three Ø and single Ø motors B All single Ø motors and MCP 1 & 2

C Only single Ø motors & MCPA D None of the above

47 In three Ø loco, if 'Catenary voltage out of limit' appears on screen, change …….. fuse after lowering panto and try. (D)

A FL B CCBA

C No need to Change **D Potential Transformer**

48 In three Ø loco, SS-09 belongs to …… sub system. (A)

A Battery sytem B Brake system

C Auxiliaries HB-1 D Auxiliary converter No.3

49 In 3 phase knorr brake loco, rear cab mode switch position is----- (C)

A HLPR B Lead

C Trail D Test

50 To reset VCD in WAP-5 loco, wait for ……seconds. (D)

A 0 B 160

C 240 **D 120**

51 In 3 phase loco cab changing is to be done with in …… minutes otherwise CE will switch OFF. (A)

A 10 B 0

C 15 D 20

52 In 3 phase locos, in cooling mode, for panto and DJ ……. motor creates pressure. (B)

A MCPs **B MCPA**

C Both A and B D None of the above

53 In three Ø loco potential transformer is connected to ……roof bar.(A)

A Middle B Panto-1

C Panto-2 D None of the above

54 The position of mode switch in leading cab of 3Ø loco provided with Knorr brake is …… (B)

A HLPR **B Lead**

C Trail D Test

55 In 3Ø loco, normal position of 152 switch is …… (A)

A '0' B '1'

C 'NORM' D None of the above

56 In 3Ø loco, SS-16 belongs to …… sub system. (C)

A Cab-2 B Fire detection

C Memotel (Speedometer) D Processor FLG-1

57 In 3Ø loco, SS-04 belongs to ……..…… sub system. (D)

A Traction bogie-1 B Traction bogie-2

C Main power **D Harmonic filter**

58 In 3Ø loco, SS-08 belongs to ……sub system. (C)

A Auxiliary converter No.1 B Auxiliary converter No.2

C Auxiliary converter No.3 D Battery

59 In 3Ø loco provided with Knorr brake, Auto brake valve (A9) handle can be locked or unlocked in …..……..… position . (C)

A Emergency B Neutral

C Full service D Minimum reduction

60 Three phase loco is having …… number of roof bars. (B)

A 2 **B 3**

C 4 D 3+3

61 Three phase loco having …… number of additional cocs (total coc on both sides). (B)

A 4 **B 4 + 4**

C 16 D 2

62 In 3Ø loco, SS-05 belongs to …… sub system. (B)

A Harmonic filter **B Hotel load**

C Brake system D Fire detection

63 WAG-9 loco is provided with ……. No. of direct brake cylinders and ….…. No. of parking brake cylinders. (A)

A 12 & 4 B 12 & 12

C 4 & 12 D 12 & 6

64 3 phase loco is fitted with ……...… type of traction motors. (A)

A 3 Ø AC Asynchronous squirrel cage induction motor B TAO 659

C Hitachi D Hitachi or TAO 659

65 In 3Ø loco, position of control Electronics (CE) during cab changing is ……. ……. (C)

A OFF B ON

C Self hold mode D None of the above

66 In 3Ø loco, location of BPFL switch is …… (B)

A FLCU B In both cabs Panel A

C In both cabs Panel B **D In both cabs Panel** C

67 To move 3 Ø loco as live or dead ensure ……& ……..… brakes are released. (C)

A Parking brakes, B Direct brakes, proportional

C Parking , Direct brakes D None of the above

68 In 3Ø loco, if throttle (ATDC) is failed, keep …… switch in …… position. (B)

A 154 , 0 **B 152 , 1**

C 152 , 0 D 160 , 1

69 In 3Ø loco, when parking brakes are applied, parking brake gauge shows ……. . (A)

A 0 Kg/cm2 B 4 Kg/cm2

C 3.5 Kg/cm2 D 6 Kg/cm2

70 In 3Ø loco, SS-15 belongs to ……sub system. (B)

A Cab-2 **B Fire detection**

C Memotel (Speedometer) D Processor FLG-1

71 In 3Ø loco, to isolate panto No.1 keep panto selector switch in ……. Position (C)

A Auto B I

C II D I & II

72 Location of Emergency stop push button switch in 3Ø loco is--------(A)

A **In both cabs Panel A** B In both cabs Panel B

C In both cabs Panel C D In both cabs Panel D

73 WAG-9 or WAP-7 locos are having …….. number of dampers (in both primary and secondary suspension). (B)

A 16 **B 20**

C 40 D 10

74 Location of MCP-2 in three Ø loco is ……..… (B)

A Loco left side below Machine room No.1 **B Loco right side below Machine room No.2**

C Machine room No.1 D Machine room No.2

75 In 3Ø loco, glowing of BPFA and flickering of LSFI indicates ……fault. (B)

A Isolation of sub system **B Priority-1**

C Priority-2 D Both Priority-1 & 2 faults at a time

76 In 3Ø locos, VCD is required to acknowledge once in every …… (B) seconds.

A 8 **B 60**

C 68 D 160 in WAG-9 or WAP-7 & 120 in WAP-5

77 In 3Ø loco, on run glowing of BPFA alone indicates …… fault. (C)

A Priority-1 B One of the sub system is isolated

C **Priority-2** D Priority-1 fault or Priority-2 fault

78 Location of Harmonic filter resistances in 3Ø loco is …… (A)

A **Loco roof** B Inside FB

C Machine room No-2 D By the side of pneumatic panel

79 In 3Ø loco, to bring isolated sub system into service (system isolated sub system), procedure is …… (A)

A **Switch OFF and switch ON CE** B Reset concerned MCB

C Close concerned COC D Operate concerned rotating switch

80 In 3Ø loco, Status code '00' means---------- (D)

A Major fault in loco B No sub system isolated

C Minor fault in loco D **No fault and No sub system isolated**

81 In 3Ø loco, Auxiliary converter No.3 feeds …… Motors. (B)

A TMB 1&2 **B** **MCP-1 & 2**

C OCB 1&2 D TFP PUMP 1&2

82 In 3Ø loco, In case of emergency, ALP can stop the train by operating …… . (D)

A Emergency stop switch B Emergency brake valve

C BPVG D **Emergency stop switch or Emergency brake valve**

83 In 3Ø loco, Constant speed control (CSC) will be de-activated automatically if throttle is disturbed above …….. % in TE side or BE side. (C)

A 33% B 66%

C **3%** D No such limit, on moving throttle

84 WAG-9 loco is having ……type of bogie. (C)

A Bo-Bo flexi coil B Co-Co Tri mount

C **Co-Co flexi coil** D Co-Co tetra mount high adhesion

85 3Ø loco having … number of single phase 415V auxiliary motors. (B)

A 12 **B** **4**

C 8 D 13

86 In 3Ø loco, Machine room blowers & their scavenging blowers

works in…….…… Mode(s). (D)

A Driving mode only
B Cooling mode only
C Off
D **Driving mode & Cooling mode**

87 In WAG-9 or WAP-7, location of air dryer is …… (C)

A Behind MCP-1 in left side
B Between two trucks
C **Behind cattle guard-1 loco pilot side**
D Behind cattle guard-1 in ALP side

88 In 3Ø loco,SS-06 belongs to …….…… sub system. (A)

A Auxiliary converter No. 1
B Auxiliary converter No. 2
C Auxiliary converter No. 3
D Traction converter No. 1

89 In 3Ø loco, Continuous glowing of LSFI indicates---------- (B)

A Priority-1 fault
B At least one sub system is isolated
C Priority-2 fault
D Priority-1 fault or Priority-2 fault

90 In 3Ø loco, location of MCP-1 is ……..…… (D)

A In machine room No.1
B In machine room No.2
C Below machine room No.2
D **Below machine room No.1**

91 In 3Ø loco, 3Ø scavenging blower collects dust from air filters of…… & ……..… . (D)

A Oil cooling blowers-1&2
B Bogie blowers-1&2
C Machine room blowers-1&2
D Oil cooling blower & Bogie blower

92 In 3Ø loco, to operate reverser ensure …… node information on screen and MR pressure should be more than 6.4 kg/cm2. (C)

A FLG-504
B FLG-550
C FLG-570
D FLG-590

93 In 3Ø loco, when harmonic filter is isolated, speed of the train is restricted to ……... (B)

A 60 Kmph.
B 40 Kmph.
C 25 Kmph.
D No such restriction

94 In 3Ø loco, location of Fire detection unit (FDU) is …… (B)

A SB-1
B SB-2
C HB-2
D Panel

95 In proportional working, maximum brake cylinder pressure in WAG-9 loco is ……..kg/cm2 (B)

A 1.8 kg/cm2
B 2.5 kg/cm2
C 3.5 kg/cm2
D 5 kg/cm2

96 3Ø loco is having …….. No. of 3 phase auxiliary motors in loco under frame. (B)

A 2 **B 4**

C 12 D 8

97 If RS pressure is below 5.2 Kg/cm2 and MCPs are not working, MCPA starts automatically provided BL key is in …….……. position. (C)

A "C" B "D"

C "C" or " D" D None of the above

98 In 3Ø loco before operating throttle, ensure …… node information on screen. (D)

A FLG-504 B FLG-550

C FLG-570 **D FLG-590**

99 In 3Ø loco, SS-03 belongs to ……sub system. (B)

A Traction bogie-1 **B Traction bogie-2**

C Main power D Harmonic filter

100 In 3Ø loco, Oil cooling blower cools …&……Oils/ water coolant. (C)

A SR-1 , SR-2 B TFP-1 , TFP-2

C TFP & SR D Traction motors

101 In 3Ø loco, to isolate truck No.1 (traction converter-1), keep …….. switch in ….……. position. (A)

A 154 , I position B 154 , II position

C 154 , Auto position D 154 , I & II position

102 In 3Ø loco, if battery voltage drops to …… volts for 30 seconds, P-2 message appears. (A)

A 92 Volts B 82 Volts

C 90 Volts D 85 Volts

103 In 3Ø loco, for application of parking brakes speed should be below……..…. (A)

A 5 Kmph B 15 Kmph

C 1.5 Kmph D Zero Kmph

104 In WAG-5, ... out put is given to all TMs fields during RB. (A)

A RSI-1 B RSI-2

C Both RSI-1 & RSI-2 D None of the above

105 Location of line contactors L-1, L-2 & L-3 in WAG-7 (above 27200) & in WAP4 locos is at …… (A)

A HT-1 BA-1 panel B HT-3 BA-2 panel

C HT-3 BA-3 panel D HT-3 BA-4 panel

106 Location of line contactors L-4, L-5 & L-6 in WAG-7 (above 27200) & in WAP4 locos is at …… (C)

A HT-1 BA-1 panel B HT-3 BA-2 panel

C HT-3 BA-3 panel D HT-3 BA-4 panel

107 Location of C-118 in WAM-4 loco is at……. (C)

A Motor chest no.2 towards carridor-1 B Motor chest no.2 towards carridor-2

C HT-3 BA-3 panel D HT-3 BA-2 Panel

108 Location of R-1 coc in WAG-5 loco is at …… (C)

A Cab-1 center locker B Near control reservoir

C Above wheel no.4 D Cab-1 left side locker

109 Location of R-1 coc in WAG-7 loco is …… (B)

A Cab-1 center locker **B Near control reservoir**

C Above wheel no.4 D Cab-1 left side locker

110 Location of C2A relay valve in WAG-5 , WAM4 & WAG7 (up to 27199) is at …… (A)

A Behind BA box no.3 B Behind BA box no.2

C Behind BA box no.1 D Behind BA box no.4

111 Location of C2A relay valve in WAG-7 loco 27200 onwards & WAP-4 crew friendly cab locos is at …… (B)

A Behind BA box no.3 **B Pneumatic panel**

C Behind BA box no.1 D Behind BA box no.4

112 Location of C2B relay valve in WAG-5, WAM4 & WAG7 (up to 27199) is at …… (B)

A In between MR-1 & MR-2 **B In between MR-3 & MR-4**

C In between MR-2 & MR-3 D Pneumatic panel

113 Location of C2B relay valve in WAG-7 (27200 onwards) & WAP4 crew friendly cab locos is at ……. (D)

A In between MR-1 & MR-2 B In between MR-3 & MR-4

C In between MR-2 & MR-3 **D Pneumatic panel**

114 Location of MVSL-1 in WAG-5, WAM4 & WAG7 (up to 27199) is at- (A)

A HT-2 compartment towards corridor-2 B HT-2 compartment towards corridor-1

C HT-1 compartment towards corridor-2 D HT-1 compartment towards corridor-1

115 Location of MVSL-2 in WAG-5, WAM4 & WAG7 (up to 27199) is at-- (B)

A HT-2 compartment towards corridor-2 **B HT-2 compartment towards corridor-1**

C HT-1 compartment towards corridor-2

D HT-1 compartment towards corridor-1

116 Location of EP-3 coc in WAG-7(27200 onwards) & WAP-4 locos is …… (A)

A Near BA-4 panel

B Near BA-3 panel

C Near BA-2 panel

D Near BA-1 panel

117 Location of MVSL-1 in WAG-7 loco 27200 onwards is …….. (A)

A HT-1 compartment

B HT-2 compartment

C HT-3 compartment

D None of the above

118 Location of MVSL-2 in WAG-7 loco 27200 onwards is …….. (B)

A HT-1 compartment

B HT-2 compartment

C HT-3 compartment

D None of the above

119 In conventional locos, ...reservoir pressure is used for horns . (D)

A MR1

B MR2

C MR3

D MR4

120 In modified locos, when additional BP cut out cock is closed in leading side,…… cab BP gauge shows '0' reading. (A)

A Trailing

B Leading

C In both cabs

D None of the above

121 In conventional locos, ...reservoir pressure is used for creation of loco BC pressure. (D)

A MR1

B MR2

C MR3

D MR4

122 In each cab A9 feed valve is having .....No. of cut out cocks (B)

A 1

B 2

C 3

D 4

123 QD-2 is connected between.....and..... traction motors. (C)

A TM4 & TM6

B TM5 & TM6

C TM4 & TM5

D None of the above

124 In conventional locos, A8 coc Position while working with cab-2 leading is…….. (C)

A Partially open

B partially closed

C Open

D Close

125 Location of line contactors in WAG-5, WAM-4 & WAG-7(up to 27199) locos is at …… (C)

A HT-1 BA-1 panel

B HT-3 BA-2 panel

C HT-3 BA-3 panel D HT-3 BA-4 panel

126 Total number of loco brake cylinders in WAP-4 loco is-------- (D)

A 6 B 8

C 4 **D 12**

127 Normal pressure of SMGR is..... Kg /cm2. (A)

A 2.5 - 3.5 B 3.0 - 2.0

C 3.5 - 4.5 D 5.0 - 3.0

128 Location of A-8 COC in WAG-7 loco above 27200 is …… (B)

A In cab-1 below A-9 **B Pneumatic panel**

C In cab-2 below A-9 D None of the above

129 If all line contactors are not closed in WAG 5 loco, ensure .....COC is in open position. (A)

A EP 2 COC B EP 1 COC

C MR 4 COC D VEAD COC

130 Location of A-8 COC in WAP-4 crew friendly locos--------- (B)

A In cab-1 below A-9 **B Pneumatic panel**

C In cab-2 below A-9 D None of the above

131 Brake pipe pressure should be .....Kg/ cm2 in locomotive and ….. Kg/ cm2 in brake van of train having 58 vehicles. (C)

A 5.0, 4.8 B 5.0, 4.9

C 5.0, 4,7 D 5.0, 5.0

132 Minimum FP pressure Should be .... Kg/ cm2 in locomotive and ……. Kg/cm2 in rear SLR of a 24 vehicles coaching (A)

A 6.0, 5.8 B 6.0, 5.9

C 6.0, 5.7 D 6.0, 5.6

133 In WAG 7 loco, If all line contactors are not closed, ensure…… cocs are in open position. (D)

A EP 2& EP3 B EP 1& EP3

C MR 4 & EP3 **D EP 1 and EP 2**

134 In conventional locos, CP Individual safety valve setting is ……kg/ cm2. (C)

A 8 B 11.5

C 11 D 9.5

135 When BP drops below 4.4 (in BP gauge) without A9……starts functioning. (C)

A ACP Indication B AFL

C Both A & B above D none of the above

136 In conventional locos, if ALP is driving from trailing cab and loco pilot is controlling from leading cab, do not exceed ……. Kmph of speed. (A)

A 40 B 15

C 30 D No Speed Restriction

137 In conventional locos RGEB2 is connected on ..... Pipe line. (B)

A FP pipe **B Brake Pipe**

C Control pipe D All the above

138 QD-1 is connected between.... and ..... traction motors. (A)

A TM2 & TM3 B TM1 & TM3

C TM1 & TM2 D None of the above

139 In conventional locos auto Drain Valve will drain out the moisture at ……... Kg/cm2 (when BLCP is closed). (B)

A 8 **B 9.5**

C 10.5 D 11

140 Location of C-145 in WAG-7 (27200 onwards) & in WAP4 (with RB) is at ……..…… (D)

A HT-1 BA-1 panel B HT-3 BA-2 panel

C HT-3 BA-3 panel **D HT-3 BA-4 panel**

141 For lowering or for raising the pantograph in three stages ..... valve is provided. (B)

A Panto servo motor **B Throttle valve**

C BothA & B D None of the above

142 In conventional locos, if ALP is in leading cab and Loco pilot is controlling from trailing cab, do not exceed …Kmph of speed. (B)

A 40 **B 15**

C 30 D No Speed Restriction

143 In conventional locos during RB, if loco brake cylinder pressure is above 1.0 kg/cm2 ,…..relay will de-energise to bring GR to '0'. (D)

A Q 51 B QVRF

C QE **D Q 50**

144 Location of VEPT-1 in crew friendly locos is …… …… (D)

A Loco roof B Cab-1 left side locker

C Cab-1 center locker **D Cab-1 back panel**

145 The clearance between brake block and wheel tyre should be ..... mm in release position of loco brakes. (A)

A 10 B 5

C 15 D 20

146 The..... reservoir pressure is used for BA2 and BA3 panels in WAG5 loco. (A)

A control reservoir B MR1

C MR2 D MR4

147 In conventional locos duplex check valve is set at ……kg/ cm2. (B)

A 5 **B 4.9**

C 6.5 D 8

148 In conventional locos,.....reservoir pressure is used for FP pressure creation. (B)

A MR1 **B MR2**

C MR3 D MR4

149 When BPSW is pressed, …….. valve energizes for quick recreation of BP pressure. (A)

A MV4 B R6

C VEF electrical D IP

150 The normal position of air intake COC is ..... (A)

A Close B Open

C Partially Open D Partially Close

151. In conventional locos, SS2 safety valve is set at ..... kg/cm2. (C)

A 10 B 11

C 10.5 D 11.

152 Location of HQOP-1 in WAG-7 loco 27200 onwards is ---- (A)

A HT-1 BA-1 panel B HT-3 BA-3 panel

C HT-3 BA-2 panel D Switch panel

153 In conventional locos proportional working pressure with A9 is .....kg/ cm2. (C)

A 2 B 2.5

C 1.8 D 3.5

154 Normally .....colour cocs to be kept open and.....colour coc to be kept closed of air dryer. (B)

A Red , Green **B Green , Red**

C Red, Red D Green , Green

155 In conventional locos, Air Dryer is connected between …….. &…… reservoirs. (B)

A MR1 , MR2 **B MR2 , MR3**

C MR3 , MR4 D None of the above

156 In conventional locos, for discharging back pressure from CP

delivery pipe line, …… valves are (A)

A Un loader B Auto drain

C Both A & B D None of the above

157 Maximum ……kg/ cm2 of pressure will go to brake cylinders of each wagon, when BP drops to '0'. (D)

A 2 B 2.5

C 1.8 **D 3.8**

158 A-8 cut out cock position is.....in MU leading loco and ..... in MU trailing loco. (A)

A Open, Close B Open, Open

C Close, Close D Close, Open

159 In BMBC system, each coach having ..... no. of brake cylinders. (C)

A 2 B 3

C 4 D 5

160 Maximum loco brake cylinder pressure with A9 is …….....Kg/cm2 and with SA-9 is ..... …… Kg/ cm2. (B)

A 1.8, 2.5 **B 1.8, 3.5**

C 2.0, 2.5 D 1.8, 3.8

161 Location of HQOP-2 in WAG-7 loco 27200 onwards is-------- (C)

A HT-1 BA-1 panel B HT-2 compartment

C HT-3 BA-2 panel D Switch panel

162 In MU locos, MU2B position in leading loco is…….. and in trailing loco is…… . (C)

A Lead, Lead B Trail, Lead

C Lead,Trail D Trail, Trail

163 In conventional locos SS-1 safety valve setting… Kg/cm2. (D)

A 8.5 B 9

C 10.5 **D 8**

164 In conventional locos, if wipers, sanders are not working and FP pressure is not creating ..... Valve to be tapped. (A)

A Duplex check valve B Double check valve

C Both A&B D None of the above

165 In conventional locos, if DJ trips during RB ..... valve destroys BP pressure automatically. (A)

A IP(M) B C3W

C A9 feed D Auto drain

166 Location of A-8 COC in WAG 5 loco is …… (A)

A In cab-1 below A-9 B Pneumatic panel

C In cab-2 below A-9 D None of the above

167 Sensitivity of distributor valve is reduction of…….. Kg/cm2 amount of BP pressure with in …….seconds. (A)

A 0.6, 6 B 0.3, 6

C 0.6, 3 D 0.3, 60

168 In conventional dead loco, IP (M) COC must be in ..... position. (A)

A Close B open

C Either close or open D None of the above

169 In conventional locos,.....pressure switch is provided on A9 control pipe line (related to AFL). (A)

A P1 B P2

C RGCP D RGAF

170 Leakages in formation 'BP' pipe is indicated through …… gauges in both cabs. (D)

A MR B Loco BC

C FP **D AFI**

171 To by pass the air dryer ..... colour cut out cock to be closed and …….colour cut out cock to be opened. (B)

A Red, Green **B Green, Red**

C Red, Red D Green, Green

172 In air brake locos, ALP emergency brake is connected to ..... pipe line. (A)

A BP B MR

C FP D BC

173 In conventional locos,.....pipeline of A9 is not having any coc in both cabs. (C)

A MR pipe B Control pipe

C BP pipe D None of the above

174 When additional BP cut out cock is closed on formation side, …… pressure will not charge in to the formation. (A)

A BP B FP

C MR D All the above

175 Location of CTF-3 in WAG-7 loco 27200 onwards & WAP4 (with RB) is ……. (D)

A HT-1 BA-1 panel B HT-3 BA-2 panel

C HT-3 BA-3 panel **D HT-3 BA-4 panel**

176 During BP pressure leakage in formation, …….. lamp glows in signaling panel. (C)

A LSDJ B LSP

C **LSAF** D LSB

177 In Air flow indicator, …… colour needle is called as reference needle

and ..... colour needle is called as indicating needle. (D)

A White, Red B Red, Green

C Green, Red **D Red, White**

178 Normal position of additional BP cut out cocks on either side of the loco is…… . (A)

A Open B Close

C Either close or open D None of the above

179 In conventional locos, ... Pressure switch is provided on BP pipe line (related to AFL). (B)

A P1 **B P2**

C RGCP D RGAF

180 The C145 contactor position is..... when MP is in traction side. (A)

A open B close

C either close or open D neither close nor open

181 In 58 BOXN+BV load, if 6 DVs are defective, the effective brake power is.....%. (A)

A (53 / 59) X 100 = 90% B (59 / 53) X 100 = 111%

C Cannot calculate D None of the above

182 The C145 contactor position is..... when MP is in braking side. (A)

A close B open

C neither close nor open D either close or open

183 Formula for effective brake power percentage is---------- (A)

A (Effective No. of cylinders /Total no of cylinders)X100 B (Total no of cylinders /Effective No. of cylinders)X100

C (Effective No. of cylinders X 100) D (Total no of cylinders / 100)

184 Though MCPA is working and RS pressure is not creating, ……..….. …… drain cocks to be checked. (D)

A EP B CP

C CDC D **RS,PT & CPA**

185 For grounding conventional loco, place ZPT key in HOM box in……..… position and turn it to ……..… position in clock wise direction. (A)

A 5° clock, 7°clock B 5° clock, 6°clock

C 7° dock, 9° clock D 11° clock, 1°clock

186 When MP is in traction side, the CTF1, CTF2 & CTF3 handles position are …….. (D)

A CTF1, CTF2 up & CTF3 down B CTF1, CTF2 down & CTF3 up

C CTF1, CTF2, CTF3 down **D CTF1, CTF2 & CTF3 up**

187 In single pipe air brake system, formation wagon / coach auxiliary reservoir is charged with ……. pressure. (D)

A MR4 B FP

C BC **D BP**

188 In MU both locos pneumatic pressure is maintainel equally through ……. pipe. (D)

A BP B FP

C BC equalising **D MR equalising**

189 In twin pipe air brake system, coaches auxiliary reservoir is charged with ……. pressure. (B)

A MR4 **B FP**

C BC D BP

190 In conventional locos, ... reservoir pressure is used for creation of BP pressure. (C)

A MR 1 B MR 2

C MR 3 D MR 4

191 In double head trailing loco , A8 coc must be in .....position. (B)

A Open **B Close**

C Either (A) or (B) D None of the above

192. While moving conventional loco as dead, MR4 reservoir is charged with …….. pressure when DV is in service (MR Eq. pipe is not connected between locos). (A)

A BP B FP

C MR D None of the above

193 For single loco both side BC equalizing pipes angle coc must be in ..... position. (A)

A Close B Open

C Either (A) or (B) D None of the above

194. During CP efficiency test, when BPSW is pressed, BP should not drop below ….....kg/cm2 (write the BP gauge reading). (B)

A 4 **B 4.4**

C 3.5 D 2.5

195 When MP is in braking side, the CTF1, CTF2 & CTF3 handles position are …….. (B)

A CTF1, CTF2, CTF3 up **B CTF1, CTF2 & CTF3 down**

C CTF1, CTF2 down & CTF3 up D CTF1, CTF2 up & CTF3 down

196. During BP continuity test, ……..…kg/ cm2 of BP pressure to

be dropped through A9 in the loco. (D)

A 2.5 B 3.5

C 2 **D 1**

197. During CP efficiency test, when BPSW is not pressed, BP gauge needle should show between …… and …… kg/cm2. (A)

A 2.5 & 3.5 B 1.5 & 2.5

C 3.0 & 3.5 D Any one of the above

198. In modified locos, when C145 contactor is closed, ……. lamp glows near Q50 relay. (C)

A LSB B LSGR

C LSC-145 D LSOL

199. When L1 or L6 is not closed, then ..... traction failure occurs. (C)

A TLTE with GR progression B TLTE w/o GR progression

C PLTE D 1st notch auto regression with LSP

200. Auto sanding is done by the energisation of ……. Relay. (C)

A Q44 B Q49

C Q48 D Q50

201 When ever cattle run over takes place, if BP dropped the immediate duty of crew is to switch ON …… light. (D)

A Head light B Cab light

C Marker light **D Flasher light**

202 When ever cattle run over takes place, after clearing the block section, the LP has to check …… voltage. (B)

A OHE voltage **B Battery voltage**

C Charger voltage D None

203 When ever cattle run over takes place, if BP dropped due to front side BP angle cut-off cock is broken , the duty of LP is to maintain BP pressure is by closing ……. ……coc. (C)

A MR-4 COCK B Rear side addl. BP coc

C Front side Addl. BP angle coc D Both side addl.BP cocs

204 Relay Q 46 is called as ……. Relay (C)

A GR half notch protection relay B Auxiliaries protection relay

C **GR full notch protection relay** D DJ protection relay

205 Relay Q 118 is called as ……..... relay. (B)

A GR half notch protection relay **B Auxiliaries protection relay**

C GR full notch protection relay
D DJ protection relay

206 On closing BLDJ, pressing BLRDJ, LSDJ remains glowing means …….. Tripping failure. (B)

A Operation A beginning
B ICDJ
C Operation A ending
D Mechanical locking of DJ

207 While checking reasons for ICDJ, UBA meter shows more than 90 V indicates ……..fuse(s) are in good condition. (C)

A CCPT & CCBA
B CCBA
C ADDl. CCBA
D CCPT & CCDJ

208 To avoid ICDJ, minimum ……..... kg/cm2 of MR/RS pressure is required. (B)

A 6.6
B 6.5
C 6
D 5.5

209 While checking the reasons for ICDJ, the panto raised condition indicates ……& ……..fuses are in good condition. (C)

A CCDJ & CCPT
B Addl CCBA & CCA
C CCBA & CCPT
D Addl CCBA & CCDJ

210 On closing BLDJ, pressing BLRDJ, LSDJ lamp extinguishes and glows immediately is an indication for ..... tripping failure. (D)

A Operation A ending
B Operation A ending part II
C Operation B Part I
D Operation A beginning

211 Earth fault in Q 118 relay coil causes …… fuse to melt. (C)

A CCBA
B CCDJ
C CCPT
D Addl. CCBA

212 In VCB(DI) DJ provided locos, the DJ control circuit is not having ..... branch. (C)

A Q 118
B MTDJ
C EFDJ
D Q 45

213 Earth fault in Q 45 relay coil causes ..... fuse to melt. (B)

A CCBA
B CCDJ
C CCPT
D Addl. CCBA

214 Earth fault in Q 44 relay coil causes …… fuse to melt. (A)

A CCPT
B CCDJ
C CCBA
D Addl. CCBA

215 Earth fault in MTDJ coil causes ……fuse to melt. (D)

A CCBA
B Addl. CCBA

C CCPT **D CCDJ**

216 Earth fault in EFDJ coil causes ……fuse to melt. (C)

A CCBA B Addl. CCBA

C CCDJ D CCPT

217 Earth fault in C 118 contactor coil causes ……. fuse to melt. (A)

A CCDJ B Addl. CCBA

C CCPT D CCBA

218 Permanent welding of the tips of C 106 contactor causes ..... tripping failure. (C)

A No tension B 6th notch tripping

C ICDJ D Operation 'O'

219 Melting of CCDJ fuse causes …… tripping failure. (D)

A Operation 'A' ending B Operation 'O'

C Operation 'A' beginning **D ICDJ**

220 For closing of DJ ..... push button switch can be used. (C)

A BP1DJ B BPP

C BP2DJ D BPR

221 Improper contact of …….. push button switch I/L causes ICDJ trouble. (A)

A BP1DJ B BPP

C BP2DJ D BPR

222 In VCB(SI/Horizontal) DJ provided Locos, the DJ control circuit is having ..... no. of branches. (C)

A 3 B 5

C 6 D 4

223 In emergency DJ can be tripped by ALP by pressing ..... push button switch in cab-2. (A)

A BP1DJ B BPP

C BP2DJ D BPR

224 Defective QVRH relay causes …… tripping failure. (D)

A Operation I B Operation B Part I

C Operation II **D Operation 'O'**

225 Defective QPH relay causes …… tripping failure. (B)

A Operation I B **Operation B Part 1**

C Operation II D Operation 'O'

226 LSCHBA glowing on run, but DJ is not tripped indicates ……..... or …… equipment is defective. (A)

A QV61 or CHBA B ARNO or CHBA

C QCVAR or ARNO D ARNO or QV61

227 Any blower contactor not closed, causes ..... tripping failure. (C)

A Operation I B Operation B Part I

C Operation II D Operation 'O'

228. Defective MVSI-1 motor causes ..... tripping failure. (A)

A Operation I B Operation B Part I

C Operation II D Operation 'O'

229 Sluggish operation of GR causes tripping of DJ through ……..……. relay. (B)

A Q 118 **B Q 44**

C Q 50 D Q 45

230 Struck up of GR in full notches during quick regression causes tripping of DJ through …….. relay energisation. (A)

A Q 46 B Q 118

C Q 44 D Q 48

231 Energisation of any safety relay, causes DJ to trip after.. seconds. (B)

A 0.6 **B 0**

C 0.5 D 5.6

232 Defective Q 30 relay leads to ..... tripping failure. (C)

A Operation A ending B Operation B Part I

C Operation B Part II D Operation 'O'

233 In VCB(SI/Vertical) DJ provided locos, the DJ control circuit is not having ..... branch. (D)

A Q 44 B MTDJ

C Q 118 **D EFDJ**

234 The defective ARNO leads to ……tripping failure. (A)

A Operation A ending B Operation B Part I

C Operation B Part II D Operation 'O'

235 To overcome the Operation B part II tripping failure ……... relay is to be wedged. (C)

A Q 44 B Q 118

C Q 45 D Q 46

236 For wedging ……. relay in DJ Control circuit, permission of TLC is necessary. (A)

A Q 44 B Q 118

C Q 45 D Q 46

237 After taking permission from TLC, before wedging Q-44 relay …… test is to be conducted. (C)

A Loco brake test B LT test

C GR efficiency test D Traction test

238 1st notch tripping failure causes due to ..... or……. defective relays. (D)

A QVMT 1 or QVMT 2 B QVSL 1 or QVSL 2

C QPH or QVRH **D QVSI 1 or QVSI 2**

239 When Q 45 relay is to be wedged, ensure ……..…… trouble should not be existing in the loco. (A)

A Operation A ending B Operation B Part I

C No tension D Operation A Ending part II

240 6th notch tripping is due to non closinging ..... contactors or their I/Ls. (C)

A C 101 or C 102 or C 103 B C 106 or C 107 or C 108

C C 105 or C 106 or C 107 D C 111 or C 121 or C 118

241 In VCB locos, if DJ N/O I/L parallel to C 118 N/O I/L on MTDJ branch is defective……tripping failure will occur. (D)

A Operation A Ending B Operation B Part I

C No tension **D Operation A Ending part II**

242 In VCB locos, the C 118 N/O I/L on MTDJ branch is defective, …….. tripping failure will occur. (A)

A ICDJ B Operation B Part I

C No tension D Operation A. Ending part II

243 The defective Q 30 relay causes ……tripping failure. (B)

A Operation A ending **B Operation B Part II**

C No tension D Operation A Ending part II

244 Relay Q 45 is called as ……. relay. (C)

A DJ protection relay B Auxiliaries protection relay

C DJ resetting relay D Notch by notch Progression relay

245 After passing neutral section, If ICDJ is experienced, check ..... & ..... fuses. (C)

A CCPT & CCBA B Addl. CCBA & CCPT

C Addl. CCBA & CCBA D CCPT & CCDJ

246. During manual operation of Q 44 relay, it should not be pressed for more than …….. seconds. (B)

A 5.6 **B 1**

C 0.5 D 0.6

247 MTDJ (VCB type) coil is called …… coil. (A)

A DJ closing, holding & tripping coil B DJ tripping coil

C DJ closing coil D DJ holding coil

248 EFDJ coil is called ..... Coil. (C)

A DJ holding & tripping coil B DJ tripping coil

C DJ closing coil D None of the above

249 In case Q 45 relay is wedged, DJ will close directly by the moment …….. Switch closes. (B)

A BLRDJ **B BLDJ**

C BP2DJ D BP1DJ

250 On switching on HBA, …….. relay in DJ control circuit will energise provided Addl. CCBA, CCBA and CCPT are in good condition. (C)

A Q 45 B Q 44

C Q 118 D None of the above

251 Defective MPH motor leads to …… tripping failure. (B)

A Operation A ending **B Operation B Part** I

C No tension D Operation B Part II

252 Defective QCVAR leads to ……tripping failure. (A)

A Operation A Ending B Operation B Part I

C No tension D Operation B Part II

253 Relay Q 118 is having ..... seconds of time lag. (A)

A 5 B 6

C 3 D 60

254 Defective QPDJ leads to ……tripping failure. (C)

A Operation A ending B Operation B Part I

C ICDJ D Operation B Part II

255 If relay Q 44 is wedged, the precautions for …….. relay also to be observed along with Q 44 relay precautions. (B)

A Q 45 **B Q 118**

C QCVAR D None of the above

256 To overcome the Q 30 relay defective trouble, ……. relay can be wedged. (A)

A Q 45 B Q 118

C QCVAR D None of the above

257 Relay Q 44 is having ..... seconds of time lag. (C)

A 1 B 0.5

C 0.6 D 2

258 When MPJ is put to forward in cab1, the J1 & J2 handles position are ……..…… (D)

A J1 up, J2 down B J1 down, J2 up

C both J1,J2 down **D both J1,J2 up**

259. In Static converter loco, to work MCPs…….. & …… relays should be energized (A)

A QCON & QTD101 B QTD101

C QCON D Q 100

260. Time delay of QTD 101 relay is ..... seconds. (B)

A 2 **B 5**

C 0.6 D 60

261. In SIV locos, ... switch is to be kept on '0', in the event of external earth fault and unable to rectify and to work the train further. (A)

A HSIV B HVSI

C HBA D HCHBA

262. In SIV locos, after keeping HSIV on '0' & pressing ELD bypass switch, time allowed to work the train is ……minutes. (C)

A No time limit B 60

C 45 D 30

263. In SIV locos, C108 contactor is provided for …….. motor. (A)

A AC MVRF B DC MVRF

C SIV rectifier D SIV inverter

264. After using RB in SIV locos, experiencing 6th notch tripping, ensure whether ..... contactor is closed. (B)

A C 108 **B C 107**

C C 118 D C 145

265. In Static converter locos (SIEMENS) ,..... no. of indication lamps provided on SIV Panel. (C)

A 2 B 3

C 5 D 4

266. Time delay of QSVM relay is .....seconds. (B)

A 5 **B 2**

C 0.6 D 60

267..... & ..... safety relays are removed in static converter locos. (D)

A QLM & QLA B QOP1 & 2

C QRSI 1 & 2 **D QOA & QLA**

268. In Microprocessor loco, if experienced TLTE due to malfunctioning of AFL/ACP circuit, change the position of ……. switch. (C)

A HAD B HRSZ

C HPAR D HBA

269. If DJ is tripped through static converter, ……..…… ……. Lamp glows in both the cabs. (C)

A LSRSI B Internal fault lamp

C LSSIT D External fault lamp

270. To avoid QD action in microprocessor loco, ... switch to be pressed up to 10th notch. (A)

A BPQD B BPSW

C ZQWC D PSA

271 In micro processor loco, before checking any loco equipment or attending any loco trouble ensure to keep ……. switch in open position. (A)

A HBA B HPAR

C BLDJ D HOBA

272 Location of CHBA ammeter in SIV locos …….. . (A)

A On SIV panel B On switch panel

C On relay panel D On CHBA

273 Rating of CCINV is ..... Amps. (A)

A 6 B 16

C 10 D 2

274**.** To close all line contactors, position of EP1 & EP2 COCs in WAG7 are …….. (B)

A EP1 & EP2 close **B EP1 & EP2 open**

C EP1 open, EP2 close D EP1 close, EP2 open

275 HRAVT is provided to isolate ....., ..., ……..…… &…….. Equipme (C)

A Static converter B Micro processor

C Heaters, cab fans, NR & W/T charger D None of these

276 When static converter is not working …….. fuse(s) to be checked. (D)

A CCINV B CCDJ

C CCA **D CCINV & CCA**

277 In static converter locos, ……..……

……..…… fuses to be checked during ICDJ. (A)

A Add. CCBA,CCBA, CCPT & CCDJ B Add. CCBA,CCBA, CCINV & CCA

C CCINV & CCA D None of these

278 In static converter locos compressors will start with a delay of ……..... seconds after extinguishing of LSCHBA. (B)

A 2 **B 5**

C 60 D 45

279 In SIV locos, if LSSIT glows continuously, crew experiences …….. tripping failure. (A)

A ICDJ B No Tension

C Operation 'A' Ending D None of these

280 In static converter locos during RB, ... motor stops working and ……. motor starts working. (A)

A MVRH , MVRF B MVRF , MVRH

C MPH , MVRH D None of the above

281 When SIV is working …….……. relay energises. (B)

A QSIT **B QCON**

C QCVAR D None of these

282 In micro processor loco ……fuses are removed. (A)

A CCDJ , CCLS, CCA & CCLSA B CCA & CCINV

C CCINV & CCAD D CCCPU & CCBA

283 ..... & ..... time delay relays are removed in static converter locos. (A)

A QTD 105 & 106 B QTD 100 & 101

C QTD 107 & 108 D None of these

284 The correct preparation for traction as well as braking is supervised by ..... relay. (C)

A Q-52 B Q-51

C Q-50 D Q-49

285 On Siemens make SIV loco panel ..... & …….. lamps glows continuously in normal working of SIV. (B)

A LSSIT & CHBA ON **B CHBA ON & SIV** ON

C External & Internal fault D OHE out of range & SIV ON

286. .....N/C interlock is provided newly on Q118 branch of SIV DJ control circuit. (B)

A QSIT **B QCON**

C QSVM D None of these

287 If earth fault occurs in out side of SIV, ... lamp glows on SIV panel. (B)

A OHE out of range **B External fault**

C Internal fault D None of the above

288. In static converter loco DJ control circuit, on MTDJ branch ..... relay interlock provided in place of QOA &QLA. (A)

A QSIT B QCON

C QSVM D None of these

289. When TLTE with LSB is experienced, it indicates ……. relay not energized. (A)

A Q-50 B Q-51

C Q-52 D Q-48

290. In WAG-5 loco the centre pivot carries …….% of load & each side bearer carries ……..% of load. (D)

A 40, 60 B 60, 40

C 50, 50 **D 60, 20**

291. In WAG-7 loco the side bearers nearer to the centre pivot carries …….% of vertical load & the side bearers away to the center pivot carries …… % of vertical load. (B)

A 40, 60 **B 60, 40**

C 50, 50 D 100, 0

292. ……..…numbers of brake cylinders are provided in WAG-5 or WAG-7 loco. (A)

A 8 B 24

C 6 D 12

293. ……&…… oil points to be checked in WAG-5 or WAM4 bogie(other than Traction motor oils). (A)

A Center pivot-1-no & side bearers-2nos B load bearers 4-nos

C side bearers 4-nos D center pivot-1No, side bearers-4 nos

294. ..... type bogie provided in WAG-7 locos. (B)

A Co-co tri mount bogie **B Co-co tetra mount high adhesion bogie**

C Co-co flexi coil bogie D Bo-bo tri mount bogie

295. ..... type bogie provided in WAP-4 locos. (C)

A Co-co tri mount bogie B Co-co tetra mount high adhesion bogie

C Co-co flexi coil bogie D Bo-bo tri mount bogie

296. When hand brake is applied in WAG-5 or in WAG-7 locos, ……...…….&…….……wheels brakes gets apply. (A)

A No-2 both sides, no-4 one side B No-2

C No-1 both sides, no-2 one side D No-4 both sides, no-2 one side

297. When hand brake is applied in WAP-4 locos ……wheel gets apply. (B)

A No-2 both sides, no-4 one side **B No-2**

C No-1 both sides, no-2 one side D No-4

298. QWC relay's action is up to ..... notch, when ZQWC is pressed(18 shunting contactors loco). (C)

A 20 B 15

C 10 D 1

299. When dead loco is attached on formation, if loco brakes are not releasing proportionally, …… is to be isolated in dead loco to avoid wheel skidding. (A)

A C3W Valve B C2A

C MU2B D Both cab A 9

300. Switch OFF blowers when the train is expected to stop for more than ……minutes to conserve the energy. (C)

A 10 B 30

C 15 D 20

301. If train is expected to stop for more than …… minutes lower the panto with the consultation of SM/SCOR. (A)

A 30 B 15

C 45 D 60

302. Location of hand brake in crew friendly locos is ……. (C)

A Cab-1 left side locker B Cab-1 right side locker

C Cab-1 on floor D Cab-2 on floor

303 During RB, working of MVRF is indicated through ……. Lamp. (B)

A LSAFL **B LSDBR**

C LSOL D LSGRPT

304. In Static inverter fitted loco …… lamp is provided to indicate the tripping of static inverter. (C)

A QSIT B LSGRPT

C LSSIT D LSAF

305. While working with MU, If CHBA is failed in trailing loco …… & …… lamps will glow in leading loco. (C)

A LSCHBA & LSGRPT B LSGRPT & LSOL

C LSOL & LSCHBA D None of the above

306 While working with MU, If tell-tale fuse is projected in leading loco …… & …… lamps will glow in leading loco. (B)

A LSRSI & LSOL **B LSRSI & LSGRPT**

C LSOL & LSGRPT D None of the above

307 While working with MU, If tell-tale fuse is projected in trailing loco …… &…… lamps will glow in leading loco (A).

A LSRSI & LSOL B LSRSI & LSGRPT

C LSOL & LSGRPT D None of the above

308 While working with MU, If Q 50 is de energised in leading loco …… & …… lamps will glow in leading loco. (C)

A LSB & LSOL B LSOL & LSGRPT

C LSB & LSGRPT D None of the above

309 While working MU, If Q 50 is de energised in trailing loco …… & ……lamps will glow in leading loco. (A)

A LSB & LSOL B LSOL & LSGRPT

C LSB & LSGRPT D None of the above

310 If signaling lamps are not working defect may be with …… ……..…….. Fuses (D).

A CCBA & Addl.CCBA B CCPT & CCLS

C CCLC & CCBA **D Addl.CCBA & CCLS**

311 Q 20 actions are (A)

A Auto regression of GR, glowing of LSOV & sounding of SON B Glowing of LSOV & sounding of SON

C Sounding of SON D None of the above

312 While working with MU …… lamp glows in healthy loco, …… lamp glows in defective loco. (A)

A LSOL & LSGRPT B LSOL & LSOV

C LSGRPT & LSAFL D LSGRPT & LSOL

313 While working with MU, If DJ is tripped in leading loco …… & …… lamps will glow in leading loco. (D)

A LSDJ & LSGRPT B LSOL & LSOV

C LSOL & LSGRPT **D LSDJ, LSCHBA, LSB,LSGR &**

LSGRPT

314 While working with MU, If DJ is tripped in trailing loco …… & …… lamps will glow in leading loco. (D)

A LSDJ & LSGRPT B LSOL & LSOL

C LSOL & LSGRPT **D LSDJ, LSCHBA, LSB & LSOL**

315 When ZQWC is pressed, QWC relay will energise only when GR is on ……. notch(es). (C)

A '0' B '1'

C '0' or '1' D on & above 20th

316 While attaching loco on to formation stop the loco first at .....mts from formation. (C)

A 10 B 15

C 20 D 25

317 In roof mounted RB provided WAP-4 locos, revised setting of QF relay is .....Amps. (C)

A 700 B 800

C 850 D 900

318 After resetting BPEMS switch, operate ZPT from …… position to ……..position. (A)

A 0, 1 B 2, 0

C 1, 0 D 1, 2

319 Earth fault in line contactors coils causes, …… fuse to melt. (A)

A CCPT B CCA

C CCDJ D CCLSA

320 In conventional locos, if VCD is not acknowledged, after 60secs, ... will happen for next 8secs. (B)

A Alarm will sound **B Yellow flashing light will glow**

C Auto regression and BP Drops D All the above

321 In conventional locos, when VCD is acted, ...…….actions will take place. (A)

A Auto regression and BP drops B DJ trips

C Panto lowers D None of the above

322 In conventional locos, to acknowledge VCD, Ack.push button/paddle switch should not be pressed for more than …Secs. (D)

A 30 B 32

C 45 **D 60**

323 When BPEMS is pressed, ... actions will take place. (D)

A DJ trips B Panto lowers

C BP drops **D All the above**

324 In conventional locos, VCD acknowledgment is done by operating …….. once in every 60 seconds (write any two). (D)

A A-9 or SA-9 B Sanders

C Progression or regression or Ack. **D Any one of the above**

325 In conventional locos, if VCD is not acknowledged, after 68secs, ... will happen for next 8secs. (C)

A Alarm will sound B.Yellow flashing light will glow

C **Alarm will sound and yellow light will glow** D. Auto regression and BP drops

326 In conventional locos, before resetting VCD, ... ……. to be operated. (B)

A HBA to be kept in '0' and '1' **B MP to be kept on '0'**

C ZPT to be kept in '0' and '1' D MPJ to be moved to 'N' and Then 'F'

327 In conventional locos, for resetting VCD, ... to be pressed. (C)

A BPP/BPR B horns

C Ack. Or Reset button D sanders

328 In conventional locos, in case of any malfunctioning, to isolate VCD, keep ..... switch in 'OFF' position. (A)

A VCD Bypass B Reset

C Acknowledgement D None of the above

329. When ever cattle run over takes place, if BP dropped due to front side BP angle cut-off cock is broken , the duty of LP is to maintain BP pressure is by closing …… (C)

A A8 coc B RAL coc

C **Front side Addl. BP angle coc** D A-9 coc

330 Controlling fuse for SMGR control circuit is ..... (A)

A CCPT B CCA

C CCBA D CCDJ

331 Before taking notches, if Q51 is in energised condition crew experiences ..... traction failure. (B)

A TLTE with LSB **B TLTE without LSB**

C Auto regression with LSP D None of the above

332 GR travelling time (0 to 32 notches) for progression is.... seconds. (A)

A 11 to 13 B 10 to 12

C 32 D 15

333 While operating GR manually ..... equipment to be observed. (D)

A PHGR B RPGR

C CGR arc-chutes **D RGR**

334 For operating GR manually take out ZSMGR handle from...position. (C)

A 6 O' clock B 7 O' clock

C 3 O' clock D 5 O'clock

335 While operating GR manually GR shall be rotated within …….. seconds. (A)

A 0.5 B 0.6

C 5 D None of above

336 When MP is moved from traction to braking side, the correct preparation for braking is ensured by glowing and extinguishing of ..... signaling lamp. (B)

A LSP **B LSB**

C LSGR D LSRSI

337 During RB if DJ trips, ... valve de-energises and causes destruction of BP pressure automatically. (A)

A IP(E) B IP(M)

C VEF(E) D VEF(M)

338 Whenever DJ is tripped on notches GR comes to zero by... relay. (D)

A Q52 B Q51

C Q46 **D Q50**

339 While operating GR manually MP should be placed in ....Position. (D)

A O B +

C - **D N**

340 Auxiliary controlling relay is ..... (D)

A Q118 B Q49

C Q119 **D Q100**

341 In EP C118 provided locos Q100 is replaced with ..... Relay. (C)

A Q119 B Q120

C QTD100 D Q121

342 When BLVMT is defective blowers can be started by--------- (C)

A Wedging contactors B Changing switch position

C Taking a notch D Ask relief loco

343 When C107 is not closed, try by keeping ……switch on… position. (B)

A HVRH, 2 **B HVRH, 3**

C HVRH, 1 D HVRH, 0

344 After wedging any 3 phase EM contactor ensure..... without fail. (C)

A Proper closing of 3 tips B Motor is working

C Both A & B D None of above

345 ..... fuse will melt, when earth fault occurs in J1 / J2 coils. (A)

A CCPT B CCBA

C CCA D CCLS

346 During RB, all traction motor fields are connected in---------- (B)

A Parallel **B Series**

C Series-parallel D None of the above

347 While using RB ..... brakes should not be used to avoid loco wheel skidding. (B)

A Formation(A-9) **B SA-9**

C All above D None of the above

348 If ..... number of fuses are projected in same RSI block, isolate concerned block and work further. (A)

A 2 or more B 1

C All above D None of the above

349 QD actions are (D)

A Auto regression of few notches B Auto sanding

C LSP glows **D All the above**

350 Traction motor meter connections in Cab-1 are ..... and in Cab-2 are ..... . (A)

A U1-TM1, U2-TM2, A3-TM3, A4-TM4, U5-TM5, U6-TM6, B A1-TM1, U2-TM2, U3-TM3, A4-TM4, U5-TM5, U6-TM6,

C A1-TM3, A2-TM4, U1-TM1, A4-TM4,U5-TM5, U6-TM6, D None of the above

351 The controlling fuse for reversers control circuit is ……. (C)

A CCA B CCDJ

C CCPT D CCLS

352 When rear cab BL is not locked properly, crew experiences ……Traction failure. (D)

A TLTE with LSB
B TLTE with out LSB
C Auto regression with LSP
D 1st notch auto regression with out LSP

353 On run when GR is on notches and CCPT is melted,…….. happens in the loco. (D)

A Panto lowers
B GR comes to zero
C DJ trips
D Both A & C

354 When CCA is melted crew experiences ..... tripping failure. (B)

A Operation O
B Operation-II
C Operation-I
D Operation-B part-I

355 When Q100 is not energized crew experiences …… tripping failure. (C)

A Operation-O
B Operation-I
C Operation-II
D Operation-B part-I

356 When C106 is not closed, try by keeping …… switch on ……. position. (D)

A HVMT-2, 2
B HVMT-2, 0
C HVMT-2, 1
D HVMT-2, 3

357 Purpose of Q119 is ..... . (D)

A To enrgise VEULs
B Late starting of MCP-3
C To energise VEAD
D Both A & B

358 During RB..... valve energizes automatically to avoid proportional working. (B)

A Auto drain
B VEF(E)
C RGCP
D VEAD

359 When notches are not progressing & regressing by MP, try with---- (A)

A EEC operation
B GR manual operation
C Ask for relief loco
D None of the above

360 When Pacco switch is in pressed condition, crew experiences …….. traction failure. (B)

A TLTE with LSB
B TLTE without LSB
C Auto regression with LSP
D None of the above

361 If Q52 is permanently energised, crew experiences ..... traction failure. (B)

A TLTE with LSB
B TLTE without LSB
C Auto regression with LSP
D None of the above

362 In conventional locos, if CHBA is isolated, work the train for……. hours during day time and …..……. hours during night time with minimum utilization of battery supply. (A)

A 6, 4 B 4, 6

C 5, 4 D 6, 3

363 While changing Bi-polar switch on DC-DC converter, ... switch to be switched off. (B)

A BLPRF **B ZRT / ZPR**

C BLPRR D BLPRD

364 The minimum battery voltage required to energise conventional AC loco is ..... Volts. (B)

A 50 **B 90**

C 110 D 100

365 If CCBA is melting even HOBA is in OFF position …… to be checked. (D)

A PANTO B DJ

C CHBA **D LTBA**

366 On closing HBA and ZUBA, if UBA reads zero volts .... …….. Fuse to be checked. (B)

A CCBA **B Addl. CCBA**

C CCA D CCPT

367 When BPSW is pressed ..... valve energizes. (B)

A PR1 **B MV4**

C PR2 D QWC

368 ..... relay causes Auto Regression during AFL working.(B)

A PR1 **B PR2**

C RGEB2 D Q20

369 During A9 application ..... Relay energises and nullifies the AFL actions. (D)

A Q-121 B Q-120

C QFL **D PR-1**

370 Length of the conventional type of Neutral section is .....meters. (C)

A 42 B 45

C 41 D 4.8

371 The purpose of ATD in OHE is ..... . (A)

A Maintains tension in OHE B Uniform wear & tear of panto

C A & B D None of the above

372 To maintain uniform wear & tear of panto pan …… arrangement is provided on OHE. (B)

A ATD **B Staggering**

C Anti creep D A & B

373 Emergency telephone sockets are provided at a distance of ……..... metres along the track. (A)

A 1000 /900 B 1500

C 800 D 750

374 In modified locos Notch Repeater is gets supply from------- (A)

A CHBA B DC-DC Converter

C TFVT D ARNO

375 The controlling fuse for reversers control circuit is ……. (C)

A CCA B CCDJ

C CCPT D CCLS

376 When head light is not glowing work the train with maximum ..... kmph speed during night time. (C)

A 50 B 30

C 40 D 60

377 Purpose of additional CCBA is …….. (A)

A Protects BA +ve cable B Protects BA –ve cable

C Protects CHBA D Protects UBA

378 The OHE supply of two traction substations is separated by------- (A)

A Neutral section B SP

C SSP D TSS

379 The length of PTFE neutral section is ..... meters. (C)

A 2.8 B 4.2

C 4.8 D 5.2

380 The zig-zag arrangement of contact wire is called as-------- (D)

A Auto tension B Regulating

C Un-regulating **D Staggering**

381 On run, if OHE contact wire is found hanging, the immediate duty of the crew is …… (B)

A Inform TLC
B Keep ZPT on "0" and apply emergencybrakes or press BPEMS.
C Inform TPC
D None of the above

382 If ATDs are provided at both ends of contact and catenary wires, it is known as ..... type of OHE. (C)

A Un-regulated
B Semi- regulated
C Regulated
D Un-known

383 The purpose of the CHBA is ..... & ..... (D)

A Charging Batteries
B Supply to Arno
C Supply to all control circuits after closing DJ
D both A & C

384. If ATDs are not provided at both ends of contact and catenary wires, it is known as ……. (A)

A Unregulated OHE
B Semi regulated OHE
C Regulated OHE
D Un known

385. Traction motor meter connections in Cab-1 are ..... and in Cab-2 are ..... . (A)

A U1-TM1, U2-TM2, A3-TM3, A4-TM4, U5-TM5, U6-TM6,
B A1-TM1, U2-TM2, U3-TM3, A4-TM4, U5-TM5, U6-TM6,
C A1-TM3, A2-TM4, U1-TM1, A4-TM4,U5-TM5, U6-TM6,
D None of the above

386 Total no. of roof bars provided in WAG 5 loco are …… (B)

A 6
B 6+2
C 4
D 4+2

387 Total no.of roof bars provided in WAP 4 loco are …… (D)

A 6
B 6+2
C 4
D 4+2

388 In conventional locos, to close DJ …….. BL switches to be operated. (C)

A BLDJ
B BLRDJ
C BLDJ, BLRDJ
D BLSN

389 In VCB type (DI) DJ, to close & maintain DJ ……. electro valve(s) to be energized. (A)

A MTDJ
B MTDJ & EFDJ

C C118 D EFDJ

390. Location of MU2B in crew friendly locos is …….. (C)

A Motor chest no.1 B Motor chest no.2

C Pneumatic panel D Switch panel

391. When panto is raised and DJ is open position, ……..… protects roof equipment against surge voltage. (C)

A ETTFP-1 B ET- 2

C ET- 1 D ET TFP- 2

392. After closing DJ, …… protects main transformer against surge voltage. (B)

A ETTFP-1 **B ET-2**

C ET-1 D ETTFP-2

393. --Relay is called as TM output over current relay during RB. (A)

A QF-1 or QF-2 B QE

C QRSI-1 or QRSI-2 D None of the above

394. Arno starting phase is given through …… contactor & ……resistance. (A)

A C118 & R118 B C118 & RGR

C C145 & R118 D C108 & RPGR

395 Starting phase of ARNO is suppressed by……. relay. (B)

A Q45 **B QCVAR**

C Q30 D Q44

396. Poly glass material projecting from TM vent mesh is called as ..... failure. (C)

A Short circuit B Over current

C Banding failure D None of the above

397. Earth fault in MPH motor causes tripping of DJ through….relay. (C)

A QLA B QOP-1

C QOA D QRSI-1

398. If MPH motor is isolated, starting 5 minutes……Amps current and continuously……Amps current to be observed for TM. (A)

A 920, 500 B 500, 500

C 750, 500 D 1000, 500

399. If MVSL-2 is not working, work the train by isolating------- (D)

A No restriction for TM current ratings B isolate bogie-2

C Work 50% load **D Above all**

400. If MVRH motor is isolated, starting 5 minutes …Amps current

and continuously……Amps current to beobserved for TM. (A)

A 920, 500 B 500, 500

C 1000, 750 D 1000, 500

401 In few locos in place of roof bushing bar …… is provided. (C)

A LT cable B LT & HT cables

C HT cable D None

402 In conventional locos, ……motors are called direct motors. (D)

A MPH, MVSI-1 B MVSI-2, MVSL-1

C MVSL-2 **D All the above**

403 MVMT 1 & MVMT 2 are …… type of auxiliary motors. D)

A direct auxiliary B starts along with ARNO

C Both A & B **D remote controlled**

404 To isolate the TM-5 in WAG-7 loco, HMCS-2 has to be placed in …… position and…… bit to be packed on –ve side of TM. (C)

A 3, J1-10th B 3, J1-8th

C 3, J2-10th D 3, J2-8th

405 To isolate the TM-3 in WAP-4 loco (without RB), HMCS-1 has to be placed in ……position and …. bit to be packed on –ve side of TM .(D)

A 4, J1-12th B 4, J1-10th

C 4, J2-6th **D 4, J1-6th**

406 To isolate the TM-4 in WAP-4 loco (With RB), HMCS-2 has to be placed in ……position and …… bit to be packed on –ve side of TM. (B)

A 2, J2-6th **B 2, J2-8th**

C 1, J2-6th D 2, J1-8th

407 Location of IP mechanical valve with coc in crew friendly locos is-- -(C)

A Cab-1 left side locker B Motor chest no.1

C Pneumatic panel D Motor chest no.2

408 In WAG-5 loco during RB application, if there is earth fault in TM-6 field .....relay will act. (A)

A QOP-1 B QOP-2

C QRSI-1 D QE

409 After moving MP to 'P' position, ...contactor closes. (B)

A C-107 **B C-145**

C C-118 D C-111

410 ..... relay will act when banding failure takes place in TM-1. (C)

A QRSI B QLM

C QOP-1 D QOP-2

411 If banding failure takes place clear the section with not exceeding ……..… Kmph of restricted speed. (D)

A 40 B 25

C 10 **D 15**

412 ATFEX comes into service after closing ..... contactor. (C)

A C-108 B C-118

C CTF-3 **D C-145**

413...number of shunting contactors provided in WAG-5 orWAG-7 locos. (D)

A 24 B 16

C 22 **D 18**

414 ……..…… relay is called traction power ciruit-1 earth fault protection relay. (B)

A QOP-2 **B QOP-1**

C QOA D QRSI-1

415 RPS resistances are cooled by .....motor. (C)

A MVSI-1 B MVSL-1

C MVRH D MVMT-1

416. RB should not be used if ..... relay is wedged in energized condition. (D)

A Q44 B Q118

C Q51 **D Q50**

417 During RB, MVRF motor gets feed from …….. TM. (A)

A TM-1 B TM-2

C TM-4 D TM-6

418 To isolate the TM-1 in WAG-5 loco, HMCS-1 has to be placed in ..... position and …….. bit to be packed on –ve side of TM. (B)

A 2, J1-6th **B 2, J1-8th**

C 2, J2-8th D 3, J1-8th

TRACTION ROLLING STOCK

01) Safety Relays are (c)

a) All DI type b) All DU type

c) Some are DU type and some are DI type d)None of the above.

02) DI Type safety relays are (b)

a) QOP, QOA b) QRSI, QLA, QLM c) QOP, QPDJ d) Q44, Q118

03) DU type safety relays are (a)

a) QOP, QOA b) QLM, QRSI c) Q44 d) Q118

04) CT ratio of RSILM:_____ (c)

a) 1000 : 5 b) 2000 : 5 c) 4000 : 5 d) 1000 : 15

05) CT ratio of TFILM (c)

a) 50 : 5 b) 100 : 5 c) 250 : 5 d) 200 : 5

06) Pick up voltage of Q20 in WAP4 locos with HITACHI type TM H15250A (a)

a) 790 V b) 800 V c) 865 V d) 850 V

07) While RB is in service which relay will act if any earth fault occurs in the power circuit in WAG-7 loco. (b)

a) QOP1 b) QOP2 c) QOA d) QLM

08) The setting value of Q44 is (d)

a) 1 sec b) 2 sec c) 5 sec d) 0.6 sec

09) The setting value of Q118 is (b)

a) 2.5 sec b) 5.0 sec c) 0.6 sec d) 1.5 sec

10) In WAG7 loco twin Beam headlight the rating of bulb is ____ (b)

a) 24V, 70/75W b) 24V, 90/100W c) 110V, 70/75W d) 110V, 90/100W

11) The input / output voltage ratings of the DC-DC converter used in WAG7 loco (c)

a) 110V / 110V b) 110V/50V c) 110V / 24V d) 110V/20V

12) In WAG7 loco twin beam Headlight, what is the voltage of bulb in "dimmer" operation (c)

a) 110V b) 55V c) 24V d) 12V

13) What is the advantage of twin beam headlights system: (d)

a).Headlight glows while passing on neutral section. b).Headlight focusing is good. c).Even one bulb fuses also, it will not affect the running of loco to destination. d).All the above

14) What is class of Insulation specified for 180 degree temperature: (c)

(a) B class (b) A class (c) H class (d) Y class.

15) The specific gravity of Electrolyte of a lead acid battery at 27 ˚C should be (a)

(a) 1.250 (b) 1.200 (c) 1.100 (d) 1.180

16) Specific gravity of electrolyte is measured by using. (c)

(a) Thermometer (b) Hygrometer (c) Hydrometer (d) Lactometer

17) DC series motor is used for traction purpose because: (b)

(a) High speed (b)High starting torque

(c) Low starting torque (d) Constant torque at all speeds.

18) Braking excitation transformer purpose is to. (b)

(a).Excitation of TM armature (b). Excitation of TM field

(c). Excitation of both (d). Excitation of TFP

19) Flasher light is provided in loco/ (d)

(a)To communicate with the loco driver coming in the opposite direction about any difficulty.

(b) To communicate with the loco driver coming in the same direction, about any Difficulty.

(c) To inform the opposite coming loco driver about the abnormality noticed about OHE/Track.

(d)All of the above.

20) Electrolyte used in a lead acid battery is (b)

(a) Concentrated sulphuric acid (b) Diluted sulphuric acid

(c) Nitric acid (d) None of above

21) The purpose of RSI Block is ----- (a)

(a) To convert AC to DC (b) To convert DC to AC

(c) To generate AC (d) None of above

22) Battery negative is connected to loco body through ----Switch (c)

(a) HQOP (b) HQOA (c) HOBA (d) HQCVAR

23) MVMT1/MVMT2 are meant for cooling of (d)

(a) Armature of TM (b) Field coils of TM

(c) Stator of TM (d) All of the above

24) Shunting contactors are provided in the loco for the purpose of (a)

(a) Increasing the speed (b) To decrease the speed

(c)To stabilize the speed (d) to stop the train.

25) The speed control method used in AC locomotives (a)

(a) Voltage control (b) Current control

(c) Rheostatic control (d) Regenerative control

26) The type of Electric braking system used in WAP4 locomotive is (b)

(a) Regenerative (b) Rheostatic (c) Both (d) None of above

27) Instrument used to measure conductor resistance (c)

(a) Whetstone bridge (b) Megger (c) Micro ohmmeter (d) None of above

28) Action in lead acid cell (a)

(a)Reversible (b) Irreversible (c) Both a & b (d) none

29) Purpose of inter pole in the traction motor (d)

a)To avoid sparking on the commutator b)To avoid bad commutation

c) To divert field current d) Both a & b.

30) During rheostat braking traction motor works as a (a)

a).Generator b) Converter c) Motor d) Inverter

31) In WAP-4 locomotive, MR pressure not building up (d)

a) A8 cock closed condition

b) Bogie cocks closed condition

c) VEAD cock closed

d) MR cock drain cock open

32) In MU loco if loco pilot experiences rear loco brakes not applying the probable reason is (b)

a) MU2B position leading in leading loco b) MU2B position leading in

trailing loco

c) A1 differential cock closed d) SA9 problem

33. Setting value of QRSI relay _____ in WAP4 locos. (a)

(a) 5A (b) 6A (c)4A (d) 5.5A

34. The resistance value of RPGR is ……. (c)

(a) 1 thousand ohms (b) 10 lakh ohms (c) 1 lakh ohms (d) 10 thousand ohms

35. The resistance value of RGR is …….. (a)

(a) 1.6Ω (b) 1.8Ω (c) 1.2Ω (d) 0.6Ω

36. _____is provided to protect batteries from fire. (b)

(a) CCLS (b) Addl .CCBA (c) CCPT (d) CCDJ

37. Over charging of batteries results ……. (b)

(a) Sulphation (b) Gassing (c) a &b (d) None of the above

38. Under charging of batters results……. (a)

(a) Sulphation (b) Gassing (c) a &b (d) None of the above

39. DGA being measured for insulating oil…….. (c)

(a) To monitor the healthiness of TM (b) To monitor the healthiness of RSI Block

(c) To monitor the healthiness of TFP (d) To monitor the healthiness of SIV

40. Transformer breather used …….. (a)

(a) For destroying the vacuum created inside the conservator

(b) To evaporate oil (c) a and b (d) Non of the above

41. Current transformers are used to measure …….in AC systems. (a)

(a) High currents (b) High Voltages (c) Low Currents (d) Low voltages

42. The _____Equipment offers protection against safety for Equipment as well as human in the locomotive. (a)

(a) HOM (b) VCB (c) SIV (d) VCD

43. SJ is connected in series with……... (d)

(a) RPS (b) VCB (c) ATFEX (d) Shunting Resistance

44. Tolerance for output voltage in static converter …….. (c)

(a) 230V $\pm$ 5% (b) 110V $\pm$ 5% (c) 415V $\pm$ 5% (d) 440 $\pm$ 5%

45. Expand FRPCPY –…… (a)

(a)Failure Rate Percentage per Year (b) First Rate Percentage per year

c) Financial Year Failure Rate (d)First year Fiancé report

46. Class of insulation for auxiliary motors winding …….. (c)

(a) C (b) B (c) H (d) F

47. UA is connected to phases to read auxiliary power voltage. (b)

(a)Arno V and W (b)Arno U and V (c) Arno U and W (d) All the above

48. In 3Ø loco, for charging of BP pressure …… COC to be kept open. (b)

(a) A 8 COC (b) 70 COC (c) 74 COC (d) 47 COC

49. The purpose of star delta starter for induction motor is

to …….on line. (b)

(a) Increase Starting speed (b) Reduce Starting Current

(c) Reduce Starting speed (d) Increase Starting Voltage

50. Expand ESMON (a)

(a) Energy cum speed monitoring system
(b) Energy saving monitoring system
(c)) Energy saving monitoring system
(d) None of the above

51. Transformer oil used to…….. (a)

(a)Insulation and cooling (b) Smoothening (c) reduce noise (d) speed control

52. Pyrometer is used to measure……... (d)

(a) Resistance (b) Current (c) Voltage (d) Temperature

53) The resistance value of RU in WAP4 locos is (b)

(a) 100 kΩ (b) 88 kΩ (c) 120 kΩ (d) 220 kΩ

54) The resistance value of RQ20 in WAP4 locos or 6P locos (c)

(a) 2.4 kΩ (b) 24kΩ (c) 13.2 kΩ (d) 10 kΩ

55).RPS permanent field weakening resistance……. (a)

(a) 0.285 Ω (b) 0.835 Ω (c) 0.385 Ω (d) 0.538 Ω

56. The rating of ATFEX …….. (a)

(a) 60 KVA (b) 40 KVA (c)70 KVA (d) 50 KVA

57. The current through RGR flows when ……..are closed. (c)

(a) CGR 2-3 (b) CGR 1-3 (c) CGR 1-2 (d) All the above

58). The pressure switch used for monitoring working of pantograph is (a)

(a).Pn 09 (b)Pn 60 (c) Pn 44 (d)Pn 26

59. The input supply of CHBA …….. Volts, output …… Volts (a)

(a) 380 – 415 AC, 110 DC (b) 230-250, 110 (c) 380 – 415AC , 110 AC (d) 230-250, 380

60…….class insulation material can with stand highest temperature. (c)

(a) H (b) F (c) C (d) B

61. In Arno loco TFVT input voltage is……..output 110 V A.C (a)

(a) 230AC (b) 415AC (c) 110AC (d) 440AC

62. Two pole synchronous motor runs at …….. rpm with 50Hz frequency (a)

(a) 3000 rpm (b) 5000 rpm (c) 1500 rpm (d) 2500 rpm

63. Expand DGA (a)

a) Dissolved Gas Analysis (b) Diluted Gas Analysis

(c) Dielectric Gas Analysis (d) a&b

64. RGR Resistance value ……. (d)

(a) 2.6 Ω (b) 3.6 Ω (c) 1.0 Ω (d) None of the above

65. RQOP resistances value …….. (a)

(a)3 X 3200 Ω (b) 2 X 3200 Ω (c) 3 X 1600 Ω (d) 2 X 1600 Ω

66. R118 resistance …… (c)

(a) 1.4 Ω (b) 2.4 Ω (c) 0.4 Ω (d) 3.4

67. RHOBA resistance …….. (a)

(a) 210 Ω (b) 110 Ω (c) 215 Ω (d) 215 Ω

68. In WAP4 loco the standard setting of RGAF is cut in/cut out …… Kg/cm2 (b)

(a) 4.8/4.6 (b) 4.0/3.0 (c) 4.6/4.4 (d) 5.5/4.4

69. In WAP4 loco the standard setting of P1 close/open ……Kg/cm2 (a)

(a) 4.5/4.8 (b) 4.0/3.5 (c) 4.6/4.4 (d) 5.5/4.4

70. In WAP4 loco the standard setting of P2 is close/open ……Kg/cm2 (c)

(a) 4.8/4.6 (b) 4.0/3.5 (c) 4.4/4.7 (d) 5.5/4.4

71. Types of maintenance schedules being carried out in trip sheds: (a)

(a) Trip and IT (b) IA and IB (c) IT and IA (d) IC only

72. Types of maintenance schedules being carried out in workshops: (c)

(a) MOH & IOH (b) IOH & POH (c) POH & MTR (d) All the above

73. Planning & dispatch of locos being done by …. ….
section in electric loco sheds. (d)

(a) MW (b) E5 (c) M3 & M5 (d) PPO

74.Type of three phase locomotive available on Indian Railways (c)

a) WAP1/WAP5/WAP4 b) WAG7/WAG9/WAP7

c) WAP5/WAP7/WAG9 d) WAP4/WAG5/WAG7

75. Advantage of three phase locos. (a)

a) Regenerative braking b) 0 .8 PF c) Both a & b d) None of the above.

76. In 3 phase locomotives, three phase indicates? (b)

a) Three phase OHE supply system b) Three phase supply to the Traction motor

c) Both a & b d) None of the above

77. Important power device used in three phase locomotive for power conversion (a)

a) IGBT b) Diode c) Thyristor d) IGCT

78.Voltage applied to Traction Motors (Phase to Phase) in WAG-9 loco is (a)

a.2180 Volts b.2800 Volts

c.750 Volts d. None of the above

79.Machine Room blower-I receives supply from (c)

a.BUR-1 b.BUR-2

c.415 Volts directly from Transformer d.110Volts directly from Transformer

80.Machine Room blower works (c)

a.In cooling mode b.In driving mode

c.In cooling and Driving modes d.In Driving and self hold mode

81.Minimum Voltage relay in 3 phase locos is for (b)

a).Sensing of OHE Voltage in driving mod b. Sensing of OHE Voltage in cooling

c. Voltage protection in self hold mode d. Over voltage protection in simulation mode

82.Minimum voltage relay in three phase locos (c)

a.86 in SB-2 b.78 in SB-1

c.86 in SB-1 d.78 in SB-2

83.DC Link voltage of Traction Converter is (c)

a.1172 Volts b.2180 Volts

c.2800 Volts d.None of the above

84. Battery charger rectifier in 3 phase locos: (b)

a.Half Wave b.Bridge Full wave

c.Full Wave center tap d.Both b & c

85.VCB trips when transformer oil temperature rises to (b)

a.80 degrees b.84 degree

c.75 degrees d.70 degrees

86.Output of Auxiliary winding in 3 phase loco (b)

a.415Volts b.1000Volts
c.2100Volts d.1200Volts

87. In three phases locos Priority-II message means (d)

a.Trips VCB b. Shut down loco
b.Isolates sub-system d .Allows normal functioning

88."ASC:0081-PS Fault Storage CGP" message is logged in three phases based on (b)

a. Differential voltage b. Differential current
b.Differential earth fault d. None of the above

89.Minimum voltage relay in three phase locos (b)

a.86 in SB2 b. 86 in SB-1 c.78 in SB-1 d.78 in SB-2

90.Type of batteries used in three phase locos (a)

a.NiCd b.Lead Acid

c. both a & c d.None of the above

91. Primary over current relay is (b)

a.89.7 b.78 C.89.6 d.86

92.The pressure switch associated with working of Baby compressor is (a)

a. 26 b. 60 c. 59 d. 6

93.In E-70 brake system locos the COC-47 is used for (a)

a.Moving the loco dead b.Application of brakes through A9

c.Operation/Isolation of PBU d.Operation/Isolation of sanders

94. Conversion of BP control pressure into electrical signal in 3Ø locomotives is done by_(c)

a.Pressure sensor b.Pressure switch

c.Control transducer d.None of the above

95. If MVR is not picking up then_____. (c)

a.Traction not possible b.RB not possible

c.Cooling mode not possible d.Driving mode not possible

96. BUR 1 & 2 operate at _____Frequencies. (d)

a)37 Hz b)50 Hz c) 132 Hz d) a&b

97.While working loco in _____mode, VCD need not be acknowledged. (c)

a.Shunting b.Constant Speed c.Inching mode d.Braking mode

98. Which of the following statement is correct. (c)

a) Teeth of bull gear of WAG9 ≤ Teeth of bull gear of WAP7

b) Teeth of pinion of WAG9 > Teeth of pinion of WAP7

c) Teeth of bull gear of WAG9 > Teeth of bull gear of WAP7

d) None of the above

99.Transformer in 3Ø locomotives is having _____number of secondary windings. With hotel load provision (c)

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

100. Number of change over contactors are provided in auxiliary circuit of 3Ø locomotives. (b)

a.6 b. 9 c.10 d.8

101.Horse power of a WAG-9 loco is _____ (d)

(a) 6200 HP b) 6500 HP (c) 6800 HP d) 6120 HP

102.Type of Traction motors used in WAG-9 locos _____ (b)

(a) DC series motor (b) 3Phase Squirrel cage Induction Motor

(c) Single Phase Squirrel cage Induction Motor (d) Non of the above

103.Maximum tractive effort of a WAG-9 loco is _____ (a)

(a)46.7 Tones (b) 45 Tones (c) 44 Tones (d) 49 Tones

104.Maximum speed of a WAG-9 loco is _____ (a)

(a) 100 KMPH (b) 130 KMPH (c) 120 KMPH (d) 90 KMPH

105.Axle load of WAP-7 loco is ____ (c)

(a) 25.5 $\pm$ 2% b) 19.5 $\pm$ 2% (c) 20.5 $\pm$ 2% (d) 22.5 $\pm$ 2%

106. VCB trips when SR oil temperature rises above _____ degrees. (c)

(a) 40^0C (b) 60^0 C (c) 80^0C (d) 42^0 C

107.Capacity of a battery in three phase loco is _____ AH. (b)

(a) 75 AH (b) 199 AH (c) 210 AH (d) 110 AH

108.Input and output of potential transformer is _____ and _____ respectively. (b)

(a) 25KV/415V (b) 25KV/200V (c) 25KV/20V (d) 25KV/110V

109. Pre charging contactor in SR is used for _____ (b)

(a) Increase Inrush Current (b) Reducing Inrush Current

(c) Constant Current (d) Non of the above

110. When MCB 63.1/2 is tripped, It will consequently lead to_____ (c)

(a)Both Bogies Isolation (b) All BURs isolation

(c) Bogie-2 Isolation (d) Bogie-1 Isolation

111. Limits of OHE voltage during working of WAG9 locomotive is ___kV to ____kV. (b)

(a) 25 – 30KV (b) 17.5 – 30KV (c) 20 – 30KV (d) 22.5 – 27.5KV

112.The letters V-O-F on cab buzzer indicates_____. (b)

(a) Voltage – Over speed – Fire (b) Vigilance – Over speed – Fire

(c) Voltage – Over speed – Frequency (d) Vigilance – Over Speed - Frequency

113.The fault message F0101P1 results in_____ (b)

(a) No effect (b) Main power off (c) Cab-1 off (d) Cab-2 off

114.In __mode, working of VCD can be tested on standstill position in 3Ø locomotives. (b)

(a) Inching mode (b) Simulation (c) Vigilance (d) none of the above

115.The brake rigging arrangement of WAP7 locomotives is similar to ____locomotive. (c)

(a) WAG-5 (b) WAP-4 (c) WAG-7 (d) WAP-5

116. How many subsystems available in 3 phase Locomotive (c)

a) 20 b) 17 c) 19 d) 22

117. Type of batteries used in 3 phase Locomotives …… and its capacity …… (d)

a) Ni-CD,179 AH b) Al-CD,199 AH c) Al-CD,179 AH d) Ni-CD, 199 AH

118. MCB for MCP -1 (b)

a) 37.1 b) 47.1/1 c) 27.1 d) 57.1

119. Maximum speed of WAG9 Loco …… kmph and WAP7 Loco …. Kmph (b)

a) 140,100 b) 100, 130 c) 100,150 d) 120,150

120.Parking brakes available on wheel no's of WAG9 Loco (b)

a) 3,5,7,10 b) 2, 6,7,11 c) 5,7,9,11 d) 7,9,11,13

121) Duplex check valve defective in WAP4 loco which resulted to (d)

a) Horn/wiper not working b) Horn / sanders not working

c) Horn/FP not working d) All the above

122. For working of control electronics machine room temperature should be below (b)

a) 50 °C b) 70 °C c) 40 °C d) 90 °C

123. No. of Aux. motors in Three phase Locomotives (b)

a) 18 b) 16 c) 20 d) 12

124. If Throttle is failed loco will be moved in …… mode. (c)

a) Sorting mode b) Normal mode c) Failure mode d) Success mode

125. Input Voltage of Flasher Light Units (b)

a) 120 DC b) 110V DC c) 100 DC d) 130 DC

126. MVR and OCR Relays Located in (a)

a) SB-I b) SB-II c) SB-III d) SB-IV

127. V-O-F buzzer available in (a)

a) Panel - C b) Panel - B c) Panel -D d) Panel - A

128. IGBT Full form …….. (a)

a) Insulated-gate bipolar transistor

b) Insulated-gate bipolar transformer
c) Insulated-gate backup transformer

d) Integrated -gate bipolar transistor

129. Loco moved in dead Pneumatic COC's position in Pneumatic panel, 74 coc is in …. condition, 70 coc is in ..... condition, 136 coc is .....condition and 47 coc is in …..condition. (c)

a) close,open,open,open b)close,open,close,close
c)close,close,close,open d)open,open,open,open

130. Three phase loco having….No's of Traction converters and… No's of Auxiliary converters (a)

a) 2,3 b) 5,7 c) 7,9 d) 1,5

131. During regenerative braking TM acts as ……..…. (b)

a) Inverter b) Generator c) Transformer d) Transistor

132. Gear ratio in WAG9 ……..… and..... (c)

a) 10:55,15:77 b) 15:77,10:55 c) 15:77,21:107 d) 25:77,15:55

133. _____ Nos. Angle Transmitters available in 3 phase loco (d)

a) 04 b) 06 c) 08 d) 02

134. PT transformer in three phase loco reduces catenary voltage to _____. (a)

a) 200v AC b) 200v DC c) 250 V AC d) 250v DC

135. The voltage fed to catenary voltmeters is _____. (a)

a) 10V DC b) 15V DC c) 20V DC d) 05V DC

136. If harmonic filter gets bypassed by system the speed of the loco should be restricted to _____

a)30 KMPH b) 10 KMPH c) 20 KMPH d) 40 KMPH (d)

137. What is the value of MUB resistor for traction converter IBGT loco type? (d)

a) 4.71Ω ± 6% b) 6.71Ω ± 9% c) 4.71Ω ± 7% d) 2.71Ω ± 5%

138. When Throttle is put to BE side, traction motor work as_____ (c)

a) Transformer b) Transistor c) Generator d) Inverter

139. Whenever temperature of control electronics increases above 70 deg C then lamp LSCE glows on _____ (c)

a) Panel-D b) Panel-B c) Panel-A d) None of the above

140. What is the purpose of oil used in transformer? (a)

a) For insulation & cooling b) For insulation & drying

c) For lubrication & cooling d) For induction & cooling

141. Full form of CCB (a)

a) Computer controlled brake system (Owned by KBIL)

b)Computer controlled brake syndicate (Owned by MEDHA)

c) Computer contacted brake system (Owned by MEDHA)

d) Computer contacted brake system (Owned by KBIL)

142. TFP expansion tank used for _oil_to facilitate (a)

a) Expansion /Contraction b) Transaction / Contraction

c) Transaction of oil d) None of the above

143. TFP pressure not ok message type (a)

a) P2 type b) P1 type c) S1 type d) S2 type

144. How many numbers of radiators in 3 phase Loco (b)

a) 01 b) 02 c) 03 d) 05

145. How many numbers expansion tanks in 3phase loco (b)

a) 01 b) 02 c) 03 d) 04

146. Composition of coolant in IGBT traction converter____ (b)

a) 50 %Glycol and 50 % Water b) 30 %Glycol and 70 % Water

c) 70 %Glycol and 30 % Water d) 100% water

147. At what temperature power reduction converter temperature message will appears (d)

a) 55 ˚C b) 45˚C c) 75 ˚C d) 65 ˚C

148. At what temperature power reduction transformer temperature message will appears (d)

a) 60 ˚C b) 50 ˚C c) 30 ˚C d) 80 ˚C

149. Capacity of MR-1, 2 tanks in 3 phase loco (d)

a) 350 ltrs b) 250 ltrs c) 150 ltrs d) 450 ltrs

150. Capacity of auxiliary reservoir in 3 phase loco? (c)

a) 140 ltr b) 440 ltrs c) 240 ltrs d) 640 ltrs

151. Capacity of Compressors? (d)

a) 1560 LPM b) 1250 LPM c) 1670 LPM d) 1750 LPM

152. Pressure setting of MCPA governor in 3 phase loco? (a)

a) cut in/ Cutout: 5.2kg/cm2- 6kg/cm2 b) cut in/ Cutout: 6kg/cm2- 9kg/cm2

c) cut in/ Cutout: 2kg/cm2- 5kg/cm2 d) cut in/ Cutout: 7kg/cm2- 8kg/cm2

153. SS15 sub system is ----- (c)

a) CAB 2 b) FLG 2 c) FDU d) BUR 2

154. Pressure Setting of SS-2? (d)

a) 6.5kg/cm2 b) 8.5kg/cm2 c) 2.5kg/cm2 d) 10.5kg/cm2

155. Hand brake in WAP-7 is applied to which wheel no.? (d)

a) 04 b) 06 c) 08 d) 02 &4

156. MCB no. of Pneumatic Panel? (c)

a) 117.7 b) 147.7 c) 127.7 d) 167.7

157. VCD isolation switch No.? (d)

a) 337.1 b) 437.1 c) 637.1 d) 237.1

158. Pressure setting of MR Low Pressure switch? (c)

a) 1.6kg/cm2- 3.4kg/cm2 b) 2.6kg/cm2- 4.4kg/cm2 c) 5.6kg/cm2- 6.4kg/cm2

d) .6kg/cm2- 9.4kg/cm2

159.Full form of CCB (b)

a) Computer controlled brake syndicate (Owned by MEDHA)

b) Computer controlled brake system (Owned by KBIL)

c) Computer contacted brake system (Owned by MEDHA)

d) Computer contacted brake system (Owned by KBIL)

160. Full form of ADV? (a)

a) Auto Drain Valve b) Auto Driver Valve

c)Auto Drain Voltage d) Auto Detect Valve

161. AIR Dryer lies between in 3 phase loco (a)

a) MR-1 & MR-2 b) VR-1 & VR-2 c) BR-1 & BR-2 d) R-1 & MR-2

162. Parking brake PRV setting is ? (a)

a) 6kg/cm2 b) 4kg/cm2 c) 8kg/cm2 d) 10kg/cm2

163. Air Dryer isolating MCB no.? (d)

a) 148.1 b) 168.1 c) 188.1 d) 128.1

164. Two types of brake units available in WAG9 Loco wheel..... (a)

a) TBU/PBU b) MBU/NBU c) VCU/BCU d) MOH/IOH

165. Total number of brake Units in WAG9 locomotive..... (c)

a) 10 b) 15 c) 12 d) 18

166. Total number of Parking Brake units in WAG9 locomotive..... (d)

a) 02 b) 06 c) 08 d) 4

167. Full form of FTIL brake system? (c)

a) Faiveley Transport International Ltd. b) Faiveley Transformer India Ltd.

c) Faiveley Transport India Ltd. d) None of the above.

168.Maximum braking effort of WAP-7 Loco is (c)

a)260KN b)160KN

c)182KN d)None of the above

169. Earth return brushes are available in which axle boxes in three phase locos (c)

a) 2,4,6,8, b) 3,5,7,9 c) 1,6,7,12 d) 4,6,8,9

170. Expand CAMTECH …… (d)

a) Centre for advanced Maintenance Technical
b) Centre for advanced Monitoring Technology
c) Centre for AC Maintenance Technology
d) Centre for advanced Maintenance Technology

171.Wheel diameter new……,wheel condemnation dia…… (d)

a) 1052,1069 b) 2092,2016 c) 3092,2016 d) 1092,1016

172.What type of bogies used in 3 phase locos. … (a)

a) High Adhesion Fabricated Bogies

b) Low Adhesion Fabricated Bogies

c) High Adhesion Lubricated Bogies

d) Low Adhesion

173 .CBC and Buffer heights …… (a)

a) 1030-1105 mm b) 1105-1205 mm c) 1205-1302 mm d) 1305-1405 mm

174.In 3 phase loco Energy transferred from bogie to body (transmission) by which equipment (b)

a) traction motor link b) traction link c) transformer link d) traction motor

175 .Purpose of centre pivot housing and traction link….. (d)

a) Transmission of Energy From Body to Body. ,

b) Transmission of Energy From Bogie to Bogie. ,

c) Transmission of Energy From Body to Bogie.

d) Transmission of Energy From Bogie to Body. ,

176. In WGAG7 loco Bogie to body is connected by which part…… (d)

a) C SHAKLE b) B SHAKLE c) A SHAKLE d) D SHAKLE

177. Consider the following activities; (d)

1.TM changing 2.Wheel Set changing 3.Axle damper changing 4.PHS changing

Which of the above activities requires for loco lifting?

a. 1 & 4 b.3 & 4 c. 2 & 3 d.1 & 2

178.Total Auxiliary loads on Auxiliary Converter3 ,when Auxiliary Coveter 1 isolated (a)

a)7 b)6 c)5 d)2

179.Total Auxiliary loads on Auxiliary Converter1 ,when Auxiliary Coveter 2 isolated (b)

a)7 b)6 c)5 d)2

180.Cell nominal voltage in 3phase locomotives (b)

a) 2.2 V b) 1.4 V c) 3.2 V d) 4.2 V

181.Total no of cells in 3 phase locomotives (d)

a) 48 b) 38 c) 58 d) 78

182. Unit voltage (each battery voltage) used in 3phase locos is ---------- (c)

a) 1.6 V b) 2.6 V c) 4.2 V d) 4.6 V

183. CBC height range (d)

a) 1015 mm min to 1040 mm b) 1205 mm min to 1050 mm

c) 1305 mm min to 1050 mm d) 1105 mm min to 1030 mm

184. Type of rotor used in 3phase locomotives (b)

a) Square cave b) Squirrel cage c) Spider cage d) None of the above

185. Type of induction motor used in WAP7/WAG9 locomotives (d)

a) 6FRA 5068 b) 6FRA 3068 c) 6FRA 3098 d) 6FRA 6068

186. Maximum current drawn by TM in 3 phase loco (b)

a) 270 A b) 370 A c) 470 A d) 570 A

187. Maximum frequency of TM in 3 phase loco (d)

a) 102 HZ b) 50 HZ c) 122 HZ d) 132 HZ

188. Type of cooling used in traction motor in 3 phase loco (b)

a) Forced air cooling from MVMT b) Forced air cooling from TMB

c) Normal air cooling from TMB d) Normal air cooling from TMB

189. Number of traction motors used in WAP5 locomotives (d)

a) 02 b) 05 c) 06 d) 04

190. Total no of Auxiliary on Auxiliary Converter1 , Auxiliary Coveter 2 and Auxiliary Coveter 3 (b)

a)7 b)13 c)5 d)2

191. MRB motor works on voltage (d)

a) 3phase 415 V AC b) 1phase 315 V AC c) 2phase 250VAC d) 1phase 415 V AC

192.. OCB supplies forced air to cool (b)

a) Double SR &TFP oil b) Both SR &TFP oil c) a&b d) None of the above

193. What is PCB? (c)

a) Panel circuit board b) Power circuit board

c) Printed circuit Board d) Pollution circuit board

194. DDS stand for (c)

a) Digital data system b) Double data set

c) Diagnostic data set d) Dual data set

195. CCU stand for (a)

a) Convertor control unit b) conversation control unit

c*) Component control unit d) Constant control unit

196. VCU stands for (b)

a) Versace continuity unit b) Vehicle control unit

c) Voltage continuity unit d) Volta circuit unit

Mechanical &Pneumatic

1. **Which type of bogies available in three phase locos (c)**
   a) Jaquimine drive bogie . b) CO - CO Tri mount bogie.
   c) CO - CO fabricated bogie. d) Fabricated flexi coil bogie
2. **Secondary suspension provided between. (b)**
   a)Axle box& Axle. b). Bogie frame& Body. c)Body& Centre pivot. d)CBC& Body yoke.
3. **How tractive forces are transferred from Bogie to Body. (d)**
   a)Wheel to Axle holder
   b) Axle to Axle box.
   c)Wheel set guide rod.
   d) Traction link
4. **What is the role of traction link assembly. (a)**
   a) Push and Pull action. b) Pushing action only. c) Pulling action only. d) None of three
5. **When a 3ph loco is moving one direction, the traction link assembly connected between trailing (rear) bogie frame and body provides the _____action by bogie. (a)**

   a) Pushing Action. b) Lifting up action.

   c) Pressing down action. d)Pulling action

06. **The purpose of Primary helical springs**. (b)

   a)To avoid bogie from bending.
   b)To absorb the vertical oscillations & Shocks primarily generated from Track& Axle.
   c)To avoid un coupling of bogie. d None of the above

07. **What is the max permissible temperature of axle box(Bearing) in 3 phase locos (b)**

   a) Up to25 degree C above Ambient temperature.

   b)Up to Ambient temperature plus 27degree C..

   c) Up to 18 degree C above ambient temperature.

   d) UP to 50degree C above ambient temperature.

08) **What is the max permissible temperature of axle box(Bearing).** **(b)**

a) Up to25 degree C above Ambient temperature.
b)Up to Ambient temperature plus 27degree C..
c) Up to 18 degree C above ambient temperature.
d) UP to 50degree C above ambient temperature.

09. **How tractive forces from Wheel transferred to CBC to pull/push the formation in 3 ? phase locos** **(a)**

a) Wheel - axle –axle box—Axle guide -bogie frame- traction link assembly- Body- CBC.
b)CBC---Body---Traction link----Bogie---Axle guide--- Axle box---Axle---Wheel.
c)Both a & b
d) None of the above

10 **What is tractive effort.(TE)** **(a)**

a) Force exerted by traction unit on the rail to move traction unit.
b)Force exerted by Rail on the wheel to roll wheel.
c) Force exerted by TM on the wheel to move train.
d) None of the above

11. **What is Adhesion?** **(c)**

a) it is the force developed by the wheel on the rail.
b)the friction between wheel and brake block.
c)It is meshing between wheel& Rail.
d) None of the above

12. **What happens if adhesion is less than the required** **(b)**

a) Wheel skid occurs. b) Wheel slip occurs. c) Wheel does not move. d) Both a& b

13. **What happens if Adhesion is more than the required** **(a)**

a) Wheel skid occurs. b) Wheel slip occurs. C) Wheel does not move. d) Both a& b

14. **How to improve Adhesion if wheel slip occurs.** **(d)**

a) By increasing Axle load. b)By pouring sand between wheel and rail.

c)By applying grease between wheel and rail. d) Both a&b

15 **How to avoid wheel skidding.** **(d)**

a)By reducing axle load. b) By increasing axle load.

c) By reducing braking force. d) Both a& c.

16. **If rear cab A 9 inlet & out let cocks also open condition. When A9 of working cab has been applied .What happens**? **(d)**

a) Both cabs A9 exhaust ports air leakages. b) Both side BP will not create.

c) BP destruction will be late to apply proportionate brakes. d) All of the above

17**. If SA-9 of rear cab inlet and out let cocks are open condition, and working cab also open condition, what happens. (b)**

a) Both SA 9 exhaust ports air leakages.

b) In idle (Release position) condition no any problem will be there. When SA-9 of working cab is applied brakes will not apply and rear SA-9 exhaust port air leakages..

c) Both Sa9 s will not function.

d)Nothing will happens.

18.What is the purpose of Duplex check valve and why it is provided. (a)

a) Duplex check valve is provided to avoid initial charging of Ckt with low pressure. This valve opens only after set value but gives full out put pressure .

b) This is a double check valve to operate the circuit from both sides.

c) This valve is for checking the availability of air pressure to Horns& Wipers.

d) None of the above

19. **Function wise is there any difference between BP C2 R valve and BC C2 relay valve (C2A &C2B)? (b)**

a) Yes, both are different in function wise.

b) No, both are same and interchangeable.

c) Both cannot be inter changed.

d) None

DEMU QUESTIONS and Answers	a	b	c	d	ANS
Shutdown coil is fitted on _____	Fuel pump	Starter motor	24 V alternator	None	a
Cut in condition of shut down coil is called	Mechanical Mode	Electrical Mode	Manual Mmode	None	b
Cut out condition of shut down coil is called	Mechanical Mode	Electrical Mode	Manual Mmode	None	a
In ____ mode engine could not be auto shutdown	Mechanical Mode	Electrical Mode	Manual Mmode	None	a
If LLOP device operates, engine	comes to Idle	RPM will reduce	gets Shutdown	No effect	c
If OSTA operates, engine	comes to Idle	RPM will reduce	gets Shutdown	No effect	c
In 1400 DEMU oer speed system actuates at engine RPM above	1800	2050	2070	3000	c
Gear ratio in 700 HP DEMU	20:90	21:95	23:104	20:95	a
Gear ratio in 1600 HP DEMU	20:90	21:95	23:104	20:95	c
In 1600 HP DEMU Compressor is driveny	Gear	Electrical Motor	Hydraulic motor	None	c
In 1600 HP DEMU Ventilator fan is driveny	Gear	Electrical Motor	Hydraulic motor	None	b
In 1600 HP DEMU compressor motor gets suppl from	Main Generator	110 V Alternator	APC	24 V Alternator	c
In 1600 HP DEMU Ventilator fan motor gets suppl from	Main Generator	110 V Alternator	APC	24 V Alternator	c
In 1600 HP DEMU Air suspension provided in place of	Primary coil springs	Secondary coil springs	shock absobers	None	b
DEMU is provided with ___ type of coupler	Shako	CBC	Screw	None	a
Number of safety straps per bogie in DEMU	2	4	8	12	c
Number of 'U'brackets per bogie in DEMU	2	4	8	12	b
Number of tie rod safety strips per bogie	2	4	8	12	c
Maximum speed of 1600 HP DEMU is ____ KMPH	95	100	105	110	d
In 1400 HP locomotive ECP(Engine Control Panel) is located in	Control panel	Driver Cabin	Engine room	Compressor room	c
Maximum BC pressure in TC during brake application	1.6 kg/sq cm	3.8 kg/sq cm	3.5 kg/sq cm	5.0 kg/sq cm	b
In 1400 HP DEMU number of radiator fans	1	2	3	4	b
110V battery knife switch is located in	Driver Desk	Control panel	Engine room	ECP	b
In HHP DEMU hydraulic pump located at	Engine power take off end left side	Engine power take off end right side	Engine free end left side	Engine free end right side	d
In 1400 HP LCC is located in	Engine room	Control Panel	Under truck	None	b
In HHP DEMU TM overloaded when Load meter exceeds _____ amps	400	600	800	1200	b
In 1600 HP DEMU wheel diameter for DPC is _____ mm	852	952	1030	1050	b
In 1600 HP DEMU wheel diameter for TC is _____ mm	915	950	1030	1050	a
In 1600 HP DEMU Auxiliary Inverter located in	Engine room	Under truck	Radiator room	None	b
In 1600 HP DEMU Auxiliary Inverter is _____ cooled	Oil	Air	Water	None	b
In 1600 HP DEMU Auxiliary Inverter supplies power to	Compressor motor	Lights & fans	Battery charging	All of the above	d
In 1600 HP DEMU motor driven compressor is located in	Compressor room	Under truck	Radiator room	None	b
'MVB' stands for	Main Vehicle Brake	Motor Ventilator Breaker	Multifunctuion Vehicle Bus	None	c
In 700 HP DEMU wheel arrangement is	CO-CO	BO-BO	AO-AO	BO1-1BO	b
In 700 HP DEMU maximim speed of DPC is _____ KMPH	100	90	105	110	a
In 700 HP DEMU wheel diameter for DPC is _____ mm	852	952	1030	1050	b
In 700 HP DEMU Idle RPM of DPC	700	800	900	1000	a
In 700 HP DEMU 8th RPM of DPC	1200	1400	1600	1800	d
In 700 HP DEMU OST trip RPM is	1900	1950	2000	2100	d
In 700 HP DEMU Fuel oil tank capacity is _____ liters	1750	1800	1950	2000	a
In 700 HP DEMU lube oil tank capacity is _____ liters	95	100	102	110	c
In 700 HP DEMU Lube oil pump diven by	Gear	Belts	Electrical motor	Hydraulic Pump	a
In 700 HP DEMU hydraulic oil capacity is _____ liters	200	250	300	350	a
In 700 HP DEMU hydraulic pump driven by	2 Belts	3 Belts	5 Belts	6 Belts	b
In 700 HP DEMU compressor driven by	2 Belts	3 Belts	5 Belts	6 Belts	a
In 700 HP DEMU Starting battery voltage is _____ Volts	24	110	220	150	a
In 1400 HP engine gets shut down when the coolant temperature reaches to _____ degree centigrade	90	98	102	110	c
In 1600 HP DEMU water pump is driven by	Belts	Gear	Hydraulic motor	Electrical motor	b
In 1400 HP DEMU bogie arrangement is	1A-A1	BO-BO	CO-CO	BO1-1BO	b
In 1400 HP locomotive ECP(Engine Control Panel) is located in	Control panel	Driver Cabin	Engine room	Compressor room	c
In 1400 DEMU fuel tank capacity is _____ liters.	1750	2500	3000	5000	c
110V battery knife switch is located in	Driver Desk	Control panel	Engine room	ECP	b
In 1400HP DEMU 24V and 110V circuit breakers are located in	Driver Desk	Control panel	Engine room	ECP	d
In 1400 HP DEMU Actuator is located	Engine right side free end	Engine right side power take off end	Engine left side free end	Engine left side power take off end	c
In 700 HP DEMU Auxiliary battery voltage is _____ Volts	24	110	220	150	b
Type of Brake system in 700 HP DEMU	IRAB	EP	CCB	None	a
Number of Brake cylinders in DPC of 700 HP DEMU	4	6	8	12	c
Number of Parking Brake cylinders in DPC of 700 HP DEMU	2	4	6	8	b
In 700 HP DEMU 'LCC' stands for	Load Control Console	Lights & fans Control Circuit Breaker	Loco Control Computer	None	a
Type of transmission system in 700 HP DEMU DPC is	DC-DC	AC-DC	AC-AC	DC-AC	b

In 700 HP DEMU MR cut in/ cut out is _____ kg/cm²	6 - 7	6.5 - 7.5	8 - 9	9 -10	b
Number of engine cylinders in Caterpillar engine of 700 HP DEMU	6	8	12	16	c
In 700 HP DEMU water pump diven by	Gear	Belts	Electrical motor	Hydraulic Pump	a
In 700 HP DEMU Auxiliary alternator is driven by	2 Belts	3 Belts	5 Belts	6 Belts	d
In 700 HP DEMU Rectifier block is located in	Engine room	Under truck	Driver Cabin	Radiator room	a
In 700 HP DEMU 24 V alternator is driven by	Single Belt	2 Bets	3 Belts	4 Belts	a
Bell code for 'Zone of SR is over, resume normal speed'	0-P-0	00	000	0000	a
Bell code for 'Stop the Train'	0	00	000	0000	a
Bell code for 'Start the Train'	0	00	000	0000	b
700 HP DEMU is equipped with _____ engine	2 Stroke SI	4 Stroke CI	2 Stroke CI	4 Stroke SI	b
700 HP DEMUs are equipped with _____ make engine	CIL	Ccaterpillar	Both CIL & Caterpillar	None	c
HHP DEMU with aerodynamic ront end is eqipped with ____ type of brake system	IRAB	CCB	EP	None	c
Air suspension is provided in _____ HP DEMUs	700	1400	1600	1400 & 1600	d
110 V Batteries provide supply to ____ during emergency when diesel engine is not in operation.	Lights	Fans	Control loads	All of the above	d
In HHP DEMU VCC is located in	Engine room	Control desk	Control Panel	Under truck	c
In 1600 HP DEMU when VCC of lead DPC is defective, to work with remote DPC power _____ to be kept in 'ON' positon	BIV	DCS	GCS	ERS	d
In Brakke control handle release position	AMV energized	HMV energized	Both AMV and HMV energized	Both AMV and HMV de-energized	d
In 1400 HP locomotive ECP(Engine Control Panel) is located in	Control panel	Driver Cabin	Engine room	Compressor room	c
In 1600 HP DEMU ventilation fans driven by	Belts	Gear	Engine	Electrical motor	d
Number of MU cables provided in DEMU	2	4	6	3	b
Type of Traction motors in 1400 HP DEMU	DC	AC	3 phase AC	None	a
Number of batteries in 24 V battery box in 700 HP DEMU	3	4	5	6	a
Number of batteries in 110 V battery box in 700 HP DEMU	10	15	18	22	c
Type of lube oil pump in DENU	Centrifugal type	Gear type positive displacement	Rotary type	None	b
In 1400 HP DEMU lube oil regulating valve is set at _____ psi	50	60	70	90	c
Hydraulic oil cooler is a _____ type of radiator	Single pass	Double pass	Three pass	None	b
Hydraulic oil cooler is located in radiator	Engine room	Under truck	Radiator room	None	c
Number of Radiators in 1400 HP DEMU	2	4	6	1	b
In 1400 HP DEMU cooling water system is pressurized by ____ psi pressure	5	7	9	10	b
In Air intake system, the condition of air cleaner element is indicated by _____	Gauge	Vacuum indicator	dust particle in filter	None	b
Number of Hydraulic pumps in 1400 HP DEMU	1	2	3	4	b
In 1400 HP DEMU, MR will be maintained by compressor governor between _____ kg/cm²	6.5 - 7.5	7 - 8	8 - 9	9 - 10	a
In 1400 HP DEMU equipped with IRAB system, maximum BC pressure with A9 application is ____ kg/cm²	1.5	1.6	1.8	2.1	b
Mr safety valve setting is ____ kg/cm²	7	8	9	10	b
Water capacity in 1400 HP DEMU is ---- liters	150	180	200	210	b
Hydraulic oil capacity in 1400 HP Caterpillar engine is _____ liters	200	300	350	400	a
Hydraulic oil capacity in 1400 HP Cummins engine is _____ liters	200	300	350	400	d
Gear driven hydraulic pump is provided for radiator fan in _____ engine	Cummins	Caterpillar	Both Cummins & Caterpillar	None	a
In working cab BIV handle should be in _____ position	Vertical	Horizontal	Any position	None	a
Engine will shutdown through LLOP when lbe oil pressure drops below ___ kg/cm²	0.5	0.8	1	1.2	b
In Cummins engine equipped DEMU, if engine shutsdown with OS, reset the fault in	Conrol Panel	LCC	Both Control Panel & LCC	None	c
In CAT engine equipped DEMU, if engine shutsdown with OS, reset the fault in	Conrol Panel	LCC	Cranking Panel	All of the above	d
In 1600 HP DEMU RRU is located in	Engine room	Radiator room	Under truck	None	c
RRU' Stands for	Rectifier and Regulating Unit	Rectifier Resistance Unit	Resistance Regulating Unit	None	a
Traction Inverter converts	AC into DC	DC into 3ø AC	Dc in to DC	AC in to AC	b
Type of traction motors in 1600 HP DEMU	DC	AC	3 phase AC Induction motor	None	c
In 1600 HP DEMU, EPCB is located in	Driver Desk	Control Panel	Engine room	None	b
DPC does not power up when _____ is 'ON' position and VCC is working normal	MPCP	ES CB	EC CB	ERS	d
Normal position of ERS is	ON	OFF	ON or OFF	None	b
If VCC in lead DPC is defective, LP has to switch on _____ switch to get power from remote DPC.	GCS	DCS	BIV	ERS	d
_____ is a bypass switch for DFR interlock provided in master controller supply	GCS	DCS	BIV	ERS	d
VCC cuts off traction power when BP pressure is reduced below _____ kg/cm²	2.5	3.4	4	4.5	b
BPPSW picks up when BP pressure is more than _____kg/cm²	3.5	3.8	4	4.2	d
PBPSW picks up when Parking brake pressure is more than _____kg/cm²	2	3	4	5	b
PBPSW drops out when Parking brake pressure is reduced below _____kg/cm²	2	3	4	5	a
Number of Display Units provided on Control desk of 1600 HP DEMU	1	2	3	4	b
In 1600 DEMU, Display screen can divided into ____ number of zones	2	4	6	8	c
Bell code for passing Automatic signal at ON	00 Pause 00	0 Pause 0	000	0000	a
Bell code for passing IBS at ON	00 Pause 00	0 Pause 0	000	0000	a
Bell code for ' Guard required by Loco Pilot'	0	00	000	0000	c
Bell code for 'Protect Train in Rear'	0	00	000	0000	d
During EP Brake application, BP drops to _____ kg/cm²	1	1.5	3.5	None	d
Number of positions in EP Brake controller	2	3	4	5	d
Number of Turbo chargers in 1400 HP Cummins Engine	1	2	3	4	b

DHMU MULTIPLE CHOICE QUESTIONS -						
S.no						Ans
1	DHMU consists of	a) 1DPC + 1TC+ 1DTC	b) 2DPC +1TC	c) 2 DTC+ 1TC	d) 1DPC+ 1TC+1DPC	a
2	DHMU wheel arrangment	a) 1A1A	b) 1AA1	c) A1A1	d) A11A	b
3	Firing order in DHMU	a) 123456	b) 654321	c) 153624	d) 123654	c
4	In DHMU OSTA tripping RPM is	a) 2000	b) 3000	c)1000	d) 2350	d
5	Brake system in DHMU	a) Vaccum	d) CCB	c) Single pipe air brake	d) Twinpipe graduted release air brake system	d
6	In DHMU AUX. Alternator (110v) is driven by	a) Gear	b) 4 belts	c) 2 belts	d) None of above	b
7	In DHMU max. pressure of compressor is …… Kgs/cm2	a) 8	b) 7	c) 10	d) 9	b
8	In DHMU Compressor is driven by	a) Electrically operated	b) 2 belts	c) 4 belts	d) Gear	b
9	DHMU Max. operated speed ……. Km/ph	a)110	b) 90	c) 100	d) 120	c
10	DHMU starter battery voltage is	a) 110 v	b) 72v	c) 24v	d)230v	c
11	In DHMU Control supply battery volege	a) 110 v	b) 72v	c) 24v	d)230v	a
12	In IDLE conduction DHMU consumes per hour per powerpack …. Ltrs of HSD oil approximately	a) 10	b) 5	c) 6.5	d) 8	c
13	DHMU AXLE gear box max. oil capacity	a) 10 ltrs	b) 20 ltrs	c) 5 ltrs	d) 14 ltrs	d
14	Min/ Max. Fuel balance in DHMU can be …….ltrs	a) 200/1400	b) 300/1000	c) 400/1200	d) 500/1100	a
15	DHMU sump capacity of compressor is …….ltrs	a) 5	b) 7	c) 7	d) 20	b
16	DHMU transmission oil sump capacity is ……..ltrs	a) 70	b) 90	c) 100	d) None of above	a
17	Purpose of water raising apparatus in DHMU is	a) to drain water	b) to cool water	c) to pump water to expansion tank	d) None of above	c
18	In DHMU when PAC operates	a) BP Drops	b) BP will not drop	c) FP drops	d) FP will not drop	b
19	In DHMU full form of PAC is	a) Passenger alaram control	b) Passenger alaram chain	c) Passenger alaram circuit	d) None of above	a
20	In DHMU reversing lever is also called as	a) Dead man handle	b) Master controller	c) Direction control switch	d) None of above	c
21	Coupling available in DHMU is	a) CBC	b) TSC	c) SCHAKO	d) Any Kind	c
22	In DHMU gauge pannel Is located in	a) Engine room	b) Under truck	c) Drivers cab	d) None of above	c
23	In DHMU meter pannel is located in	a) Engine room	b) Under truck	c) Drivers cab	d) None of above	c
24	In DHMU When high water temp. occurs engine will ……..	a) Comes to IDLE	b) no effect	c) Shutdown/Trips	d) None of above	a
25	In DHMU When high transmisson oil temp.occurs engine will ……..	a) Comes to IDLE	b) no effect	c) Shutdown/Trips	d) None of above	a
26	In DHMU When Low Lube oil pressure occurs engine will ……..	a) Comes to IDLE	b) no effect	c) Shutdown/Trips	d) None of above	c
27	In DHMU When over speed of engine occurs engine will …..	a) Comes to IDLE	b) no effect	c) Shutdown/Trips	d) None of above	c
28	In DHMU When Low hydralic oil level of engine occurs engine will …..	a) Comes to IDLE	b) no effect	c) Shutdown/Trips	d) None of above	c
29	In DHMU When Low cooling water level of engine occurs engine will …..	a) Comes to IDLE	b) no effect	c) Shutdown/Trips	d) None of above	c

30	In DHMU inter cooler safety valve set at ……. Kg/cm2	a) 10	b)9	c) 10.5	d) 8	b
31	In DHMU after cooler safety valve set at ……. Kg/cm2	a) 10	b)9	c) 9.5	d) 8	c
32	In DHMU 24v alternator is driven by	a) 4 Belts	b) 2 belts	c) 1 belt	d) 3 belts	c
33	In DHMU water pump is drivenby	a) Gear	b) 2 belts	c) AC supply	d) DC supply	b
34	In DHMU total number of belts for driving different components	a) 7	b) 9	c) 5	d) 3	b
35	In DHMU DPC Parking brake will apply on ……. Wheels	a) L1 R2 L3 R4	b) L1 R1 L2 R2	c) L1 R3 L2 R4	d) L3 R4 R2 L1	a
36	In DHMU parking brake pressure is ……. Kg/cm2 in release conduction	a) 5	b) 3.5	c) 6.5	d) 7	b
37	In DHMU parking brake pressure is ……. Kg/cm2 in apply conduction	a) 0	b) 3.5	c) 6.5	d) 7	a
38	In DHMU each 3 coach unit consists of	a) 2 PC+2TC+2AD gear box	b) 1PC+ 1TC+ 1AD gear box	c) 2PC+2TC+1AD gear box	d) None of above	a
39	What are the brakes available in DHMU	a) DB only	b) A9 only	c) SA 9 only	d) A9, SA9, PB & D1 emergency	d
40	DMH COC is located near…….. Wheel	a) L3	b) R3	c) L1	d) R1	c
41	DHMU each power pack horse power is	a) 400 HP	b) 500 HP	c) 345 HP	d) 365 HP	c
42	DHMU Consumes …… ltrs of HSD oil for the contineous run of one Hour with full occupancy	a) 2	b) 20	c) 30	d) 35	d
43	In DHMU ……. No.of relay pannals are availabel	a) 3	b) 2	c) 1	d) 0	a
44	In DHMU transmission oil temp. should be less than	a) 100 deg.c	b) 90 deg.c	c) 120 deg.c	d) 150 deg.c	c
45	In DHMU minimum lube oil pressure should be ….. Kg/cm2	a) 5	b) 4	c) 10	d) 1.8	d
46	In DHMU cooling water temp. should be	a) 100 deg.c	b) 90 deg.c	c) 120 deg.c	d) 150 deg.c	a
47	During DMH COC closed conduction	a) Single man can work	b) ALP should be available	c) No restrictions	d) None of above	b
48	Transmission system in DHMU is	a) Hydro dynamic	b) AC/AC	c) AC/DC	d) DC/DC	a
49	Bell code for stopping the train	a) x	b) xx	c) xxx	d) xxxx	a
50	Bell code for starting the train	a) x	b) xx	c) xxx	d) xxxx	b
51	Bell code for Guard requried by driver	a) x	b) xx	c) xxx	d) xxxx	c
52	Bell code protect the train in rear	a) x	b) xx	c) xxx	d) xxxx	d
53	Bell code for commencement or completion of combined brake test	a) x	b) xx	c) xxxxx	d) xxxx	c
54	Bell code for caution spot clear	a) x	b) x - x	c) xxx	d) x - x	b
55	Bell code for passing automatic signals at ON	a) xx	b) xxx	c) ---	d) xx - xx	d
56	Bell code for motorman not to exceed the prescribed speed	a) xx	b) xxx	c) xxx - xxx	d) xx - xx	c
57	Bell code for Guard leaving the cab	a) xxxx- xxxx	b) xxx	c) xxx - xxx	d) xx - xx	a
58	Seating capacity of passengers in DPC & DTC is	a) 100	b) 110	c) 101	d) 120	c
59	Seating capacity of passengers in TC is	a) 108	b) 110	c) 101	d) 120	a
60	In DHMU lamp test facility is provided near	a) Drivers control switch box	b) Under truck	c) Engine room	d) None of above	a

DIESEL TRACTION TRAINING CENTRE/KAZIPET

Question bank - Multiple choice

1) When continuous wheel slip is experienced due to locked axle (a)
a) Fail the loco immediately b) Isolate the particular axle's TM and work further
c) Clear the section and fail the loco d) Isolate the truck

2) If AGFB tripped in WDP4/WDG4 locos (c)
a) Battery will discharge b)Load meter will not respond c)Both a and b d)Engine will shut down

3) Oil lubricated TM gear case is provided in (d)
a) WDM 2 b) WDM 3D c) WDG 3A d) WDP 4

4) Loco should not be moved if water level above rail is (a)
A) 4 inches b) 3 inches c) 1 inches d) 2 inches

7) Side load pads are provided in this type of under truck (b)
a) Tri mount bogie b) Fabricated bogie c) both b and d d) HTSC bogie

8) How to reset the VCD penalty brakes in Alco locos (c)
a)Bring TH to idle, Reverser-F/R b)Reset after 35 sec-after Extinguishing of LED
c)Both a and b d)None

9) In AC/DC if GFOLR trips (d)
a) Engine will shut down b) Load meter will not respond
c) Throttle will not respond d) Both ' b' and 'c'

10) If exciter current exceeds 285 amps (a)
a) GFOLR will trip b) GR2 will trip c) GR1 will trip d) GR will trip

11) In WW governor loco if PCS is knocked out (a)
a)ERR will de-energies b)ESR will de-energies c)DMR will de-energies d)Both A & C

12) In AC - DC loco if MB2 trips on run (c)
a)Batteries will get overcharge b)Batteries will get discharge
c)Engine will shut down d)BCA will show 0

13) LLOB is provided in----------Governor Loco (c)
a) MCBG b) GE c) Wood ward d) None

14) Eddy current clutch is located in (d)
a) Nose compartment b) Control compartment
c) Compressor room d) Radiator room

15) ERF should be put ON when (d)
a) ECC is defective b) R1 & R2 defective
c) TS-1&TS-2 Defective d) Both b and c

16) If radiator fan is not working during continuous hot engine alarm switch ON. (a)
a) ERF b) LWS c) DMR d) TR

17) S21 contactor is connected between TM Nos. (a)
a) 3&6 b) 1&4 c) 2&5 d) 3&5

18) During M.U. operation if trailing loco GR-1 trips on run, (c)
the indication in leading loco
a)GR-1 knob projects out b)Bell will ring along with white bulb glowing
c)Load meter will overshoot with alarm bell ringing d)Engine will shut down

19) Continuous working in restricted zone will cause (b)
a) continuous wheel slip b) Power ground
c) Hot engine alarm d) Engine shut down

20) In M.U. operation if trailing loco ¾" coc alone kept in open position (d)
a)BP will not destroy in any position b)BP will destroy only in emergency position
c)Loco brakes will not apply d)BP will not create to 5 kg/cm2

21) In Medha Microprocessor version III loco Low hauling power will be
experienced when (c)
a) TE limit switch is enabled. b) Rectifier fuse blown out
c) Both a & b. d) Power setter switch enabled.

22) In Medha microprocessor loco when one TM is isolated, loco will (a)
a) Start with Series parallel combination b)start with Parallel combination
c) Start with Parallel with shunt combination d)Loco will not move

23) In Medha version III loco, traction motors are isolated through (a)
a) DID panel b)MCOS c)Toggle switch d)By packing reverser bits

24) In Medha microprocessor loco if TM No. 4 & 5 are isolated loco will start with (b)
a)Series parallel combination b)Parallel combination
c)series parallel with shunt combination d)Parallel with shunt combination

25) In GE Microprocessor Loco load meter will not respond if (c)
a) GFB trips b) ECB trips. c) Both a & b d) CEB trips.

26) In GE microprocessor loco during cranking ECS should be kept in (c)
a)Isolate b)Run c)Start d)Idle

27) In Medha microprocessor loco when tration motor No.5 is isolated (c)
a)S1 will not pick up b)S21 will not pick up c)S31 will not pick up d)P31 will not pick up

28) In GE microprocessor loco if GFB trips on run (b)
a) Throttle will not respond b) Load meter will not respond
c) Both a and b d) Engine will shut down.

29) If MPCB breaker trips DID will become blank in (c)
a) GE microprocessor loco b) Siemens microprocessor loco
c) Medha microprocessor loco d) GM loco

30) In GE microprocessor locos to build up F.O.P (a)
a)EST should be moved to prime position b)ECS should be moved to prime position
c)Both a and b d)EST should be moved to start position

31) In GE microprocessor loco during false locked axle indication (d)
a)Switch On LACS switch. b)Switch On SCO switch.
c)Isolate defective TM. d)Both a & b.

32) In GE microprocessor loco throttle will not respond if (a)
a)ERS breaker trips b)GFB trips c)MCB trips d)MFPB-1 trips.

33) In GE microprocessor loco during level - 1 fault is experienced (d)
a) Bring throttle to idle. b) Toggle DAS switch.
c) Press reset key. d) Both a & c

34) In GE microprocessor loco when automatic fault is experienced (a)
a) Bring throttle to idle. b)Toggle DAS switch. c)Press Reset key. d)Both b & c.

35) In Medha Microprocessor loco if TM2 & 5 are isolated loco will start with (a)
a)Series-parallel combination b)Parallel combination
c)Parallel with shunt combination d)Series-parallel with shunt combination

36) Engine should not be cranked if it is shut down for more than (c)
a)24 hrs. b)36 hrs. c)48 hrs. d)32 hrs.

37) In Alco locomotive, Lube oil filter is located in (d)
a)Nose compartment b)Compressor room c)Engine room d)Radiator room

38) If MCBG power breaker is in OFF position during cranking engine will (b)
a) not Crank b) not Fire c) not Hold d)a and b

39) In WDG4 loco LLOB is located in (a)
a) Accessories room b)Compressor room c)Engine power take off end d)ECC3

40) In WDP4/WDG4 if GR (power) trips continuously three times within 10 mts (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

41) 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

42) 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

43) In WDP4/WDG4 banker loco working CS, L/T switch should be kept in (c)
a)Lead b)Trail c)HLPR d)Test

44) 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

45) In WDP4/WDG4 dead loco for quick release of loco brakes open one side (d)
a)MR equalising cock b)BC equalising cock
c)BP equalising pipe d)Both a & b

46) In WDP4/WDG4 banker loco, working control stand Auto handle should be kept in(a)
a)FS position b)Run position c)Release position d)Emergency position

47) Oil visibility in bye pass sight glass indicates that (b)
a)Fuel Primary filter is choked. b)Fuel Spin on filter choked.
c)Lube oil filter choked. d)Lube oil strainer choked.

48) In WDP4/WDG4 loco choking of fuel oil primary filter is indicated by (a)
a)Filter condition gauge. b)Oil visibility in bye pass sight glass.
c)Both A & B d)Oil visibility in sight glass near to engine block

49) In WDP4/WDG4 Loco when lube oil temperature exceeds 124 degree centigrade.(d)
a)Hot oil detector operates b)LLOB operates c)OSTA trips d)Both a and b

50) 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

51) 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

52) 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

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

54) 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

55) 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

56) 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

57) 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

58) In WDP4/WDG4 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

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

60) In Alco locomotive, Control air pressure is adjusted by (d)
a) A9 Feed valve b)F1 selector valve c)NS 16 governor d)Limiting Valve

61) If inlet valve of HP cylinder in Air compressor 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

62) Throttle will not respond if (d)
a)MB2 trips b)MB1 trips c)AGFB trips d)MCB trips

63) 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

64) 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

67) Dynamic brake will not work if (b)
a) GF emergency switch is put ON b)TM is isolated
c)Working with manual transition d)LWS emergency switch is put ON

68) In WW governor loco not provided with MUSDR relay during cranking if MUSD is in STOP position during cranking engine will (b)
a)Crank b)Not fire c)Not hold d)Not crank

69) In AC/DC loco during cranking, engine will not crank if (c)
a)GR trips b)GR1 trips c)GR2 trips d)GFOLR trips

70) In AC/DC loco if CK1 and CK2 are welded (c)
a)Battery ammeter will show discharge b)Load meter will not respond
c)Both a & b d)Battery ammeter will show overcharge

71) In AC /DC loco engine will not crank if (b)
a)TDR is energized b)CKR1 is not energized
c)CKR2 is not energized d)Both b and c

72) ERF should be switched ON when (c)
a)R1 and R2 contactors not picking up b)ECC coil is open circuit
c)Both a and d d)TS1 & TS2 defective

73) 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

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

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

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

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

78) 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

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

80) 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)KeepA9 in Emergency position until the trouble is rectified. d)Apply loco brakes alone

81) 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

82) 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 up to 5.0 kg/cm2
c)Loco brakes will not apply d)BP will distroy only in emergency

83) 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

84) Location of C3W DV in IRAB1 brake system is (b)
a)B control stand b)Nose compartment c)under truck d)A control stand

85) 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

86) 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

87) In AC/DC loco if cranking contactors gets welded (a)
a)Batteries will get discharge b)Batteries will get overcharge
c)Engine will get shut down d)Batteries will neither charge nor discharge

88) In AC/DC loco if TDR is in energized condition (b)
a)Throttle will not respond b)Batteries will discharge
c)Both a and b d)Engine will get shut down

89) In AC/DC loco if CK3 gets welded (d)
a)Load meter will not respond b)Batteries will get discharged
c)TH will not respond d)Both a and b

90) In AC/DC loco load meter will not respond if (c)
a)CK1 & CK2 are welded b)CK3 welded c)Both a and b d)GFC is welded

91) In ALCO locos turbo super charger is driven by (c)
a)Gears b)Motor c)Exhaust gas d)Clutch

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

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

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

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

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

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

98) 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 carboy is accomplished by (b)
a)Hooks b)Safety links c)Lateral shock absorber d)Springs

99) The un sprung weight of the locomotive carbody 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

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

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

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

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

104) In WDG4 loco, maximum BC is ___Kg/Cm2 during backup brake (a)
a)3.8 b)3.2 c)2.2 d)5

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

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

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

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

109) MRPT-main reservoir pressure transducer reads _____pressure (a)
a)MR1 b)MR2 c)BC d)FP pressure

110) When the dead engine cutout cock is set for a dead locomotive, the pressure regulator Charges
a)MR2 to 5kg/cm2. b)Brake cylinder (c)
c)MR2 at 1.76kg/cm2 from the brake pipe d)limiting brake cylinder pressure to 1.76kg/cm2

111. Wood ward governor is located at (b)
a)Engine left side power take off end
b)Engine right side power take off end
c)Engine left side free end
d)Engine right side free end

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

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

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

115. Working of compressor lube oil pump is indicated by (c)

a)Breather valve b) spy glass

c)projection of brass spindle d) sight glass

116. Compressor crank case vacuum is maintained by (a)

a)Breather valve b) spy glass

c)Brass spindle unit d) sight glass d) CCEM

117. If MCBG power breaker is tripped on run engine will (a)

a)Shut down b) come to Idle c) none

118. BKBL is located in (c)

a)Engine room b) Compressor room

c)Nose compartment d) Radiator room

119. BKBL gets current from (c)

a)Battery b) Auxiliary generator

c)Current developed by TM during DB d) Main generator

120. In air brake train when BP is dropped ____ will connect to brake cylinder for brake application (b)

a)Control reservoir b) Auxiliary reservoir

c)Main reservoir d) none

121. Feed pipe is getting charged by _____ valve (c)

a)C2w relay b) F1 selector c) C2N d) C2W DV

122. The super charged air in the air manifold is called (a)

a)BAP b) CAP c) FP d) BP

123. If battery ammeter is showing over charging, the reason is (c)

a)BS open b) MB1 tripped c) Battery defective d) AGFB tripped

124. If BA shows over charging due to defective battery (a)

a)BS to be open b) shut down the engine

c)Engine to brought to Idle d) No action required

125) What is the code for Brake pipe leakage failure in self test ? (a)

a) 6B b)10B c)6F d)6S

126) 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

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

128) 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

129) Where the booster air pressure stored in Two stroke engine? (a)
a) In air box b)manifold c)tank d)MR

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

131) Loading and unloading of compressor is controlled by_____in WDG4/P4 (a)
a) MVCC b)EPG c)RGCP d)None of the above

132) After cranking, allow a minimum of _____minutes for starter motor cooling before attempting another engine start. (a)
a) 2 b) 5 c) 8 d) 10

133) Do not crank engine for more than _____with starting motors in HHP. (d)
a)30seconds b)1minutes c)10seconds d)20 seconds

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

135) 8th notch speed of WDG4 Engine_____RPM (c)
a)1050 b)1000 c)954 d)915

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

137) FTTM driven by (c)
a)Electric motor. b)Belts. c)Gear d)Hydraulic pressure

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

139) HP of WDP1 is: (d)
a)1400 b)1800 c)2400 d)2300

140) Latest modified lube oil cooler is of _____type (b)
a)Drum b)Plate c)Paper d)Roll

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

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

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

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

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

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

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

148) Minimum contiuous speed at Maximimum tractive effort of WDP4 Locomotive is _____ kmph (d)
a)15.5 b)20 c)10.0 d)22.5

149) Limiting valve is used to control ------ pressure (c)

a)BP pressure b)FP pressure c)Control Air Pressure d)BC pressure

150) HP of WDG4 Loco motive is _____ HP (a)
a)4500 b)3900 c)3950 d)3939

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

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

153) Turbo supercharger is rotated by ------: (b)
a)Cam gear b)Exhaust gasses c)Crank shaft d)AC motor

154) Type of Water Pump in WDP4 ------: (c)
a)AC motor pump b)Air driven pump c)Centrifugal Pump d)Gear pump

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

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

157) AUX. GEN. F.B. breaker protects the _____ (c)
a)Aux Gen Field b)Input of Comp.Alternator
c)traction alternator field firing control circuit (FCd). d)TrAlt output

158) Current rating of Starting fuse_____ (d)
a)600 amps b)1000 amps c)500 amps d)800 amps

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

160) 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

161) If the TM temerature is greater than _____digree Celcius the inverter will derate to keep the traction motor temarature in control (a)
a)200 b)100 c)95 d)92

162) LOCAL CONTROL circuit breaker establishes local (vs. trainlined) control with power from the locomotive battery or auxiliary generator to operate heavy duty switchgear, magnet valves, contactors, blowers, and miscellaneous relays. (a)
a)Relay b)Magnetic valves c)contactors d)All of the above

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

164) 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

165) 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

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

167) TCC1 COMPUTER breaker provides power and protection to (b)
a)GTO1 b)The No.1 bogie traction inverter (TCC1)computer and associated circuits c)TM1 d)DCL

168) The function of DC link capacitor is (d)
a)Convert AC to DC b)Convert DC to AC
c)To act as AC link voltage d)To act as buffer to DC link voltage

169) 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

170) 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)Comp.Alt output c)Fan circuits d)Radar circuits

171) The purpose of DVR(Digital Voltage Regulator) is (d)
a)To regulates Companion alternator output b)To regulates Main Generator
c)None of the above d)To Regulates auxiliary generator output by controlling auxiliary generator field current

172) The purpose of Ground relay is to protect when _____ (b)
a)A failed group of rectifying diodes b)Development of a Main Gen positive or negative high voltage path to ground c)A & B d)TM Low current

173) Tractive effort is transferred from to TM to wheel is through _____ (d)
a)Load pads b)side bearers c)coil springs d)Traction rods

174) "Whenever DC link exceeds 3600volts,the _____ trips, which fires a (b)
a) Hard Crowbar." b)AC control TCC Break Over Diode (BOD)
c)Local control breaker d)GR

175) Whenever DC link voltage exceeds 3200 volts ,the TCC fires a _____crow bar (c)
a)Hard Crowbarb)Sneaky crow bar c)Soft Crowbar d)GR

176) Which module provides an interface for communication between the EM2000 locomotive computer, the SIBAS traction inverter computers and the (a)
a)COM b)FCF c)PSM d)ADA

177) Which module converts analog input signals (Pressure,Temperature,Voltage,Current,Speed) into digital signals for the computer and converts digital computer output signals into analog signals. (c)
a)DIO b)FCF c)ADA d)FCD

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

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

180) If the pressure across the primary filter element exceeds_____, a bypass valve begins to open, bypassing the primary fuel filter. (d)
a)1.6kg/cm2 b)5.3kg/cm2 c)4.8kg/cm2 d)2.1kg/cm2

181) When fuel oil pressure at the spin-on filters input rises _____kg/cm2, the spin-on filters bypass valve opens fully and fuel bypasses the engine and return to fuel tank. (b)
a)5.3kg/cm2 b)4.2 c)4.8kg/cm2 d)3.8kg/cm2

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

183) 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

184) 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

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

186) How many Power Contactors are available in WDG4 Loco motive ? (d)
a)7 b)9 c)8 d)0

187) _____ Number of brake blocks are provided on WDM3A (b)
a)16 b)24 c)32 d)22

188) The number of Brake cylinders provided on WDM3A locomotive (b)
a)6 b)8 c)10 d)12

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

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

191) how many Lube oil pumps available in EMD engine? (d)
a)5 b)7 c)9 d)4

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

193) 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

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

195) 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

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

197) 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

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

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

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

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

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

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

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

205) In Alco locomotive Electro Pneumatic Governor is located in (d)
a) Compressor room b)Radiator room c)Nose compartment d)Rear compartment

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

207) Main Reservoir pressure unloading will takes place at___kg /cm2. (c)
a)8 b)9 c)10 d)11

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

209) MR safety valve is set at_____ Kg/Cm² pressure. (c)
A)7 b)9 c)10.5 d)9.5

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

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

212) 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

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

214) Cooling Water capacity in WDM3A locomotive is_____ liters. (d)
a)900 b)910 c)1300 d)1210

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

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

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

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

219) 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

220) The system maintains the coolant temperature within a predetermined range of from (a)
a)79º C to 85º Cb)85 to 95 c)92 to 100 d)72 to 80

221) 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

222) In WDG3A locomotive Hot engine alarm (HEA) will come at _____ ºC . (c)
a) 60 b) 70 c) 90 d) 80

223) 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

224) 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

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

226) 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

227) What is the color code for the B.P pressure pipe ? (c)
a) Black b) Red c) Green d)Yellow

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

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

230) 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 with in _____ minutes. (a)
a) 05 b) 10 c) 15 d) None of the above

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

232) 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

233) 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

234) 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

235) 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

236) What acts LP/ALP should not do while approaching /passing signals /stations to avoid SPAD ? (c)
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)All

237) 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

238) 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

239) 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

240) What is the position of ¾ 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

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

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

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

244) 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 loco & formation, close BP & FP COC of loco towards formation.

245) 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

246) 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

247) 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

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

249) When Head light become defective speed of the train shall not exceed ____. (c)
a) 20Kmph b) 30Kmph c) 40kmph d) 50kmph

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

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

252) 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

253) 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

254) 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

255) 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.

256) Locos provided with Cast Iron brake blocks requires _____than the Locos provided with Composite brake blocks (a)
a)More braking distanceb)Less braking distance c)frequent change of brake blocks d)BC pressure 3.8 kg/cm2

257) 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

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

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

260) 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

261) 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

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

263) 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

264) 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

265) 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

266) When Head light become defective speed of the train shall not exceed (c)
a) 20 kmph b) 30 kmph c) 40 kmph d) 50 kmph

267) 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

268) The Lead /Trail switch position in console of WDG4/WDP4 working as MU trailing is (a)
a) Trail b) Lead c) Both d) None

269) If BP & FP pipes are wrongly connected ---- will fail. (b)
a) Loco is failed b) Formation Brakes c) Loco brakes d)All

270) 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

271) 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

272) 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

273) 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

274) 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

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

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

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

278) 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

279) 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 the above

280) In Alco loco 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

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

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

283) If FPC Contactor closing but engine is not cranking what may be the reason? (c)
a) MB1 Tripped/Off b) MB2 Tripped/Off c) FPB Tripped/Off
d) MFPB1 & MFPB2 Tripped/Off

284) 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

285) 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

286) What is the reason if engine shutdown automatically on run? (d)
a) MB2 Tripped b) MFPB1 &MFPB2 Tripped c) FPB Tripped d) All the above

287) Which breaker is to be checked if engine shutdown on run? (c
a) MB1 b) MCB1 & MCB2 Tripped c) FPB Tripped d) All the above

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

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

290) 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

291) What may be the reason for throttle is not responding? (d)
a) DMR De-energised b) GR Tripping c) GFOLR Tripping d) All the above

292) What happens if MCB1 & MCB2 get tripped on run? (b)
a) Engine shutdown b) Engine comes to idle c) Load meter shows zero
d) No Problem

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

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

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

296) 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

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

298) 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

299) The Procedure for isolation of AFL, when AFL is malfunctioning (d)
a) If isolation switch available switch Off b) If not disconnect 171 wire c) Pack DMR
d) All the above

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

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

302) Improper control air pressure leads to (d)
a) Power Contactors fluttering b) Flashovers c) Power Ground
d) All the above

303) 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

304) What is the effect of GR tripping? (d)
a) Load meter zero b) Engine comes to Idle c) GR Indication with bell
d) All the above

305) What is the effect of WSR? (d)
a) LM gradually drops to zero b) Sanders operate c) Wheel slip indication with buzzer
d) All the above

306) In AC/DC Locomotives engine is cranked by (b)
a) Main Generator b) Auxiliary & Exciter Generators c) Auxiliary Generator
d) Exciter Generator

307) In AC/DC Locomotives no of cranking relays and no of cranking contactors? (a)
a) 2,3 b) 3,2 c) 2,2 d) 1,2

308) In AC/DC Locos during cranking which relay protects Auxiliary And
Exciter Generators? (c)
a) SAR b) GR c) TDR d) WSR

309) In place of AC Governor, which Governor is provided for compressor loading
And unloading (a)
a) EPG b) GE c) Z.W d) Run-Release

310) What is the purpose of GFOLR in AC/DC Locomotive? (c)
a) To protect Main Generator field b) To protect Rectifier panel
c) To protect Main Generator field & rectifier panel d) To protect Auxiliary Generator

311) No of GRs in AC/DC locomotives (b)
a) 1 b) 2 c) 3 d) 4

312) which circuits are protected by GR1 & GR2 after earthing? (c)
a) Power Circuit b) Control circuit c) Power and Control circuits
d) Nothing

313) what is the procedure to be taken before resetting GR (d)
a) ECS & Throttle Idle b) Both GF Switches Off c) Reverser Handle neutral
d) All the above

314) If BKT or Reverser is not operating properly what is the action to be taken? (b)
a) Fail the loco b) Operate manually with `L' rod c) Shutdown engine
d) Engine Idle

315. BP pressure in Alco locomotive is _____ kg/cm² (b)
a) 3.5 b) 5 c) 6 d) 8

316. FP pressure in Alco locomotive is _____ kg/cm² (c)
a) 3.5 b) 5 c) 6 d) 8

327. Fuel oil relief valve is set at _____kg/cm² in Alco locomotive (b)
a) 4.5 b) 5 c) 6 d) 8

328. Maximum Brake cylinder pressure with SA9 (b)
a) 5 kg/cm² b) 3.5 kg/cm² c) 1.8 kg/cm² d) 5.2 kg/cm²

329. Maximum Brake cylinder pressure with A9 (c)
a) 5 kg/cm² b) 3.5 kg/cm² c) 1.8 kg/cm² d) 5.2 kg/cm²

330. Horse power of WDG3A loco is _____ (c)
a)2600 b) 3600 c) 3100 d) 4000

331. Horse power of WDG4 loco is _____ (b)
a)2600 b) 4500 c) 3100 d) 4000

332. Control air pressure in Alco loco _____ kg/cm² (c)
a)3.5 b) 4 c) 5 d) 6

333. Number of Main bearings in WDG3A locomotive (c)
a)7 b) 8 c) 9 d) 10

334. Fuel tank capacity in WDG3A loco is _____ liters. (c)
a)5000 b) 5500 c) 6000 d) 4000

335. Pinion to Bull gear ratio in WDM2 loco is _____ (b)
a)18:74 b) 18:65 c) 17:77 d) 17:90

336. Pinion to Bull gear ratio in WDG3A loco is _____ (a)
a)18:74 b) 18:65 c) 17:77 d) 17:90

337. Pinion to Bull gear ratio in WDP4 loco is _____ (c)
a)18:74 b) 18:65 c) 17:77 d) 17:90

338. Pinion to Bull gear ratio in WDG4 loco is _____ (d)
a)18:74 b) 18:65 c) 17:77 d) 17:90

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

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

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

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

341. In WDM3A loco FTTM is driven with _____ (b)

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

342. In WDM3A loco RTTM is driven with _____ (a)

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

343. Type of transmission in WDM3A loco (b)

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

344. Type of transmission in WDG3A loco (b)

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

345. Type of transmission in WDG4 loco (d)

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

346. Type of transmission in WDP4 loco (d)

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

347. In Alco loco LWS is located in _____ (c)

a) Nose Compartment b) Driven cabin

c) Compressor Compartment d) Radiator room

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

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

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

a)Nose Compartment b) Driven cabin

c) Compressor Compartment d) Radiator room

350. Type of engine in Alco loco (c)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

a)Driver cab b) Nose compartment

c) Compressor compartment d) Radiator room

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

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

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

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

361. 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

362. 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

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

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

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

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

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

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

366. Rectifier converts (a)

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

367. Inverter converts (b)

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

368. Idle RPM of WDG3A locomotive is (b)

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

369. 8th notch RPM of WDG3A locomotive is (b)

a) 1000 b) 1050 c) 1100 d) 1150

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

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

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

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

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

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

373. Horse power of WDM3D locomotive is (c)

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

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

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

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

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

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

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

377. Reduction in BP pressure causes (c)

a)Brakes release b) Brakes slow release c) Brakes application d) MR pressure increasing

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

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

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

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

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

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

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

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

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

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

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

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

384. Compressor lube oil pump is driven by (b)

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

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

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

386. 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

387. 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

388. 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

389. The rundown test of Napier is to be conducted on ____ notch (a)
a)Idle b) 4 c) 6 d) 8

390. Hot Engine Alarm will come at _____ °C in WDG3A locos (c)
a)60 b) 70 c) 90 d) 80

391. Electro Pneumatic Governor is located in (a)
a)Compressor room b) Radiator room c) Nose compartment d) none

392. During MR efficiency test in WDG3A loco, ____ kg/cm² MR pressure should be created within _____ minutes. (c)
a)7, 5 b) 8, 4 c) 10, 3 d) 5, 5

393. No. of Brake cylinders in Alco loco (b)
a)4 b) 8 c) 12 d) 10

394. Lube oil filter drum is located in (a)
a)Radiator Room b) Generator room
c)Nose compartment d) Engine room

395. How many kinds of Brakes are provided in WDG3A/WDG4 loco (b)
a)2 b) 5 c) 4 d) 6

396. 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

397. MR pressure unloading takes place at _____ kg/cm² (a)
a)10 b) 8 c) 12 d) 10.5

398. From where the control air pressure gets charged (a)
a)MR1 b) MR2 c) FP d) BP

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

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

400. 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

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

a) b) 4 c) 6 d) 8

402. Reduction in BP pressure causes _____ (c)

a)Brakes releaseb) Brakes slow release c) Brakes application

c)MR pressure increasing

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

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

404. 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

405. 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

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

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

407. Compressor Inter cooler safety valve is set at _____ PSI (d)

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

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

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

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

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

410. 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

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

a)5 b) 2 c) 8 d) 16

412. _____ is provided on WDG3A bogie to avoid run out of bogie from chassis

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

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

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

414. 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

415. Power contactors fluttering is due to (c)

a) Less magnetism b) Load meter defective

c)Less control air pressure d) Week batteries

416. 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

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

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

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

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

419. 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

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

a)Compressor compartment b) Excitation Panel

c)LP cab d) Existing location of Governor

421. 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

422. The conventional Electronic type excitation system is replaced with ____ (a)

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

423. Breather valve is provided on (c)

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

424. 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

425. FP pressure is charged from (a)

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

426. MREq pressure is charged from (a)

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

427. Sanders are operated from (a)

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

428. Horns are operated from (a)

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

429. Wipers are operated from (a)

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

430. Sensitivity of DV is (a)

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

c)0.3 kg/cm² in 60 sec d) None

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

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

432. Maximum BC pressure in kg/cm² with SA9 (a)

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

433. Maximum BC pressure in kg/cm² with A9 (b)

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

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

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

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

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

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

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

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

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

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

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

439. In MU lead loco MU2B position should be (a)
a)Lead b) Trail c) Dead d) None

440. In MU trail loco MU2B position should be (b)
a)Lead b) Trail c) both a & b d) None

441. In Alco locomotive MR cut in pressure (in kg/cm²) (c)
a)5 b) 10 c) 8 d) 6

442. In Alco locomotive MR cut out pressure (in kg/cm²) (b)
a)5 b) 10 c) 8 d) 6

443. No. of lube oil filters in lube oil filter drum of WDM3A loco (b)
a)4 b) 8 c) 10 d) 12

444. In Alco loco lube oil cooler is located in (c)
a)Nose compartment b) Engine room c) Radiator compartment d) None

445. Number of belts in RTTM blower pulley (b)
a)4 b) 6 c) 8 d) 2

446. In Alco loco lube oil pump is driven by (a)
a)Extension shaft gear b) Electrical motor c) Belt d) none

447. Cam gears are lubricated by (b)
a)Main header b) Auxiliary header c) both a & b d) None

448. In Wood ward governor loco LLOB tripping is set at
_____ kg/cm² in Idle (a)
a)1.3 b) 2.5 c) 3.5 d) 5.0

449. In Wood ward governor loco LLOB tripping is set at
_____ kg/cm² in 8th notch (c)
a)1.3 b) 2.5 c) 3.5 d) 5.0

450. Air flow indicator gives indication to LP about (b)
a)FP leakage b) BP leakage c) MR leakage d) None

451. L5 HP pipe line is cracked (b)
a)Fail the loco b) Lock rack of L5 c) lock left side racks d) Ignore

452. During dynamic braking ____ valve avoids loco brake to apply (c)
a)vC2 relay valve b) Additional C2 relay valve c) BKIV d) SA9

453. In IRAB1 brake system PCS2 picks up & drops at (d)
a)4.0 & 4.5 kg/cm² b) 1.3 & 1.6 kg/cm²
c)2.5 & 3.0 kg/cm² d) 4.0 & 2.8 kg/cm²

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

a)Starting ground b) battery discharging

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

455. If explosion door burst, _____ (a)

a)Fail the loco b) wait for second time

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

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

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

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

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

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

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

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

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

460. 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

461. On run if MCB1 or MCB2 trips _____ trouble will be experienced (c)

a)Engine shut down b) Load meter not responding

c)Throttle not responding d) None of these

462. To protect power circuit from earth fault ____ relay is provided (b)

a)DMR b) GR c) ESR d) SAR

463. ¾" COC is provided 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

464. Limiting valve is provided in (b)

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

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

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

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

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

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

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

468. 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

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

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

470. 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

471. 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

472. AFL gets operated during _____ (d)

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

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

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

474. ____ 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

475. ____ 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

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

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

477. 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

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

a)Engine comes to Idle b) BP drops

c)Brakes will apply d) all the above

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

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

480. 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

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

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

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

a)APU b) VCDc) AFL d) all the above

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

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

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

a)Lead, Trail b) Trail, Trail c) Trail, Leadd) Lead, Trail

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

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

486. 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

487. 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

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

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

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

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

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

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

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

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

492. 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

493. 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

494. If water contaminated with lube oil, viscosity of lube oil will be ___ (b)

a)Less b) more c) remains unchanged d) None

495. 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

496. 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

497. In engine crank case, if positive pressure increases more than its limit _____ gets operated (c)

a)LWS b) OSTA c) Explosion door d) PCS

498. Horse Power of WDM3D is (b)

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

499. In WDM3A radiator fan rotates at ___ different speeds (a)

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

500. Air dryer is provided between (b)

a)MR Cooling coil & MR1 b) MR1 & MR2

c)Compressor & MR cooling coil d) Inter cooler & After cooler

501. Gear case of Alco locomotive is lubricated by (d)

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

502. Number of transitions in AC-DC locomotive (a)

a)1 b) 2 c) 3 d) 4

503. ___ type of fire extinguisher is provided in DE locomotives (b)

a)Foam b) DCP c) water d) CO2

504. 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

505. ECC (Edddy Current Clutch) is located in (b)

a)Compressor room b) Radiator room

c)Engine room d) Generator room

506. LLOB is provided in ___ governor (a)

a)Woodward b) GE c) MCBG d) EP

507. If OSTA trips, engine will come to (b)

a)Idle b) Shut down c) 2nd notch RPM d) none

508. If ECC is short circuited ___ breaker will trip (a)

a)FPB b) MFPB c) MCB d) MPCB

509. 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

510. Sanders test on WDG3A to be conducted by keeping reverser handle in ___ position (d)

a)Neutral b) Forward c) Reverse d) ‘a’ or ‘b’

511. Compressor efficiency test is conducted by using ___ mm test orifice (b)

a)5 b) 7.5 c) 8 d) 10

512. 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

513. Starting ground occurs due to earth fault in ____ circuit (a)

a)Control b) power c) both a & b d) None

514. COS (Centrifugal Oil Separator) is provided in ___ system (b)

a)Fuel oil b) lube oil c) air intake system d) none

515. Lube oil pump is driven by (a)

a) gear b) chainc) electric motor d) none

516. Water pump is driven by (a)

a)gear b) chainc) electric motor d) none

517. Wood ward governor is located at (b)

a)Engine left side power take off end

b)Engine right side power take off end

c)Engine left side free end

d)Engine right side free end

518. Fuel oil tank capacity in WDG3A locomotive (litres) (b)

a)5000 b) 6000 c) 3000 d) 4000

519. In WDM3A fuel oil primary filter is located in (a)

b)Compressor room b) Engine room

c)Radiator room d) under truck

520. In WDM3A fuel pump motor is located in (a)

a)Compressor room b) Engine room

c)Radiator room d) under truck

521. Working of compressor lube oil pump is indicated by (c)

a)Breather valve b) spy glass

c)projection of brass spindle d) sight glass

522. Compressor crank case vacuum is maintained by (a)

a)Breather valve b) spy glass

c)Brass spindle unit d) sight glass d) CCEM

523. If MCBG power breaker is tripped on run engine will (a)

a)Shut down b) come to Idle c) none

524. BKBL is located in (c)

a)Engine room b) Compressor room

c)Nose compartment d) Radiator room

525. BKBL gets current from (c)

a)Battery b) Auxiliary generator

c)Current developed by TM during DB d) Main generator

526. In air brake train when BP is dropped ____ will connect to brake cylinder for brake application (b)

a)Control reservoir b) Auxiliary reservoir

c)Main reservoir d) none

527. Feed pipe is getting charged by _____ valve (c)

a) C2w relay b) F1 selector c) C2N d) C2W DV

528. The super charged air in the air manifold is called (a)

a)BAP b) CAP c) FP d) BP

529. If battery ammeter is showing over charging, the reason is (c)

a)BS open b) MB1 tripped c) Battery defective d) AGFB tripped

530. If BA shows over charging due to defective battery (a)

a)BS to be open b) shut down the engine

c)Engine to brought to Idle d) No action required

531. Number of ABD valves in HHP locomotive (b)

a) 1 b) c) 3 d) 4

532. In WDG4 locomotive Fuel oil relief valve is set at ___ PSI (a)

a) 15 b) 20 c) 30 d) 40

534. In WDG4 locomotive Fuel oil primary filler bypass valve is set at ___ PSI (c)

a) 15 b) 20 c) 30 d) 40

535. In WDG4 locomotive Fuel oil secondary filter bypass valve is set at ___ PSI (d)

a) 30 b) 40 c) 50 d) 70

536. In HHP locomotive hand brake is located (b)

a) loco left side b) loco right side c) Nose compartment d) None

537. Driver backup valve has ____ number of positions (c)

a) 1 b) c) 3 d) 4

538. In HHP loco, during pre-lubrication lube oil is filtered through (a)

a) only soak back filer b) only TSC spin on filter

c) both soak back & TSC spin on filter d) None

539. In CCB-II which statement is true regarding ‘dead engine cock’ (d)

a) It has 2 positions

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

540. In CCB-II fitted locos, dead engine cock is provided on (b)

a) 16 CP b) ER CP c) BP CP d) 20 CP

541. Number of sand magnet valves in WDG4 locomotive (d)
a) 1 b) c) 3 d) 4

542. In HHP loco for quick charging of BP _____ is provided (d)
a) SP1 b) SP2 c) Bail off ring d)'Release' position of Auto handle

543. Malfunction of LWS leads engine to _____ (c)
a) Idle RPM b) 4th Notch RPM c) Shutdown d) None

544. Number of brake cylinder cut out cocks in WDM3A locomotive (a)
a) 2 b) 4 c) 6 d) 8

545. One of the reason for MR not building up is (b)
a) Safety valve dummied b) Inter cooler tubes burst
c) ABD valves not working d) Engine hunting

546. In HHP loco fuel oil primary filter condition gauge is having (d)
a) Green zone b) Yellow zone c) Red zone d) all of the above

547. For CCB system air supply is from (b)
a) MR1 b) MR2 c) MREQ d) FP

548. Number of engine cylinders in WDP4 locomotive (c)
a) 8 b) 12 c) 16 d) 20

549. In HHP loco, dust bin blower motor is located in (c)
a) Compressor compartment b) Radiator compartment
c) Clean air compartment d) Equipment rack

550. In HHP loco IPR (Inverter Protection Resistor) is located in (c)
a) Compressor compartment b) Radiator compartment
c) Clean air compartment d) Equipment rack

551. In CCB 1.5 fault code will be displayed in (c)
a) VCU b) PCU c) CRU d) BVC

552. In HHP loco Control & FP switch is located in (b)
a) ECC1 b) Control console 2 c) ECC2 d) ECC3

553. Location of lube oil cooler in HHP locomotive (a)
a) Equipment Rack b) Radiator room
c) Compressor room d) Engine room

554. Location of lube oil filter in HHP locomotive (a)
a) Equipment Rack b) Radiator room
c) Compressor room d) Engine room

555. Location of fuel oil primary filter in HHP locomotive (a)
a) Equipment Rack b) Radiator room
c) Compressor room d) Engine room

556. Location of water expansion tank in HHP locomotive (a)
a) Equipment Rack b) Radiator room
c) Compressor room d) Engine room

557. Maximum brake cylinder pressure (in kg/cm²) in WDG4/WDP4 loco (a)
a) 5.2 b) 4.8 c) 3.8 d) 3.5

558. 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

559. In WDG4 loco power contactors are replaced with (d)
a) FS contactors b) relays c) BKT/REV d) DC Link

560. In WDG4 loco compressor is cooled by (d)

a) Nature b) Air c) Oil d) Water

561 In WDG4 loco turbo is cooled by (c)
a) Nature b) Air c) Oil d) Water

562. In HHP loco, STA, ST contactors are located in (b)

a) ECC-1 b) ECC-2 c) ECC-3 d) ECC-4

563. In HHP loco, ECC-1 is located in (a)

a) Driver Cabb) Under Truck c) Near Compressor Room d) None

564. In HHP loco, ECC-3 is located in (c)

a) Driver Cabb) Under Truck c) Near Compressor Room d) None

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

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

567.Maximum speed of WDP4 locomotive (c)

a) 120 b) 150 c) 160 d) 180

568.Transmission in WDG4 locomotive is (b)

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

569.Fuel tank capacity in WDG4 locomotive (c)

a) 4000 b) 5000 c) 6000 d) 7000

570.Type of diesel engine fitted WDG4 locomotive (c)

a) Alco-251 b) GT46PAC c) 710G3B d) GT46MAC

571.Number of power contactors in HHP locomotive (a)

a) 0 b) 6 c) 9 d) 10

572.Number of cylinders in WDG4 locomotive (b)

a) 12 b) 16 c) 18 d) 20

573.Type of traction motors in HHP locomotive (a)

a) AC motors b) DC motors c) both A & B d) None

574.Type of diesel engine in WDG4 locomotive (b)

b) 4 stroke b) 2 stroke c) 3 stroke d) SI

575.Maximum speed of WDG4 locomotive (a)

a) 100 b) 150 c) 160 d) 180

576.Maximum speed of WDP4 locomotive (c)

a) 120 b) 150 c) 160 d) 180

577.Transmission in WDG4 locomotive is (b)

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

578.Fuel tank capacity in WDG4 locomotive (c)

a) 4000 b) 5000 c) 6000 d) 7000

579.Type of diesel engine fitted WDG4 locomotive (c)

583.Type of diesel engine in WDG4 locomotive (b)

a) 4 stroke b) 2 stroke c) 3 stroke d) SI

584.Pinion to Bull gear ratio in WDG4 locomotive (d)

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

585.Pinion to Bull gear ratio in WDP4 locomotive (b)

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

586.Maximum speed of WDG4 locomotive (a)

a) 100 b) 150 c) 160 d) 180

587.Maximum speed of WDP4 locomotive (c)

a) 120 b) 150 c) 160 d) 180

588.Transmission in WDG4 locomotive is (b)

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

589.Fuel tank capacity in WDG4 locomotive (c)

a) 4000 b) 5000 c) 6000 d) 7000

590.Type of diesel engine fitted WDG4 locomotive (c)

a) Alco-251 b) GT46PAC c) 710G3B d) GT46MAC

591.Number of power contactors in HHP locomotive (a)

a) 0 b) 6 c) 9 d) 10

592.Number of cylinders in WDG4 locomotive (b)

a) 12 b) 16 c) 18 d) 20

593.Type of traction motors in HHP locomotive (a)

a) AC motors b) DC motors c) both A & B d) None

594.Number of power contactors in HHP locomotive (a)

a) 0 b) 6 c) 9 d) 10

595.Number of cylinders in WDG4 locomotive (b)

a) 12 b) 16 c) 18 d) 20

596.Type of traction motors in HHP locomotive (a)

a) AC motors b) DC motors c) both A & B d) None

597.In WDG4 locomotive compressor is cooled by (b)

a) Air b) Water c) Oil d) Nature

598.Number of positions of Auto brake in WDG4 locomotive (c)

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

599.In WDG4 locomotive hot oil detector is set at _____ °C (b)

a) 100 b) 126 c) 150 d) 180

600.Blended brake is available in _____ locomotive (b)

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

601.Lube oil sump capacity in WDG4 locomotive (in liters) (d)

a) 1000 b) 1100 c) 910 d) 1457

602.Full RPM of WDG4 locomotive (c)

a) 1000 b) 1050 c) 954 d) 1100

603.Idle RPM of WDG4 locomotive (b)

a) 200 b) 269 c) 350 d) 400

604.Low Idle RPM of WDG4 locomotive (a)

a) 200 b) 269 c) 350 d) 400

605.Coolant water capacity in HHP locomotive (c)

a) 1000 b) 1100 c) 1045 d) 1145

606.Minimum continuous speed of WDG4 locomotive (in Kmph) (b)

a) 21.5 b) 22.5 c) 20.5 d) 23.5

607.Type of bogie in WDG4 locomotive (b)

a) Single suspension b) Double suspension c) Triple suspension d)None

608.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

609.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

610.In HHP locomotive Turbo charger is driven by (c)

a) Exhaust Gas b) Gear Train c) Gear Train & Exhaust Gas d)None

611.Loco model of WDG4 (b)

a) GT46PAC b) GT46MAC c) Both A & B d) None

612.Loco model of WDP4 (a)

a) GT46PAC b) GT46MAC c) Both A & B d) None

613.Number of cylinders of air compressor in WDG4 loco (b)

a) 2 b) 3 c) 4 d) 6

614.In HHP locomotive fuel pump motor is located in (c)

a) Compressor room b) Radiator room c) Under truck d) engine room

615. In HHP loco if water pressure is less (c)

a) LLOB trips b) Low water pressure button will trip

c) Both LLOB & low water pressure button will trip d) None

616. Number of starter motors in HHP locomotive (b)

a) 1 b) 2 c) 3 d) 0

617. Scavenging pump is a (b)

a) Reciprocating pump b) Centrifugal pump

c) Positive displacement gear type pump d) None

618. No of exhaust valves in a power assembly of HHP locomotive (b)

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

619. To reset VCD reverser should be in _____ position (d)

a) Neutral b) Forward c) Reverse d) Forward or Reverse

620. Compressor in HHP locomotive is a (b)

a) Rotary compressor b) Reciprocating compressor

c) Centrifugal compressor d) None

621. ECC-4 is provided in (d)

a) WDG4 b) WDP4 c) WDP4B d) WDP4D

622. Number of inlet valves in cylinder head of WDG4 locomotive (d)

a) 2 b) 4 c) 6 d) None

623. Compression ratio in HHP locomotive (d)

a) 12.5:1 b) 13:1 c) 15:1 d) 16:1

624. Number of ETPs (Engine Temperature Probes) provided in WDG4 loco (b)

a) 1 b)2 c) 3 d) 4

625. Number of DB grid blower motors in HHP locomotive (b)

a) 1 b)2 c) 3 d) 4

HHP ENGINE एचएचपी इंजन

1. What is the Horse power of WDP_4 D & WDP_4 B locomotives

   A. 3000 HP
   B. 3500 HP
   C. 4000 HP
   D. 4500 HP

2. What is the compression ratio of WDP_4 D & WDP_4 B locomotives

   A. 16:1
   B. 14:1
   C. 13:1
   D. 15:1

3. Which type of diesel engine is fitted in HHP locomotive

   A. Four stroke
   B. Three stroke
   C. One stroke
   D. Two stroke

4. TM pinion and bull gear ratio in WDP_4 D & WDP_4 B loco is

   A. 17:90
   B. 17:77
   C. 65:18
   D. 90:35

5. Maximum speed of WDP_4 D & WDP_4 B locomotive is

   A. 130 Kmph
   B. 160 Kmph
   C. 150 Kmph
   D. 180 Kmph

6. What is the fuel tank capacity in WDP_4 D & WDP_4 B locomotive

   A. 5000 Litter
   B. 6000 Litter
   C. 4000 Litter
   D. None of these

7. Transmission in WDP_4 D & WDP_4 B locomotive is
   A. AC-DC
   B. AC-AC
   C. DC-DC
   D. DC-AC

8. Total weight of WDP_4 D loco is

A. 115.8 Tones
B. 119.8 Tones
C. 121.8 Tones
D. 123.0 Tones

9. Total weight of WDP_4 B loco is

A. 115.8 Tones
B. 119.8 Tones
C. 121.2 Tones
D. 123.0 Tones

10. What is the maximum speed of the WDG_4 locomotive

A. 150 Kmph
B. 140 Kmph
C. 120 Kmph
D. 100 Kmph

11. What is the fuel tank capacity of WDG4 Locomotive

A. 5000 Liters
B. 6000 Liters
C. 4000 Liters
D. 7000 Liters

12. Length of WDG4/WDP4B loco over buffer is A. 19964 mm
B. 23000mm
C. 20000mm
D. 21000mm

13. Length of WDP4D loco over buffer is

A. 19964 mm
B. 23000mm
C. 20000mm
D. 21000mm

14. Maximum Tractive effort of WDG4 loco is

A. 41 Tones
B. 53Tones
C. 50 Tones
D. 123.0 Tones

15. MaximumTractive effort of WDP4B/WDP4D loco is

A. 41 Tones
B. 53Tones
C. 50 Tones
D. 123.0 Tones

16. Which type of diesel engine model is fitted in HHP locomotive

A. ALCO-251
B. GT46
C. 710 G3B
D. GT 46MAC

17. How many cylinders are used in HHP Loco Engine

A. 16 Nos
B. 08 Nos
C. 12 Nos
D. 14 Nos

18. Which type of Traction Motors fitted in HHP LOCO?

A. 3-Phase AC Motors
B. DC Séries Motors
C. Both A & B
D. None of these

19. Which type of Main Generator fitted in HHP LOCO?

A. DC Generator
B. 3 phase Alternator
C. Both A & B
D. None of these

20. Main role of Traction Inverters in HHP LOCO?

A. To control 3-Phase AC Induction Motors
B. To control 3 phase Alternator
C. Both A & B
D. None of these

21. Traction Inverters converts in HHP Loco?

A. DC power into 3 phase AC power for variabl frequency
B. AC power into 3 phase AC power
C. Both A & B
D. None of thèse

22. How much Traction Inverters in HHP LOCO (**In Medha make Traction System**)

A. 6
B. 5
C. 4
D. 3

23. How much Traction Inverters in HHP LOCO (**In EMD make Traction System**)

A. 6
B. 2
C. 4
D. 3

24. How much Traction Inverters in HHP LOCO (**In SIEMENS make Traction System**)

A. 6
B. 2
C. 4
D. 3

25. In HHP Loco LCC, Traction Computer, DCL in house of (**In EMD make Traction System:**).

A. ECC1
B. ECC2
C. TCC
D. ECC3

26. In HHP Loco LCC, Traction Computer, DCL in house of (**In SIEMENS make Traction System:**).

A. ECC1
B. ECC2
C. TCC
D. ECC3

27. In HHP Loco , Traction Computer, DCL in house of (**In Medha make Traction System:**).

A. ECC1
B. ECC2
C. TCC
D. ECC3

28. In HHP Loco, LCC in house of (**In Medha make Traction System:**).

A. ECC1
B. ECC2
C. TCC
D. ECC3

29. How much phase module in HHP Loco (**In Medha make Traction System**)

A. 18
B. 6 C.12
D. None of these

30. How much phase module in HHP Loco (**In EMD make Traction System**)

A. 18
B. 6
C. 12
D. None of these

31. How much phase module in HHP Loco (**In Siemens make Traction System**)
    A. 18
    B. 6
    C. 12
    D. None of these

32. Which type of **IGBT Device** used in HHP loco (**In Medha make Traction System**)
A. ABB make,V =6.5 KV, I=600Amps. 2 devices/phase module
B. Siemens make, V =6.5 KV, I=600Amps. 6 devices /phase module
C. Mitsubishi make, V =4.5 KV, I=1200Amps, 4 devices /phase module
D. None of these

33. Which type of **IGBT Device** used in HHP loco (**In SIEMENS make Traction System**)
A. ABB make,V =6.5 KV, I=600Amps. 2 devices/phase module
B. Siemens make, V =6.5 KV, I=600Amps. 6 devices /phase module-
C. Mitsubishi make, V =4.5 KV, I=1200Amps, 4 devices /phase module
D. None of these

34. Which type of **IGBT Device** used in HHP loco (**In EMD make Traction System)**

A. ABB make,V =6.5 KV, I=600Amps. 2 devices/phase module
B. Siemens make, V =6.5 KV, I=600Amps. 6 devices /phase module
C. Mitsubishi make, V =4.5 KV, I=1200Amps, 4 devices /phase module
D. None of these

35. Input voltage & current of TCC is. A. 620 -2600 V DC, max 1200
    A. DC
    B. 0 V AC--- 2000 V, max 1100 A AC
    C. 520 -2600 V DC, max 1100 A DC
    D. None of these

36. Output voltage & current of TCC is. A. 620 -2600 V DC, max 1200
    A DC
    B. 0 V AC- 2000 V, max 1100 A AC
    C. 520 -2600 V DC, max 1100 A DC
    D. None of these

37. Weight of TCC is.
    A. 2400Kg
    B. 2000Kg
    C. 1500Kg
    D. None of these

38. Outer Dimension (lxbxh) of TCC is.
    A. 1833x2140x1450mm
    B. 1530x2140x1450mm
    C. 2133x2140x1450mm
    D. None of these

39. Current rating of **COMPUTER CONTROL, AC CONTROL, AIR DRYER,** Circuit breaker in HHP loco is
   A. 10 Amp
   B. 15 Amp
   C. 20 Amp
   D. 25 Amp

40. Current rating of **FUEL PUMP, TURBO, LIGHT, GOV. BOOSTER PUMP, LOCAL CONTROL, TCC BLOWER, FILTER BLOWER** circuit breaker in HHP loco is
   A. 30 Amp
   B. 15 Amp
   C. 20 Amp
   D. 25 Amp

41. Current rating of **Head Light** circuit breaker in HHP loco is
   A. 10 Amp
   B. 15 Amp
   C. 20 Amp
   D. 35 Amp

42. Current rating of **CONTROL** circuit breaker in HHP loco is
   A. 40 Amp
   B. 50 Amp
   C. 90 Amp
   D. 35 Amp

43. Current rating of **GEN FIELD** circuit breaker in HHP loco is
   A. 40 Amp
   B. 50 Amp
   C. 90 Amp
   D. 35 Amp

44. Current rating of **TCC1 Computer, TCC2 Computer, AUX.GEN FEEDBACK, AUX.GEN FIELD** circuit breaker in HHP loco is
   A. 10 Amp
   B. 20 Amp
   C. 30 Amp
   D. 35 Amp

45. Current rating of **TCC1-TCC2 BLOWER** circuit breaker in HHP loco is
   A. 10 Amp
   B. 50 Amp
   C. 30 Amp
   D. 35 Amp

46. Current rating of **DCL Control, EVENT RECORDER** circuit breaker in HHP loco is
   A. 03 Amp
   B. 5 Amp
   C. 10 Amp
   D. 15 Amp

47. How much DC LINK switch gears in HHP LOCO?
   A. 6
   B. 5
   C. 4
   D. 3

48. Traction Control Cabinet (TCC) consists of

A. Six Traction Computers, 6 DCL switch gears
B. 6 IGBT based Inverters, DC link Capacitors and Crow bar circuit
C. Both A & B
D. None of thèse

49. TCC converts during dynamic brake. In HHP Loco?

A. DC power into 3 phase AC power
B. 3 phase AC power into DC power
C. Both A & B
D. None of thèse

50. In HHP Locos ECC-2 are located in
A. Driver cabin
B. Under Truck
C. Near Radiator room
D. None of thèse

51. In HHP Locos STA & ST Contactors are located in
A. ECC-1
B. ECC-2
C. ECC-3
D. ECC-4

52. In HHP Locos AGAI &AGAV Sensors are located in
A. ECC-1
B. ECC-2
C. ECC-3
D. ECC-4

53. In HHP Locos Battery charger & Aux Gen CB are located in
A. ECC-1
B. ECC-2
C. ECC-3
D. ECC-4

54. WDP4D Locos, ECC2 same as
A. WDP4
B. WDG4
C. WDP4B
D. All of above

55. In WDP4/WDP4B Locos ECC-1 are located in
A. Driver cabin
B. Near Radiator room
C. Under Truck
D. None of thèse

56. In WDP4/WDP4B Locos ECC-3 are located in

A. Driver cabin
B. Near Radiator room
C. Under Truck
D. None of these

57. ……..type of speedometeris available onWDG4.

A. Mechanical
B. Electrical
C. radar sensor
D. Electronic

58. How many Power Contactors are available in WDG4 Locomotive?
A.8
B.9
C.0
D.6

59. In WDG4 loco compressor is cooled by
A. Nature
B. Air
C. Oil
D. Water

60. In WDG4 turbo is cooled by
A. Nature
B. Air
C. Oil
D. Water

61. In WDG4 power contactors are replaced with
A. FS contactor
B. only relays
C. BKT/REV
D. DC Link

62. In WDG4 when driver fails to acknowledge the alerter it gives audio warning for ….sec.
A. 10
B. 17
C. 25
D. 8

63. For quick charging of BP in WDG4..... is used.
A. Foot pedal
B. A9 release
C. SP1/SP2
D .None of these

64. In WDG4 hot oil detector is set at….degrees centigrade A.126
B. 100 C.150 D .200

65. Blended brake is mixture of
A. Vacuum +Air
B. Dynamic +Loco
C. Formation +Dynamic+ loco
D. Formation +Loco

66. In WDP4 when the loco is moving in opposite direction to the reverser position will happen soon the speed increases to 5 kmph
    A. Dynamic brake come into action
    B. alerter will come into function
    C. power ground will take place
    D. Loco will shutdown

67. The only loco provided with two dipstick gauges to measure lube oil is
    A. WDM2
    B. WDP4
    C. WDG4
    D. WDG3A

68. WDG4 engine cylinders are cooled by
    A. Water
    B. oil and water
    C. super charged air and water
    D. air conditioning

69. What is the lube oil SUMP capacity of WDP4 loco?

    A. 1073 Liters
    B. 1100 Liters
    C. 950 Liters
    D. 910 Liters

70. What is the full speed RPM of the HHP locomotive engine

    A. 1000 RPM
    B. 904 RPM
    C. 900 RPM
    D. 950 RPM

71. What is the IDLE speed RPM of the HHP locomotive engine
    A. 300 RPM
    B. 200 RPM
    C. 269 RPM
    D. 904 RPM

72. What is the low IDLE speed RPM of the HHP locomotive engine

    A. 300 RPM
    B. 200 RPM
    C. 269 RPM D 904 RPM

73. What is the lube oil SUMP capacity of WDG4 loco?
    A. 1000 Liters
    B. 1100 Liters
    C. 1457 Liters
    D. 910 Liters

74. What is the coolent water capacity in the HHP locomotive
    A. 1200 Liters
    B. 1100 Liters
    C. 1045 Liters
    D. 1145 Liters

75. Capacity of sand box in the WDG $_4$ locomotive
   A. 1 Ft3/ box
   B. 2 Ft3/ box
   C. 1.5 Ft3/ box
   D. 3 Ft3/ box

76. Capacity of sand box in the WDP $_4$ locomotive

   A. 1.5 Ft3/ box
   B. 02 Ft3/ box
   C. 01 Ft3/ box
   D. 3 Ft3/ box

77. What is the minimum continues speed of the WDG4 locomotive
   A. 21.5 Kmph
   B. 22.5 Kmph
   C. 20.5 Kmph
   D. 23.5 Kmph

78. Which type of bogie fitted in the HHP locomotive

   A. Single suspension
   B. Double suspension
   C. Triple suspension
   D. None of these

79. In the fuel oil system which type of injectors provided in HHP locomotive

   A. Unit injectors
   B. Injectors with HP line
   C. Injector with cam
   D. None of these

80. In the two stroke engine the cylinder head of the engine equipped with

   A. Inlet & Exhaust valves
   B. Only Inlet valves
   C. Only Exhaust valves
   D. None of these

81. In the HHP locomotive the Turbo charger is driven by

   A. Exhaust Gas
   B. Gear Train
   C. Gear Train & Exhaust gas
   D. None of these

82. In the WDP 4 & WDG4 locomotive engine how many lube oil pumps used
   A. One
   B. Two
   C. Three
   D. Four

83. In the HHP locomotive, the air compressor is.....

A. Air cooled
B. Water cooled
C. Oil cooled
D. None of these

84. In the WDP $_4$ & WDG $_4$ locomotive the coolant used in compressor is

A. Engine coolant
B. Compressor coolant
C. Raw water
D. None of these

85. Air compressor lube oil sump capacity is

A.10 Liters
B.12 Liters
C.15 Liters
D.23 Liters

86. Air compressor in the HHP locomotive is

A. Single stage
B. Two stage
C. Three stage
D. Four stage

87. How many brake cylinders are used per bogie

A. 06 Nos
B. 04 Nos
C. 02 Nos
D. 05 Nos

88. Which type of bogie is used in HHP locomotive

A. Fabricated bogie
B. Cast steel
C. High tensile cast steel D. None of these

89. In HHP locomotive Air brake is controlled by

A. Mechanically
B. Electrically
C. Computer
D. None of these

90. Brake system in WDP_4 &WDG_4 loco is

A. 28LAV-1
B. 28LV-1
C. CCB-KNORR
D. None of these

91. In HHP locomotive the first schedule carried out after

A. One month
B. Three month
C. Four month
D. 15 Days

92. In WDP4/WDG4 when continuous wheel slip is experienced due to locked axle

A. Isolate the defective TM
B. Isolate the defective speed sensor
C. Fail the loco immediately
D. Isolate the defective truck

93. In WDP4/WDG4 loco if water pressure is less

A. LLOB trips
B. Low water pressure button will trip
C. Crank case pressure button will trip
D. Both A and B

94. In WDP4/WDG4 loco while conducting air brake self test on working control stand.

A. A9 handle should be kept in run position
B. SA handle should be kept in release position
C. LT switch in trail position
D. Both A and B

95. In WDP4/WDG4 loco while conducting air brake self test in working control stand

A. A9 handle should be kept in FS
B. SA9 should be kept in release
C. Both a and b
D. LT switch in Trail

96. In WDP4/WDG4 loco while conducting BP leakage test L/T switch should be kept in

A. Lead position
B. Trail position
C. TEST position
D. Helper

97. In WDP4/WDG4 loco Load meter will not respond if

A. GFB trips
B. AGFB trips
C. Both A & B
D. MAB trips

98. In WDP4/WDG4 loco when PCS is knocked out

A. MAB breaker should be recycled
B. TCC breaker should be recycled
C. Air drier breaker
D. Both A and B

99. In WDP4/WDG4 loco while conducting BP leakage test. L/T switch should be kept in

A. Lead
B. Trail
C. Helper
D. Test

100. In WDP4/WDG4 loco speed sensor should be isolated when

A. False locked axle indication
B. Traction motor is burnt experienced
C. Axle locked condition
D. Both A and B

101. In WDP4/WDG4 loco if LLOB is in tripped position during cranking engine will

A. Crank
B. Not Fire
C. Not hold
D. Not crank

102. In WDP4 /WDG4 loco before conducting air brake self test

A. Recycle MAB
B. Recycle TCC1 and TCC2
C. Recycle Air drier breaker.
D. Both A & B

103. Location of EST in WDG4 loco is in

A. Control stand
B. control panel
C. Generator room
D. Accessories room

104. In WDG4 loco LLOB is located in

A. Accessories room
B. Compressor room
C. Engine power take off end
D. ECC3

105 In WDP4/WDG4 loco during false locked axle indication

A. Isolate the defective truck
B. Isolate the defective speed sensor
C. Isolate the defective TM
D. Fail the loco

106. In WDP4/WDG4 dead loco for quick release of loco brakes open one side

A. MR equalising cock
B. BC equalising cock
C. BP equalising pipe
D. Both A & B

107. Location of BS in WDG4 Loco is

A. On foot plate
B. In Accessories room
C. In LP's cab
D. In ECC 3

108. In WDP4/WDG4 Loco when lube oil temperature exceeds 124 degree centigrade.

A. Hot oil detector operates
B. LLOB operates
C. OSTA trips
D. Both A and B

109. In WDP4/WDG4 banker loco working control stand A9 should be kept in

A. FS position
B. Run position
C. Release position
D. Emergency position

110. In WDP4/WDG4 loco engine should not be cranked when

A. Low water button is tripped
B. crank case pressure button is tripped
C. LLOB is in tripped
D. OSTA is tripped

111. In WDP4/WDG4 banker loco working CS, L/T switch should be kept in

A. Lead
B. Trail
C. HLPR
D. Test

112. In WDP4/WDG4 loco defective speed sensor should be isolated if

A. False locked axle indication
B. GR trips more than 3 times within experienced 10 minutes
C. Any one TM is defective
D. Crow bar fires

113. Oil visibilty in bye pass sight glass indicates that

A. Primary filter is choked.
B. Spin on filter choked.
C. Lube oil filter choked.
D. Lube oil strainer choked.

114. In WDP4/WDG4 loco choking of fuel oil primary filter is indicated by

A. Filter condition guage.
B. Oil visibility in bye pass sight glass.
C. Both A & B
D. Oil visibility in sight glass near to engine block

115. WDP4/WDG4 MU trailing loco L/T switches in both control stand should be kept in

A. Lead
B. Trail
C. test
D. Helper

116. Oil lubricated TM gear case is provided in

A. WDM 2
B. WDM 3D
C. WDG 3A
D. WDP4

117. If AGFB tripped in WDP4/WDG4 locos

A. Battery will discharge
B. Load meter will not respond
C. Both A and B
D Engine will shut down

118. Firing order of HHP Loco

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. 1,3,5,7,9,11,13,15,16,2,4,6,8,10,12,14
D None of these

119. Model of Main Generator assembly in WDG4 Loco

A.TA17-CA6B

B. 5A-8147
C. Both A & B
D None of these

120. Model of AC AUX. Generator in WDG4 Loco

A.TA17-CA6B
B. 5A-8147
C. Both A & B
D None of these

121. Model of Traction Motor in WDG4 Loco

A.TA17-CA6B

B. 5A-8147
C. TB26221
D None of these

122. Speed of Traction Motor in WDG4 Loco
A. 3220 RPM
B. 2000 RPM
C. 904 RPM
D None of these

123. Horse Power of Traction Motor in WDG4 Loco

A. 500KW
B. 600KW
C. 1430KW
D None of these

124. In WDG4 Loco Traction Motor is……

A. Force air ventilated cooled
B. Oil cooled
C. Water cooled D None of these

125. Nominal AC Aux. Generator Voltage in WDG4 Loco

A. 64VDC
B. 55V AC
C. 74VDC
D None of these

126. Rectified Voltage of AC Aux. Generator in WDG4 Loco

A. 64VDC
B. 55V AC
C. 74VDC
D None of these

127. Max Power output of AC Aux. Generator in WDG4 Loco

A. 18KW
B. 25KW
C. 20KW
D None of these

128. Total nos. of Batteries in WDG4 Loco Lead acid type

A. 10
B. 02
C. 08
D None of these

129. Total nos of cell of Batteries in WDG4 Loco (Lead acid type)

A. 32
B. 50
C. 64
D None of these

130. Total nos of cell of Batteries in WDP4 Loco (Ni-Cadmium type)

A. 32
B. 50
C. 64
D None of these

131. Voltage of Battery Cell in WDP4 Loco (Ni-Cadmium type)

A. 1.5V
B. 2.1V
C. 2.5V
D None of these

132. Voltage of Battery Cell in WDG4 Loco (Lead acid type)

A. 1.5V
B. 2.1V
C. 2.5V
D None of these

133. Total Voltage of Batteries in WDG4 Loco (Lead acid type)

A. 68V
B. 75V
C. 72V
D None of these

134. Total Voltage of Batteries in WDP4 Loco (Ni-Cadmium type)

A. 68V
B. 75V
C. 72V
D None of these

135. Total nos of Batteries in WDP4 Loco (Ni-Cadmium type)

A. 10
B. 02
C. 08
D None of these

136. Total nos of Cylinder of Air Compressor in WDG4 Loco

A. 06
B. 03
C. 04
D None of these

137. Capacity of lube oil of Air Compressor in WDG4 Loco

A. 9.98Litter
B.12 Litter
C.06 Litter
D None of these

138. Model of WDG4. Loco

A.GT46MAC
B.GT46PAC
C.Both A & B
D None of these

139. Model of WDP4. Loco

A.GT46MAC

B.GT46PAC
C. Both A & B
D None of these

140. Nos of Axles in WDP4 &WDG4 Locos

A.06
B.04 C.08
D None of these

141. How many Traction Motors in WDP4 Locos

A.06
B.04
C.08
D None of these

142. In WDP4 Locos Traction Motor fitted on

A. Axles no.1, 2 & 5, 6
B. All Axles
C. Axles no.1, 2 & 3, 4
D. D None of these

143. In WDP4 Locos Engine starting switch is located

A. ECP
B. Engine room
C. Control stand
D. D None of these

144. In WDG4 Locos Engine starting switch is located

A. ECP
B. Engine room
C. Control stand
D. D None of these

145. In WDG4 Locos RADAR is located

A. Between Rear bogie & Fuel tank
B. Engine room
C. Between Front bogie & Fuel tank-
D. D None of these

146. In WDP4 Locos RADAR is located

A. Between Rear bogie & Fuel tank
B. Engine room
C. Between Front bogie & Fuel tank
D. D None of these

147. Blended brake, Low water level switch, Temperature gauge & color code are provided in

A. WDP4
B. WDG4
C. Both A & B
D. D None of these

148. Starting Tractive effort of WDG4 Loco is

A. 540KN
B. 270KN
C. 400KN
D. 200KN

149. Starting Tractive effort of WDP4 Loco is

A. 540KN
B. 270KN
C. 400KN
D. 200KN

150. Max. Continuous Tractive effort of WDP4 Loco is

A. 540KN
B. 270KN
C. 400KN
D. 200KN

151. Max. Continuous Tractive effort of WDG4 Loco is

A. 540KN
B. 270KN
C. 400KN
D. 200KN

152. Max. Dynamic Tractive effort (Speed 40 KMPH to 0) of WDG4 Loco is

A. 540KN
B. 270KN
C. 400KN
D. 200KN

153. Max. Dynamic Tractive effort (Speed 68 KMPH to 1) of WDP4 Loco is

A. 540KN
B. 270KN
C. 160KN
D. 200KN

154. Dead engine cut-off cock & C3W Distributor valve in WDP4/WDG4 Locos are located in

A. Nose compartment
B. Driver Cabin
C. Engine compartment
D. Radiator compartment

155. Lead/Trail Air Brake Set-up Switch mounts on

A. the lower right corner of the air brake controller
B. Nose compartment
C. Engine compartment
D. D Radiator compartment

156. How many braking position of A-9 valve have.

A. 05 breaking position
B. 04 breaking position
C. 03 breaking position
D. 01 breaking position

157. How many braking position of SA-9 valve have..

A. 03 position
B. 02 position
C. 05 position
D. 01 position

158. In minimum reduction position of A-9 brake valve BP should drop up to (PSI)...

A. 0 to3 PSI
B. 4 to 7 PSI
C. 8 to 11 PSI
D. 12 to 15 PSI

159. In WDG 4 if false locked wheel indication is experienced

A. Isolate defective sensor
B. Isolate defective truck
C. Isolate defective TM
D. Fail the loco

160. In WDP4/WDG4 if GR (power) trips continuously three times within 10 minutes

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

161. In WDP4/WDG4 engine cranking but not starting due to

A. EPD Tripped
B. Governor not advancing fuel racks
C. No fuel reaching in the cylinders
D. Any one of above

162. In WDP4/WDG4 thick black smoke and poor hauling due to

A. Low fuel oil pressure & Low booster air pressure
B. Faulty turbo
C. Faulty injectors.
D. Any one of above

163. Temperatures of Engine exhaust gas reach up to

A. 538°C
B. 438°C
C. 338°C
D. None of these

164. Main parts of KNORR/NYAB CCB 1.5 Brake system are

A. VCU & CRU
B. PCU & KE Valve
C. BVC
D. All of above

165. Total no. of Keys on EM2000 Display Panel are
A. 8
B. 16
C. 10
D. 12

166. No. of Radiator fan in WDP4 &WDG4 Locos
A.02
B.01
C.03
D. None of these
167. No. of Grid Blower Motors in WDP4 &WDG4 Locos
A.04
B.02
C.03
D.None of these

168. No. of Brake blocks in HHP Locos
A.24
B.12
C.08
D.None of these

169. When Computer controlled Breaker is recycled the disabled speed sensor.

A. Remain Disabled
B. Gets enabled but not to be disabled again
C. Remain disabled but to be enabled
D. Get enabled automatically & has to be disabled

170. Brake warning Indication
A. Excessive Main Alternator
B. Excessive Breaking current in DB
C. Excessive Air Breaking
D. Excessive Main Generator Current

171. When Reverser is thrown in forward direction, Sanders of

A. No (3) & (6) only work
B. All sanders work
C. sanders works irrespective of Reverser
D. No (1) & (4) wheels only work

172. Battery charger rectifies AC to DC of
A. Aux gen output
B. Companion Alternator output
C. Main Alternator output
D. None of the above

173. B.P continuity not getting to train from a working WDG4 Loco due to

A. Additional BP COC closed in train end
B. BP angle cock defective
C. In train end no BP pressure in loco
D. All of the above

174. On run GR Trip then the engine
A. Will shut - down
B. Comes to idle
C. No effect on engine
D. No effect on loco

175. What is the type of lubrication system being used in diesel loco

A. Gravity lubrication
B. Force Feed lubrication
C. Force Feed & splash lubrication
D. Capillary lubrication

176. To check engine sump level, engine should be in condition
A. Shout – down
B. 4th Notch
C. Idle
D. 2nd Notch

177. Each Traction Motor provided with

A. One speed sensor
B. One speed sensor & one temp sensor
C. One temp sensor
D. Two speed sensor

178. Diameter of new wheels in WDP4 locos is

A. 1090mm
B. 1092mm
C. 1100mm
D. 1080mm

179. When there is communication link failure and micro air breaker is active, the loco will work

A. As lead in
B. Only in trail mode
C. In both modes
D. In helper mode

180. To recover PCS, it is compulsory to keep

A. Both throttle handle in idle
B. Any one throttle handles in idle
C. Leading control stand throttle handle in idle
D. Leading throttle handle in idle & reversor in neutral

181. The companion alternator runs at the same speed as

A. Engine rpm
B. Aux gen rpm
C. Turbo rpm
D. Locomotive rpm

182. MR Pressure dropping on run due to

A. Air dryer defective
B. Auto drain valve malfunctioning
C. Break cylinder pipe damaged
D. All of above

183. WDP4/WDG4 Hand break applies on wheels

A. R4, R5
B. R4, L4
C. R4, R6
D. L4, L5

184. Break cylinder pressure in WDP4/WDG4

A. 5.2 kg /sq.cm
B. 4.8 kg /sq.cm
C. 3.8 kg /sq.cm
D. 3.5 kg /sq.cm

185. MR pressure not building up due to

A. MR EQ COC in open condition

B. Pipe link chocked in MRPT system
C. Defective MVCC
D. All of above

186. What is the effect of auto flasher operation

A. Engine comes to idle
B. auto flasher indication
C. Buzzer
D. All of above

187. ER/BP not creating

A. LT switch defective
B. Air break failure
C. Penalty not reset
D. All of above

188. Lube oil pumps provided In HHP

A. Scavenging pump
B. Piston cooling pump & main lube oil pump
C. Turbo lube pump
D. All of above

189. Radiator fan controlled by

A. EM2000
B. TCC
C. EM2000 & TCC
D. None of these

190. Load demand of the traction motor is met by

A. EM2000

B. TCC

C. EM2000 & TCC
D. None of these

191. Total No. of After coolers inWDP4/WDG4

A.4
B.3
C.2
D.5

192. Total no. of Water expansion tanks inWDP4/WDG4

A.1
B.2
C.3
D.4

193. In WDP4/WDG4 BA consists of two zones

A. Green zone & red zone
B. Green zone & yellow zone
C. yellow zone & red zone
D. None of these

194. In WDP4/WDG4 slipped pinion will be indicates clearly by

A. Loco not moving
B. Train not hauling loads
C. High motor rpm in computer feedback
D. None of these

195. Head light rating in WDP4/WDG4 loco is

A. 100W 32V
B. 200W 30V
C. 250W 32V
D.250W 34V

196. Governor is used in HHP Loco

A. GE Governor
B. WW Governor
C. Both (A) & (B)
D. None of these

197. Type of cooling water pump used in WDP4/WDG4 Locomotives

A. Centrifugal
B. Reciprocating
C. Positive displacement
D. None of these

198. OSTA in WDP4/WDG4 trip at minimum

A.960RPM
B. 1000RPM
C. 1020
D. None of these

199. Flasher light working voltage

A. 72V
B. 12V
C. 24V
D. None of these

200. Nos of Main bearings available in WDP4 Locomotives

A. 12
B. 14
C. 10
D. None of these

ANSWER SHEET

Q. No.	ANSWER	Q. No.	ANSWER	Q. No.	ANSWER
1.	D	26.	C	51.	B
2.	A	27.	C	52.	B
3.	D	28.	A	53.	B
4.	B	29.	A	54.	D
5.	A	30.	C	55.	A
6.	A	31.	C	56.	B
7.	B	32.	A	57.	C
8.	D	33.	A	58.	C
9.	C	34.	C	59.	D
10.	C	35.	A	60.	C
11.	B	36.	B	61.	D
12.	A	37.	A	62.	B
13.	B	38.	A	63.	B
14.	B	39.	B	64.	A
15.	A	40.	A	65.	C
16.	C	41.	D	66.	A
17.	A	42.	A	67.	B
18.	A	43.	C	68.	C
19.	B	44.	A	69.	C
20.	A	45.	C	70.	B
21.	A	46.	A	71.	C
22.	A	47.	A	72.	B
23.	B	48.	C	73.	C
24.	B	49.	B	74.	C
25.	A	50.	B	75.	C

Q. No.	ANSWER	Q. No.	ANSWER	Q. No.	ANSWER
76.	C	101.	D	126	C
77.	B	102.	A	127	A
78.	B	103.	D	128	B
79.	A	104.	A	129	A
80.	C	105.	B	130	B
81.	C	106.	C	131	A
82.	D	107.	A	132	B
83.	B	108.	D	133	A
84.	A	109.	A	134	B
85.	A	110.	B	135	A
86.	B	111.	C	136	B
87.	B	112.	A	137	A
88.	C	113.	B	138	A
89.	C	114.	D	139	B
90.	C	115.	B	140	A
91.	B	116.	D	141	B
92.	C	117.	C	142	A
93.	D	118.	A	143	A
94.	D	119.	A	144	B
95.	B	120.	B	145	C
96.	C	121.	C	146	A
97.	C	122.	A	147	A
98.	A	123.	A	148	A
99.	D	124.	A	149	B
100.	A	125.	B	150	D

Q. No.	ANSWER	Q. No.	ANSWER	Q. No.	ANSWER
151	C	174	B	197	A
152	B	175	D	198	A
153	C	176	C	199	B
154	A	177	B	200	C
155	A	178	B		
156	A	179	B		
157	A	180	D		
158	B	181	A		
159	A	182	D		
160	A	183	A		
161	D	184	A		
162	D	185	D		
163	A	186	D		
164	D	187	D		
165	B	188	D		
166	A	189	A		
167	B	190	B		
168	B	191	C		
169	D	192	A		
170	B	193	A		
171	D	194	C		
172	A	195	C		
173	D	196	B		

HHP ENGINE एचएचपी इंजन

1. What is the Horse power of WDP_4 D & WDP_4 B locomotives

   A. 3000 HP
   B. 3500 HP
   C. 4000 HP
   D. 4500 HP

2. What is the compression ratio of WDP_4 D & WDP_4 B locomotives

   A. 16:1
   B. 14:1
   C. 13:1
   D. 15:1

3. Which type of diesel engine is fitted in HHP locomotive

   A. Four stroke
   B. Three stroke
   C. One stroke
   D. Two stroke

4. TM pinion and bull gear ratio in WDP_4 D & WDP_4 B loco is

   A. 17:90
   B. 17:77
   C. 65:18
   D. 90:35

5. Maximum speed of WDP_4 D & WDP_4 B locomotive is

   A. 130 Kmph
   B. 160 Kmph
   C. 150 Kmph
   D. 180 Kmph

6. What is the fuel tank capacity in WDP_4 D & WDP_4 B locomotive

   A. 5000 Litter
   B. 6000 Litter
   C. 4000 Litter
   D. None of these

7. Transmission in WDP_4 D & WDP_4 B locomotive is
   A. AC-DC
   B. AC-AC
   C. DC-DC
   D. DC-AC

8. Total weight of WDP_4 D loco is

A. 115.8 Tones
B. 119.8 Tones
C. 121.8 Tones
D. 123.0 Tones

9. Total weight of WDP_4 B loco is

A. 115.8 Tones
B. 119.8 Tones
C. 121.2 Tones
D. 123.0 Tones

10. What is the maximum speed of the WDG_4 locomotive

A. 150 Kmph
B. 140 Kmph
C. 120 Kmph
D. 100 Kmph

11. What is the fuel tank capacity of WDG4 Locomotive

A. 5000 Liters
B. 6000 Liters
C. 4000 Liters
D. 7000 Liters

12. Length of WDG4/WDP4B loco over buffer is A. 19964 mm
B. 23000mm
C. 20000mm
D. 21000mm

13. Length of WDP4D loco over buffer is

A. 19964 mm
B. 23000mm
C. 20000mm
D. 21000mm

14. Maximum Tractive effort of WDG4 loco is

A. 41 Tones
B. 53Tones
C. 50 Tones
D. 123.0 Tones

15. MaximumTractive effort of WDP4B/WDP4D loco is

A. 41 Tones
B. 53Tones
C. 50 Tones
D. 123.0 Tones

16. Which type of diesel engine model is fitted in HHP locomotive

A. ALCO-251
B. GT46
C. 710 G3B
D. GT 46MAC

17. How many cylinders are used in HHP Loco Engine

A. 16 Nos
B. 08 Nos
C. 12 Nos
D. 14 Nos

18. Which type of Traction Motors fitted in HHP LOCO?

A. 3-Phase AC Motors
B. DC Séries Motors
C. Both A & B
D. None of these

19. Which type of Main Generator fitted in HHP LOCO?

A. DC Generator
B. 3 phase Alternator
C. Both A & B
D. None of these

20. Main role of Traction Inverters in HHP LOCO?

A. To control 3-Phase AC Induction Motors
B. To control 3 phase Alternator
C. Both A & B
D. None of these

21. Traction Inverters converts in HHP Loco?

A. DC power into 3 phase AC power for variabl frequency
B. AC power into 3 phase AC power
C. Both A & B
D. None of thèse

22. How much Traction Inverters in HHP LOCO (**In Medha make Traction System**)

A. 6
B. 5
C. 4
D. 3

23. How much Traction Inverters in HHP LOCO (**In EMD make Traction System**)

A. 6
B. 2
C. 4
D. 3

24. How much Traction Inverters in HHP LOCO (**In SIEMENS make Traction System**)

A. 6
B. 2
C. 4
D. 3

25. In HHP Loco LCC, Traction Computer, DCL in house of (**In EMD make Traction System:**).

A. ECC1
B. ECC2
C. TCC
D. ECC3

26. In HHP Loco LCC, Traction Computer, DCL in house of (**In SIEMENS make Traction System:**).

A. ECC1
B. ECC2
C. TCC
D. ECC3

27. In HHP Loco , Traction Computer, DCL in house of (**In Medha make Traction System:**).

A. ECC1
B. ECC2
C. TCC
D. ECC3

28. In HHP Loco, LCC in house of (**In Medha make Traction System:**).

A. ECC1
B. ECC2
C. TCC
D. ECC3

29. How much phase module in HHP Loco (**In Medha make Traction System**)

A. 18
B. 6 C.12
D. None of these

30. How much phase module in HHP Loco (**In EMD make Traction System**)

A. 18
B. 6
C. 12
D. None of these

31. How much phase module in HHP Loco (**In Siemens make Traction System**)
    A. 18
    B. 6
    C. 12
    D. None of these

32. Which type of **IGBT Device** used in HHP loco (**In Medha make Traction System**)
A. ABB make,V =6.5 KV, I=600Amps. 2 devices/phase module
B. Siemens make, V =6.5 KV, I=600Amps. 6 devices /phase module
C. Mitsubishi make, V =4.5 KV, I=1200Amps, 4 devices /phase module
D. None of these

33. Which type of **IGBT Device** used in HHP loco (**In SIEMENS make Traction System**)
A. ABB make,V =6.5 KV, I=600Amps. 2 devices/phase module
B. Siemens make, V =6.5 KV, I=600Amps. 6 devices /phase module-
C. Mitsubishi make, V =4.5 KV, I=1200Amps, 4 devices /phase module
D. None of these

34. Which type of **IGBT Device** used in HHP loco (**In EMD make Traction System)**

A. ABB make,V =6.5 KV, I=600Amps. 2 devices/phase module
B. Siemens make, V =6.5 KV, I=600Amps. 6 devices /phase module
C. Mitsubishi make, V =4.5 KV, I=1200Amps, 4 devices /phase module
D. None of these

35. Input voltage & current of TCC is. A. 620 -2600 V DC, max 1200
    A. DC
    B. 0 V AC--- 2000 V, max 1100 A AC
    C. 520 -2600 V DC, max 1100 A DC
    D. None of these

36. Output voltage & current of TCC is. A. 620 -2600 V DC, max 1200
    A DC
    B. 0 V AC- 2000 V, max 1100 A AC
    C. 520 -2600 V DC, max 1100 A DC
    D. None of these

37. Weight of TCC is.
    A. 2400Kg
    B. 2000Kg
    C. 1500Kg
    D. None of these

38. Outer Dimension (lxbxh) of TCC is.
    A. 1833x2140x1450mm
    B. 1530x2140x1450mm
    C. 2133x2140x1450mm
    D. None of these

39. Current rating of **COMPUTER CONTROL, AC CONTROL, AIR DRYER,** Circuit breaker in HHP loco is
   A. 10 Amp
   B. 15 Amp
   C. 20 Amp
   D. 25 Amp

40. Current rating of **FUEL PUMP, TURBO, LIGHT, GOV. BOOSTER PUMP, LOCAL CONTROL, TCC BLOWER, FILTER BLOWER** circuit breaker in HHP loco is
   A. 30 Amp
   B. 15 Amp
   C. 20 Amp
   D. 25 Amp

41. Current rating of **Head Light** circuit breaker in HHP loco is
   A. 10 Amp
   B. 15 Amp
   C. 20 Amp
   D. 35 Amp

42. Current rating of **CONTROL** circuit breaker in HHP loco is
   A. 40 Amp
   B. 50 Amp
   C. 90 Amp
   D. 35 Amp

43. Current rating of **GEN FIELD** circuit breaker in HHP loco is
   A. 40 Amp
   B. 50 Amp
   C. 90 Amp
   D. 35 Amp

44. Current rating of **TCC1 Computer, TCC2 Computer, AUX.GEN FEEDBACK, AUX.GEN FIELD** circuit breaker in HHP loco is
   A. 10 Amp
   B. 20 Amp
   C. 30 Amp
   D. 35 Amp

45. Current rating of **TCC1-TCC2 BLOWER** circuit breaker in HHP loco is
   A. 10 Amp
   B. 50 Amp
   C. 30 Amp
   D. 35 Amp

46. Current rating of **DCL Control, EVENT RECORDER** circuit breaker in HHP loco is
   A. 03 Amp
   B. 5 Amp
   C. 10 Amp
   D. 15 Amp

47. How much DC LINK switch gears in HHP LOCO?
   A. 6
   B. 5
   C. 4
   D. 3

48. Traction Control Cabinet (TCC) consists of

A. Six Traction Computers, 6 DCL switch gears
B. 6 IGBT based Inverters, DC link Capacitors and Crow bar circuit
C. Both A & B
D. None of thèse

49. TCC converts during dynamic brake. In HHP Loco?

A. DC power into 3 phase AC power
B. 3 phase AC power into DC power
C. Both A & B
D. None of thèse

50. In HHP Locos ECC-2 are located in
A. Driver cabin
B. Under Truck
C. Near Radiator room
D. None of thèse

51. In HHP Locos STA & ST Contactors are located in
A. ECC-1
B. ECC-2
C. ECC-3
D. ECC-4

52. In HHP Locos AGAI &AGAV Sensors are located in
A. ECC-1
B. ECC-2
C. ECC-3
D. ECC-4

53. In HHP Locos Battery charger & Aux Gen CB are located in
A. ECC-1
B. ECC-2
C. ECC-3
D. ECC-4

54. WDP4D Locos, ECC2 same as
A. WDP4
B. WDG4
C. WDP4B
D. All of above

55. In WDP4/WDP4B Locos ECC-1 are located in
A. Driver cabin
B. Near Radiator room
C. Under Truck
D. None of thèse

56. In WDP4/WDP4B Locos ECC-3 are located in

A. Driver cabin
B. Near Radiator room
C. Under Truck
D. None of these

57. ……..type of speedometeris available onWDG4.

A. Mechanical
B. Electrical
C. radar sensor
D. Electronic

58. How many Power Contactors are available in WDG4 Locomotive?
A.8
B.9
C.0
D.6

59. In WDG4 loco compressor is cooled by
A. Nature
B. Air
C. Oil
D. Water

60. In WDG4 turbo is cooled by
A. Nature
B. Air
C. Oil
D. Water

61. In WDG4 power contactors are replaced with
A. FS contactor
B. only relays
C. BKT/REV
D. DC Link

62. In WDG4 when driver fails to acknowledge the alerter it gives audio warning for ….sec.
A. 10
B. 17
C. 25
D. 8

63. For quick charging of BP in WDG4..... is used.
A. Foot pedal
B. A9 release
C. SP1/SP2
D .None of these

64. In WDG4 hot oil detector is set at….degrees centigrade A.126
B. 100 C.150 D .200

65. Blended brake is mixture of
A. Vacuum +Air
B. Dynamic +Loco
C. Formation +Dynamic+ loco
D. Formation +Loco

66. In WDP4 when the loco is moving in opposite direction to the reverser position will happen soon the speed increases to 5 kmph
    A. Dynamic brake come into action
    B. alerter will come into function
    C. power ground will take place
    D. Loco will shutdown

67. The only loco provided with two dipstick gauges to measure lube oil is
    A. WDM2
    B. WDP4
    C. WDG4
    D. WDG3A

68. WDG4 engine cylinders are cooled by
    A. Water
    B. oil and water
    C. super charged air and water
    D. air conditioning

69. What is the lube oil SUMP capacity of WDP4 loco?

    A. 1073 Liters
    B. 1100 Liters
    C. 950 Liters
    D. 910 Liters

70. What is the full speed RPM of the HHP locomotive engine

    A. 1000 RPM
    B. 904 RPM
    C. 900 RPM
    D. 950 RPM

71. What is the IDLE speed RPM of the HHP locomotive engine
    A. 300 RPM
    B. 200 RPM
    C. 269 RPM
    D. 904 RPM

72. What is the low IDLE speed RPM of the HHP locomotive engine

    A. 300 RPM
    B. 200 RPM
    C. 269 RPM D 904 RPM

73. What is the lube oil SUMP capacity of WDG4 loco?
    A. 1000 Liters
    B. 1100 Liters
    C. 1457 Liters
    D. 910 Liters

74. What is the coolent water capacity in the HHP locomotive
    A. 1200 Liters
    B. 1100 Liters
    C. 1045 Liters
    D. 1145 Liters

75. Capacity of sand box in the WDG $_4$ locomotive
   A. 1 Ft3/ box
   B. 2 Ft3/ box
   C. 1.5 Ft3/ box
   D. 3 Ft3/ box

76. Capacity of sand box in the WDP $_4$ locomotive

   A. 1.5 Ft3/ box
   B. 02 Ft3/ box
   C. 01 Ft3/ box
   D. 3 Ft3/ box

77. What is the minimum continues speed of the WDG4 locomotive
   A. 21.5 Kmph
   B. 22.5 Kmph
   C. 20.5 Kmph
   D. 23.5 Kmph

78. Which type of bogie fitted in the HHP locomotive

   A. Single suspension
   B. Double suspension
   C. Triple suspension
   D. None of these

79. In the fuel oil system which type of injectors provided in HHP locomotive

   A. Unit injectors
   B. Injectors with HP line
   C. Injector with cam
   D. None of these

80. In the two stroke engine the cylinder head of the engine equipped with

   A. Inlet & Exhaust valves
   B. Only Inlet valves
   C. Only Exhaust valves
   D. None of these

81. In the HHP locomotive the Turbo charger is driven by

   A. Exhaust Gas
   B. Gear Train
   C. Gear Train & Exhaust gas
   D. None of these

82. In the WDP 4 & WDG4 locomotive engine how many lube oil pumps used
   A. One
   B. Two
   C. Three
   D. Four

83. In the HHP locomotive, the air compressor is.....

A. Air cooled
B. Water cooled
C. Oil cooled
D. None of these

84. In the WDP $_4$ & WDG $_4$ locomotive the coolant used in compressor is

A. Engine coolant
B. Compressor coolant
C. Raw water
D. None of these

85. Air compressor lube oil sump capacity is

A.10 Liters
B.12 Liters
C.15 Liters
D.23 Liters

86. Air compressor in the HHP locomotive is

A. Single stage
B. Two stage
C. Three stage
D. Four stage

87. How many brake cylinders are used per bogie

A. 06 Nos
B. 04 Nos
C. 02 Nos
D. 05 Nos

88. Which type of bogie is used in HHP locomotive

A. Fabricated bogie
B. Cast steel
C. High tensile cast steel D. None of these

89. In HHP locomotive Air brake is controlled by

A. Mechanically
B. Electrically
C. Computer
D. None of these

90. Brake system in WDP_4 &WDG_4 loco is

A. 28LAV-1
B. 28LV-1
C. CCB-KNORR
D. None of these

91. In HHP locomotive the first schedule carried out after

A. One month
B. Three month
C. Four month
D. 15 Days

92. In WDP4/WDG4 when continuous wheel slip is experienced due to locked axle

A. Isolate the defective TM
B. Isolate the defective speed sensor
C. Fail the loco immediately
D. Isolate the defective truck

93. In WDP4/WDG4 loco if water pressure is less

A. LLOB trips
B. Low water pressure button will trip
C. Crank case pressure button will trip
D. Both A and B

94. In WDP4/WDG4 loco while conducting air brake self test on working control stand.

A. A9 handle should be kept in run position
B. SA handle should be kept in release position
C. LT switch in trail position
D. Both A and B

95. In WDP4/WDG4 loco while conducting air brake self test in working control stand

A. A9 handle should be kept in FS
B. SA9 should be kept in release
C. Both a and b
D. LT switch in Trail

96. In WDP4/WDG4 loco while conducting BP leakage test L/T switch should be kept in

A. Lead position
B. Trail position
C. TEST position
D. Helper

97. In WDP4/WDG4 loco Load meter will not respond if

A. GFB trips
B. AGFB trips
C. Both A & B
D. MAB trips

98. In WDP4/WDG4 loco when PCS is knocked out

A. MAB breaker should be recycled
B. TCC breaker should be recycled
C. Air drier breaker
D. Both A and B

99. In WDP4/WDG4 loco while conducting BP leakage test. L/T switch should be kept in

A. Lead
B. Trail
C. Helper
D. Test

100. In WDP4/WDG4 loco speed sensor should be isolated when

A. False locked axle indication
B. Traction motor is burnt experienced
C. Axle locked condition
D. Both A and B

101. In WDP4/WDG4 loco if LLOB is in tripped position during cranking engine will

A. Crank
B. Not Fire
C. Not hold
D. Not crank

102. In WDP4 /WDG4 loco before conducting air brake self test

A. Recycle MAB
B. Recycle TCC1 and TCC2
C. Recycle Air drier breaker.
D. Both A & B

103. Location of EST in WDG4 loco is in

A. Control stand
B. control panel
C. Generator room
D. Accessories room

104. In WDG4 loco LLOB is located in

A. Accessories room
B. Compressor room
C. Engine power take off end
D. ECC3

105 In WDP4/WDG4 loco during false locked axle indication

A. Isolate the defective truck
B. Isolate the defective speed sensor
C. Isolate the defective TM
D. Fail the loco

106. In WDP4/WDG4 dead loco for quick release of loco brakes open one side

A. MR equalising cock
B. BC equalising cock
C. BP equalising pipe
D. Both A & B

107. Location of BS in WDG4 Loco is

A. On foot plate
B. In Accessories room
C. In LP's cab
D. In ECC 3

108. In WDP4/WDG4 Loco when lube oil temperature exceeds 124 degree centigrade.

A. Hot oil detector operates
B. LLOB operates
C. OSTA trips
D. Both A and B

109. In WDP4/WDG4 banker loco working control stand A9 should be kept in

A. FS position
B. Run position
C. Release position
D. Emergency position

110. In WDP4/WDG4 loco engine should not be cranked when

A. Low water button is tripped
B. crank case pressure button is tripped
C. LLOB is in tripped
D. OSTA is tripped

111. In WDP4/WDG4 banker loco working CS, L/T switch should be kept in

A. Lead
B. Trail
C. HLPR
D. Test

112. In WDP4/WDG4 loco defective speed sensor should be isolated if

A. False locked axle indication
B. GR trips more than 3 times within experienced 10 minutes
C. Any one TM is defective
D. Crow bar fires

113. Oil visibilty in bye pass sight glass indicates that

A. Primary filter is choked.
B. Spin on filter choked.
C. Lube oil filter choked.
D. Lube oil strainer choked.

114. In WDP4/WDG4 loco choking of fuel oil primary filter is indicated by

A. Filter condition guage.
B. Oil visibility in bye pass sight glass.
C. Both A & B
D. Oil visibility in sight glass near to engine block

115. WDP4/WDG4 MU trailing loco L/T switches in both control stand should be kept in

A. Lead
B. Trail
C. test
D. Helper

116. Oil lubricated TM gear case is provided in

A. WDM 2
B. WDM 3D
C. WDG 3A
D. WDP4

117. If AGFB tripped in WDP4/WDG4 locos

A. Battery will discharge
B. Load meter will not respond
C. Both A and B
D Engine will shut down

118. Firing order of HHP Loco

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. 1,3,5,7,9,11,13,15,16,2,4,6,8,10,12,14
D None of these

119. Model of Main Generator assembly in WDG4 Loco

A.TA17-CA6B

B. 5A-8147
C. Both A & B
D None of these

120. Model of AC AUX. Generator in WDG4 Loco

A.TA17-CA6B
B. 5A-8147
C. Both A & B
D None of these

121. Model of Traction Motor in WDG4 Loco

A.TA17-CA6B

B. 5A-8147
C. TB26221
D None of these

122. Speed of Traction Motor in WDG4 Loco
A. 3220 RPM
B. 2000 RPM
C. 904 RPM
D None of these

123. Horse Power of Traction Motor in WDG4 Loco

A. 500KW
B. 600KW
C. 1430KW
D None of these

124. In WDG4 Loco Traction Motor is……

A. Force air ventilated cooled
B. Oil cooled
C. Water cooled D None of these

125. Nominal AC Aux. Generator Voltage in WDG4 Loco

A. 64VDC
B. 55V AC
C. 74VDC
D None of these

126. Rectified Voltage of AC Aux. Generator in WDG4 Loco

A. 64VDC
B. 55V AC
C. 74VDC
D None of these

127. Max Power output of AC Aux. Generator in WDG4 Loco

A. 18KW
B. 25KW
C. 20KW
D None of these

128. Total nos. of Batteries in WDG4 Loco Lead acid type

A. 10
B. 02
C. 08
D None of these

129. Total nos of cell of Batteries in WDG4 Loco (Lead acid type)

A. 32
B. 50
C. 64
D None of these

130. Total nos of cell of Batteries in WDP4 Loco (Ni-Cadmium type)

A. 32
B. 50
C. 64
D None of these

131. Voltage of Battery Cell in WDP4 Loco (Ni-Cadmium type)

A. 1.5V
B. 2.1V
C. 2.5V
D None of these

132. Voltage of Battery Cell in WDG4 Loco (Lead acid type)

A. 1.5V
B. 2.1V
C. 2.5V
D None of these

133. Total Voltage of Batteries in WDG4 Loco (Lead acid type)

A. 68V
B. 75V
C. 72V
D None of these

134. Total Voltage of Batteries in WDP4 Loco (Ni-Cadmium type)

A. 68V
B. 75V
C. 72V
D None of these

135. Total nos of Batteries in WDP4 Loco (Ni-Cadmium type)

A. 10
B. 02
C. 08
D None of these

136. Total nos of Cylinder of Air Compressor in WDG4 Loco

A. 06
B. 03
C. 04
D None of these

137. Capacity of lube oil of Air Compressor in WDG4 Loco

A. 9.98Litter
B.12 Litter
C.06 Litter
D None of these

138. Model of WDG4. Loco

A.GT46MAC
B.GT46PAC
C.Both A & B
D None of these

139. Model of WDP4. Loco

A.GT46MAC

B.GT46PAC
C. Both A & B
D None of these

140. Nos of Axles in WDP4 &WDG4 Locos

A.06
B.04 C.08
D None of these

141. How many Traction Motors in WDP4 Locos

A.06
B.04
C.08
D None of these

142. In WDP4 Locos Traction Motor fitted on

A. Axles no.1, 2 & 5, 6
B. All Axles
C. Axles no.1, 2 & 3, 4
D. D None of these

143. In WDP4 Locos Engine starting switch is located

A. ECP
B. Engine room
C. Control stand
D. D None of these

144. In WDG4 Locos Engine starting switch is located

A. ECP
B. Engine room
C. Control stand
D. D None of these

145. In WDG4 Locos RADAR is located

A. Between Rear bogie & Fuel tank
B. Engine room
C. Between Front bogie & Fuel tank-
D. D None of these

146. In WDP4 Locos RADAR is located

A. Between Rear bogie & Fuel tank
B. Engine room
C. Between Front bogie & Fuel tank
D. D None of these

147. Blended brake, Low water level switch, Temperature gauge & color code are provided in

A. WDP4
B. WDG4
C. Both A & B
D. D None of these

148. Starting Tractive effort of WDG4 Loco is

A. 540KN
B. 270KN
C. 400KN
D. 200KN

149. Starting Tractive effort of WDP4 Loco is

A. 540KN
B. 270KN
C. 400KN
D. 200KN

150. Max. Continuous Tractive effort of WDP4 Loco is

A. 540KN
B. 270KN
C. 400KN
D. 200KN

151. Max. Continuous Tractive effort of WDG4 Loco is

A. 540KN
B. 270KN
C. 400KN
D. 200KN

152. Max. Dynamic Tractive effort (Speed 40 KMPH to 0) of WDG4 Loco is

A. 540KN
B. 270KN
C. 400KN
D. 200KN

153. Max. Dynamic Tractive effort (Speed 68 KMPH to 1) of WDP4 Loco is

A. 540KN
B. 270KN
C. 160KN
D. 200KN

154. Dead engine cut-off cock & C3W Distributor valve in WDP4/WDG4 Locos are located in

A. Nose compartment
B. Driver Cabin
C. Engine compartment
D. Radiator compartment

155. Lead/Trail Air Brake Set-up Switch mounts on

A. the lower right corner of the air brake controller
B. Nose compartment
C. Engine compartment
D. D Radiator compartment

156. How many braking position of A-9 valve have.

A. 05 breaking position
B. 04 breaking position
C. 03 breaking position
D. 01 breaking position

157. How many braking position of SA-9 valve have..

A. 03 position
B. 02 position
C. 05 position
D. 01 position

158. In minimum reduction position of A-9 brake valve BP should drop up to (PSI)...

A. 0 to3 PSI
B. 4 to 7 PSI
C. 8 to 11 PSI
D. 12 to 15 PSI

159. In WDG 4 if false locked wheel indication is experienced

A. Isolate defective sensor
B. Isolate defective truck
C. Isolate defective TM
D. Fail the loco

160. In WDP4/WDG4 if GR (power) trips continuously three times within 10 minutes

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

161. In WDP4/WDG4 engine cranking but not starting due to

A. EPD Tripped
B. Governor not advancing fuel racks
C. No fuel reaching in the cylinders
D. Any one of above

162. In WDP4/WDG4 thick black smoke and poor hauling due to

A. Low fuel oil pressure & Low booster air pressure
B. Faulty turbo
C. Faulty injectors.
D. Any one of above

163. Temperatures of Engine exhaust gas reach up to

A. 538°C
B. 438°C
C. 338°C
D. None of these

164. Main parts of KNORR/NYAB CCB 1.5 Brake system are

A. VCU & CRU
B. PCU & KE Valve
C. BVC
D. All of above

165. Total no. of Keys on EM2000 Display Panel are
A. 8
B. 16
C. 10
D. 12

166. No. of Radiator fan in WDP4 &WDG4 Locos
A.02
B.01
C.03
D. None of these
167. No. of Grid Blower Motors in WDP4 &WDG4 Locos
A.04
B.02
C.03
D.None of these

168. No. of Brake blocks in HHP Locos
A.24
B.12
C.08
D.None of these

169. When Computer controlled Breaker is recycled the disabled speed sensor.

A. Remain Disabled
B. Gets enabled but not to be disabled again
C. Remain disabled but to be enabled
D. Get enabled automatically & has to be disabled

170. Brake warning Indication
A. Excessive Main Alternator
B. Excessive Breaking current in DB
C. Excessive Air Breaking
D. Excessive Main Generator Current

171. When Reverser is thrown in forward direction, Sanders of

A. No (3) & (6) only work
B. All sanders work
C. sanders works irrespective of Reverser
D. No (1) & (4) wheels only work

172. Battery charger rectifies AC to DC of
A. Aux gen output
B. Companion Alternator output
C. Main Alternator output
D. None of the above

173. B.P continuity not getting to train from a working WDG4 Loco due to

A. Additional BP COC closed in train end
B. BP angle cock defective
C. In train end no BP pressure in loco
D. All of the above

174. On run GR Trip then the engine
A. Will shut - down
B. Comes to idle
C. No effect on engine
D. No effect on loco

175. What is the type of lubrication system being used in diesel loco

A. Gravity lubrication
B. Force Feed lubrication
C. Force Feed & splash lubrication
D. Capillary lubrication

176. To check engine sump level, engine should be in condition
A. Shout – down
B. 4th Notch
C. Idle
D. 2nd Notch

177. Each Traction Motor provided with

A. One speed sensor
B. One speed sensor & one temp sensor
C. One temp sensor
D. Two speed sensor

178. Diameter of new wheels in WDP4 locos is

A. 1090mm
B. 1092mm
C. 1100mm
D. 1080mm

179. When there is communication link failure and micro air breaker is active, the loco will work

A. As lead in
B. Only in trail mode
C. In both modes
D. In helper mode

180. To recover PCS, it is compulsory to keep

A. Both throttle handle in idle
B. Any one throttle handles in idle
C. Leading control stand throttle handle in idle
D. Leading throttle handle in idle & reversor in neutral

181. The companion alternator runs at the same speed as

A. Engine rpm
B. Aux gen rpm
C. Turbo rpm
D. Locomotive rpm

182. MR Pressure dropping on run due to

A. Air dryer defective
B. Auto drain valve malfunctioning
C. Break cylinder pipe damaged
D. All of above

183. WDP4/WDG4 Hand break applies on wheels

A. R4, R5
B. R4, L4
C. R4, R6
D. L4, L5

184. Break cylinder pressure in WDP4/WDG4

A. 5.2 kg /sq.cm
B. 4.8 kg /sq.cm
C. 3.8 kg /sq.cm
D. 3.5 kg /sq.cm

185. MR pressure not building up due to

A. MR EQ COC in open condition

B. Pipe link chocked in MRPT system
C. Defective MVCC
D. All of above

186. What is the effect of auto flasher operation

A. Engine comes to idle
B. auto flasher indication
C. Buzzer
D. All of above

187. ER/BP not creating

A. LT switch defective
B. Air break failure
C. Penalty not reset
D. All of above

188. Lube oil pumps provided In HHP

A. Scavenging pump
B. Piston cooling pump & main lube oil pump
C. Turbo lube pump
D. All of above

189. Radiator fan controlled by

A. EM2000
B. TCC
C. EM2000 & TCC
D. None of these

190. Load demand of the traction motor is met by

A. EM2000

B. TCC

C. EM2000 & TCC
D. None of these

191. Total No. of After coolers inWDP4/WDG4

A.4
B.3
C.2
D.5

192. Total no. of Water expansion tanks inWDP4/WDG4

A.1
B.2
C.3
D.4

193. In WDP4/WDG4 BA consists of two zones

A. Green zone & red zone
B. Green zone & yellow zone
C. yellow zone & red zone
D. None of these

194. In WDP4/WDG4 slipped pinion will be indicates clearly by

A. Loco not moving
B. Train not hauling loads
C. High motor rpm in computer feedback
D. None of these

195. Head light rating in WDP4/WDG4 loco is

A. 100W 32V
B. 200W 30V
C. 250W 32V
D.250W 34V

196. Governor is used in HHP Loco

A. GE Governor
B. WW Governor
C. Both (A) & (B)
D. None of these

197. Type of cooling water pump used in WDP4/WDG4 Locomotives

A. Centrifugal
B. Reciprocating
C. Positive displacement
D. None of these

198. OSTA in WDP4/WDG4 trip at minimum

A.960RPM
B. 1000RPM
C. 1020
D. None of these

199. Flasher light working voltage

A. 72V
B. 12V
C. 24V
D. None of these

200. Nos of Main bearings available in WDP4 Locomotives

A. 12
B. 14
C. 10
D. None of these

ANSWER SHEET

Q. No.	ANSWER	Q. No.	ANSWER	Q. No.	ANSWER
1.	D	26.	C	51.	B
2.	A	27.	C	52.	B
3.	D	28.	A	53.	B
4.	B	29.	A	54.	D
5.	A	30.	C	55.	A
6.	A	31.	C	56.	B
7.	B	32.	A	57.	C
8.	D	33.	A	58.	C
9.	C	34.	C	59.	D
10.	C	35.	A	60.	C
11.	B	36.	B	61.	D
12.	A	37.	A	62.	B
13.	B	38.	A	63.	B
14.	B	39.	B	64.	A
15.	A	40.	A	65.	C
16.	C	41.	D	66.	A
17.	A	42.	A	67.	B
18.	A	43.	C	68.	C
19.	B	44.	A	69.	C
20.	A	45.	C	70.	B
21.	A	46.	A	71.	C
22.	A	47.	A	72.	B
23.	B	48.	C	73.	C
24.	B	49.	B	74.	C
25.	A	50.	B	75.	C

Q. No.	ANSWER	Q. No.	ANSWER	Q. No.	ANSWER
76.	C	101.	D	126	C
77.	B	102.	A	127	A
78.	B	103.	D	128	B
79.	A	104.	A	129	A
80.	C	105.	B	130	B
81.	C	106.	C	131	A
82.	D	107.	A	132	B
83.	B	108.	D	133	A
84.	A	109.	A	134	B
85.	A	110.	B	135	A
86.	B	111.	C	136	B
87.	B	112.	A	137	A
88.	C	113.	B	138	A
89.	C	114.	D	139	B
90.	C	115.	B	140	A
91.	B	116.	D	141	B
92.	C	117.	C	142	A
93.	D	118.	A	143	A
94.	D	119.	A	144	B
95.	B	120.	B	145	C
96.	C	121.	C	146	A
97.	C	122.	A	147	A
98.	A	123.	A	148	A
99.	D	124.	A	149	B
100.	A	125.	B	150	D

Q. No.	ANSWER	Q. No.	ANSWER	Q. No.	ANSWER
151	C	174	B	197	A
152	B	175	D	198	A
153	C	176	C	199	B
154	A	177	B	200	C
155	A	178	B		
156	A	179	B		
157	A	180	D		
158	B	181	A		
159	A	182	D		
160	A	183	A		
161	D	184	A		
162	D	185	D		
163	A	186	D		
164	D	187	D		
165	B	188	D		
166	A	189	A		
167	B	190	B		
168	B	191	C		
169	D	192	A		
170	B	193	A		
171	D	194	C		
172	A	195	C		
173	D	196	B		

(15) MEMU/EMU

1.	OLP protects _____winding				( )
	a)	Primary	**b)**	Secondary	
	c)	Auxiliary I	**d)**	Auxiliary II	
2.	OLP setting is _____Amps.				( )
	a)	900	**b)**	4000	
	c)	160	**d)**	180	
3.	NR1 energizes, when _____tapping contactors closes				( )
	a)	T1,T3,T5	**b)**	T2,T4,T6	
	c)	TL,DL,RTL	**d)**	T7,T8,T9	
4.	Total Voltage available in tapped winding is_____ volts				( )
	a)	391	**b)**	266	
	c)	141	**d)**	782	
5.	_____ type of traction motors provided in EMU/MEMU				( )
	a)	4061AZ	**b)**	TAO 4061	
	c)	HITACHI	**d)**	4601AZ	
6.	While driving from rear Motor coach, _____speed restriction to be followed,(brake equipment working in LEADING motor coach)				( )
	a)	30KMPH	**b)**	40 KMPH	
	c)	60 KMPH	**d)**	Normal Speeds	
7.	Total No. of brake cylinders provided in D-Coach of EMU are				( )
	a)	20	**b)**	6+4	
	c)	8+4	**d)**	12+4	
8.	When CBR 'A" relay acts _____lamp will glow in Motor coach				( )
	a)	vcb off	**b)**	Rectifier fuse blown	
	c)	control on	**d)**	Battery charger off Red	
9.	To energies SR initially _____contactors must be in open condition				( )
	a)	Motor	**b)**	DL	
	c)	WGR	**d)**	Tapping	
10.	To energies SR initially _____contactors must be in closed condition				( )
	a)	Motor	**b)**	DL	
	c)	WGR	**d)**	Tapping	
11.	Equipment governor pressure setting is _____ kg/cm^2				( )
	a)	6-7	**b)**	4.2-3.3	
	c)	5.5-7.5	**d)**	4.5-3.5	
12.	If any one unit MCP to be isolated _____MCB is to be kept in OFF position				( )
	a)	2.5A SYN-MCB	**b)**	5A SYN-MCB	
	c)	15A SYN-MCB	**d)**	2.5A MCB	
13.	If air bellow punctured in air suspension, _____speed restriction to be followed by Loco pilot in EMU.				( )
	a)	30 KMPH	**b)**	MPS	
	c)	Normal	**d)**	60 KMPH	
14.	If DMH become in operate in section, after taking precaution _____ to travel in MC along with Loco pilot				( )
	a)	Points Man	**b)**	SM	
	c)	Guard	**d)**	Traveler	
15.	If driver experienced PLTE, without any lamp indication in motor coach check _____ & _____relays.				( )
	a)	ABR & ARR	**b)**	EFRP & EFRA 2	
	c)	NVR & SR	**d)**	LTR & EFRP	

16.	In EMU/MEMU _____ type of mechanical couplers are used at present.				( )
	a)	Automatic Schaku	**b)**	Permanent	
	c)	CBC	**d)**	Semi Automatic Schaku	

17.	In 16 Car formation _____No. of brake cylinders are available (including parking brake cylinders)				( )
	a)	80	**b)**	96	
	c)	128	**d)**	64	
18.	_____ Type of bogie is provided in EMU/MEMU				( )
	a)	Bo-Bo Fabricated Bolster	**b)**	Co-Co Fabricated Bolster	
	c)	Bo-Bo Flexi coil	**d)**	Bo-Bo Moulded Bolster	
19.	To operate EAS _____key to be used				( )
	a)	BIV	**b)**	BL Key	
	c)	Guard	**d)**	Reverser Key	
20.	CC2 contactor closing, but Aux. Compressor is not working check _____ MCB				( )
	a)	15 A MCB /Aux. compressor	**b)**	15 A MCB/Main compressor	
	c)	2.5 A SYN-MCB/Aux. compressor	**d)**	2.5 A SYN-MCB/Main compressor	
21.	CC2 contactor closing, but Aux. Compressor is not working check _____ fuse				( )
	a)	63A	**b)**	16A	
	c)	10A	**d)**	80A	
22.	BIV is having _____ No. of electrical connections				( )
	a)	Many	**b)**	3	
	c)	6	**d)**	5	
23.	BIV is having _____No. of pneumatic connections				( )
	a)	Many	**b)**	3	
	c)	6	**d)**	5	
24.	Normally time taken to buildup MR pressure in one unit is ___ min				( )
	a)	4 to 5 min	**b)**	5 to 6 min	
	c)	5 to 7 min	**d)**	9 to 10 min	
25.	Operating voltage of comportment fans & lights is _____.				( )
	a)	141 single phase AC	**b)**	266 single phase AC	
	c)	141 three phase AC	**d)**	266 three phase AC	
26.	BELL code for calling the guard to Motor coach is _____.				( )
	a)	00	**b)**	000	
	c)	0-0	**d)**	00-00	
27.	On every odd notch _____ transfer contactor will close				( )
	a)	T9	**b)**	TL	
	c)	T8	**d)**	T7	
28.	To raise rear unit pantograph only from leading Motor coach, Loco pilot to operate _____ relays in leading motor coach in EMU.				( )
	a)	NVR, SR	**b)**	ABR, ARR	
	c)	EFRP, SR	**d)**	EFRA II, ARR	
29.	While passing automatic signal at 'ON', loco pilot has to operate _____switch to avoid over speeding.				( )
	a)	Flasher Light	**b)**	Head Light	
	c)	Tail Lamp	**d)**	AWS	
30.	PLTE experiences due to defective governor _____ lamp will glow in all MCs				( )
	a)	MSTL	**b)**	Unit Fault Lamp	

	c)	VCB Red	**d)**	Parking Brake	
31.	Battery charges provided in _____ circuit				( )
	a)	Aux I	**b)**	Aux II	
	c)	Power circuit	**d)**	Tap changer circuit	

32.	During DMH brake application _____ pressure will be admitted to brake cylinders.				( )
	a)	Auxiliary Res. (BP)	**b)**	Main Res. (MR)	
	c)	Control Res.	**d)**	Parking Brake Res	
33.	when leading MC struck up in Neutral Section _____switch to be operate, before closing VCB to clear neutral section				( )
	a)	AWS	**b)**	TSS	
	c)	Control	**d)**	Head Light	
34.	If 15AMCB - PT/VCB trips frequently duty of loco pilot is keep ____switch in fault position in _____motor coach/coaches				( )
	a)	TSS, Leading	**b)**	HOBA, Leading	
	c)	TSS, All	**d)**	HOBA, All	
35.	If 5A MCB/VCB fault trips in leading MC _____lamps will glow in that MC				( )
	a)	VCB off Red lamp	**b)**	MSTL	
	c)	Unit Fault Lamp	**d)**	BCFR	
36.	_____No. of Brake cylinders available in MC of MEMU				( )
	a)	8	**b)**	4	
	c)	16	**d)**	6	
37.	_____ No. of PB Brake cylinders available in MEMU.				( )
	a)	8	**b)**	4	
	c)	16	**d)**	6	
38.	Parking brake applied for _____wheels of motor coach in MEMU.				( )
	a)	1-2-7-8	**b)**	1-4-5-8	
	c)	2-5-6-7	**d)**	1-6-7-11	
39.	Before starting of first trip of the day _____test is to be conducted.				( )
	a)	Brake power	**b)**	Pit Examination	
	c)	AWS	**d)**	Joint Brake	
40.	To operate guard side switch panel switches _____ to be inserted				( )
	a)	BL Key	**b)**	Guard Key	
	c)	Reverser	**d)**	. BIV/Spare BIV	
41.	For releasing brake binding, after closing of EPIC & AIC _____ to be Operated				( )
	a)	Brake Release Handle	**b)**	EPIC Switch	
	c)	EPIC COC	**d)**	AIC COC	
42.	Parking brakes are fitted on wheels of _____ coach in EMU				( )
	a)	A Coach	**b)**	B Coach	
	c)	C Coach	**d)**	D Coach	
43.	In case of ACP by Passenger, Guard will look for _____.				( )
	a)	Any abnormality in coaches or near by	**b)**	Exchange with LP	
	c)	Exchange with Station Staff	**d)**	Punctuality	
44.	Correct operation of public addressing system is the responsibility of _____.				( )
	a)	Loco Pilot	**b)**	Station Master	
	c)	Guard	**d)**	Pilot Asst. Loco	
45.	When VCB trips _____ lamp will glow in defective MC, in addition to the VCB off lamp indication.				( )
	a)	MSTL	**b)**	Unit Fault Lamp	
	c)	MRTL	**d)**	Emergency cab light	
46.	_____type of Fire extinguishers provided in EMU /MEMU.				( )
	a)	Dry Chemical Powder	**b)**	Carbon dioxide	

	c)	carbon Monoxide	**d)**	Wet Chemical Powder	
47.	During emergency application position _____ ports will be in open position in poppet valve in WSF brake system.				( )
	a)	A-B-C-D	**b)**	A-B	
	c)	C-D	**d)**	A-C	
48.	If cab emergency lights not glowing check _____ MCB of cab lights.				( )
	a)	2.5 A MCB	**b)**	5 A MCB	
	c)	15 A MCB	**d)**	2.5 Sync MCB	

49.	If cab emergency lights not glowing check 2.5A MCB in _____ panel.				( )
	a)	1st row	**b)**	2nd row	
	c)	3rd row	**d)**	4th row	
50.	Line Voltmeter showing 'O' and VCB in closed condition check __ MCB of volt meter in MEMU.				( )
	a)	2.5 A MCB	**b)**	5 A MCB	
	c)	15 A MCB	**d)**	2.5 Sync MCB	
51.	Setting of CLR 1 when one pair of traction motors are in isolated condition is _____ Amps.				( )
	a)	425-325A	**b)**	400-300A	
	c)	425 A	**d)**	325 A	
52.	Brake Power certificate of EMU/MEMU issued by _____.				( )
	a)	Guard	**b)**	Shift in charge of Shed	
	c)	Loco pilot	**d)**	Station Master	
53.	OL5 acts at _____ amps				( )
	a)	900A	**b)**	4000A	
	c)	160A	**d)**	180A	
54.	_____ is protected from surge voltages				( )
	a)	OLP	**b)**	Lightening arrester	
	c)	WGR	**d)**	Panto Pan	
55.	_____ will act when temperature of the transformer exceeds 85 C temperature				( )
	a)	BIR	**b)**	HEFRP Red target	
	c)	TTR	**d)**	EFRA II	
56.	To reset the OL relays loco pilot has to open _____ switch				( )
	a)	HVCB Trip	**b)**	HEFRP	
	c)	EP Supply on	**d)**	Control	
57.	When the parking brakes are fully applied the pressure in the parking brake cylinder is _____kg/cm2.				( )
	a)	3.5 kg/cm2	**b)**	0 kg/cm2	
	c)	5 kg/cm2	**d)**	1.6 kg/cm2	
58.	The main compressor governor closes its contact at ____ kg/cm2 and opens at _____ kg/cm2.				( )
	a)	5, 6	**b)**	5, 7	
	c)	5, 8	**d)**	6, 7	
59.	The heat generated in the traction motors is cooled by _____.				( )
	a)	.KF1 and KF2	**b)**	TM Blowers	
	c)	self ventilated fan in TM unit	**d)**	Cooling is not necessary	
60.	The bell code for the guard to apply brakes is _____.				( )
	a)	00	**b)**	000000	
	c)	0-0	**d)**	00-00	
61.	_____ Switch is provided to restrict the power supply to the traction motors beyond shunt.				( )
	a)	Flasher light	**b)**	HOBA knife switch	
	c)	Auto Warning	**d)**	Control	
62.	_____ MCB gives supply to the unit fault lamp				( )
	a)	5A MCB/MCP	**b)**	5A MCB VCB Fault	
	c)	5A MCB Guards Supply	**d)**	15A MCB Master Control	
63.	Over voltage relay energizes at _____volts.				( )
	a)	540 V	**b)**	4000V	
	c)	900V	**d)**	160V	
64.	The left over AC pulses are purified by the _____ in the traction power circuit.				( )
	a)	Rectifier Fan	**b)**	ASL, PFD	
	c)	TL, DL	**d)**	Carbon Filters	

65.	Emergency lights in the trailer coaches will glow when the lights contact is in closed condition and _____ relay is in de-energized position.				( )
	a)	EFRAII	**b)**	QTD 105	
	c)	Normal lights relay	**d)**	Emergency lights relay	
66.	While closing VCB, Loco pilot will experience __ trouble, if EFRP is acted already.				( )
	a)	Partial Loss	**b)**	ICVCB	
	c)	Total Loss	**d)**	VCB chattering	
67.	If BP pipe is broken between the middle motor coach and "D" coach of the leading unit, rear portion BP can be charged by.				( )
	a)	Spare BIV	**b)**	to Close BP angle COC of 'D'	
	c)	Guard key	**d)**	to Close BP angle COC of 'MC'	
68.	Aux. motors provided in aux. power circuit1_____.				( )
	a)	Aux. comp	**b)**	MCP	
	c)	TM	**d)**	oil pump	
69.	If Motor contactors open _____ lamp will glow in motor coach				( )
	a)	VCB off Red	**b)**	Control on	
	c)	MSTL	**d)**	BCFR	
70.	WGR will energize when MPT is moved to _____ position				( )
	a)	Full Power	**b)**	Half Power	
	c)	Shunt	**d)**	Shunt to Half Power	
71.	In lap position _____ ports are closed in the Poppet valve,in WSF brake system .				( )
	a)	A&B	**b)**	C&D	
	c)	A,B,C&D	**d)**	none	
72.	The auxiliary compressor contactor is _____.				( )
	a)	CC1	**b)**	CC2	
	c)	FC	**d)**	LC	
73.	The purpose of KF1 and KF2 is _____.				( )
	a)	To cool Transformer Oil	**b)**	To Cool Traction Motors	
	c)	To cool Main Rectifier	**d)**	To Cool Auxiliary Rectifier	
74.	Total output of the tapped and untapped windings is_____ volts.				( )
	a)	391	**b)**	782	
	c)	141	**d)**	266	
75.	If more than one HRC fuse is blown in the rectifier block, _____relay will get energized.				( )
	a)	CBR 'A'	**b)**	CLR 1&2	
	c)	AOVR	**d)**	CBR 'B'	
76.	Dropping reactance is in service up to _____ notches				( )
	a)	2	**b)**	12	
	c)	10	**d)**	22	
77.	_____ Relay will protect transformer in the event of hot gases.				( )
	a)	BIR	**b)**	TTR	
	c)	KF1&KF2	**d)**	OVR	
78.	The Main compressor safety valve setting is_____ kg/cm^2				( )
	a)	8 Kg/cm2	**b)**	7 Kg/cm2	
	c)	9 Kg/cm2	**d)**	6-7 Kg/cm2	
79.	The out put of the auxiliary II winding is _____ volts.				( )
	a)	266V 3phase AC	**b)**	141V 3phase AC	
	c)	266V 1phase AC	**d)**	141V 1phase AC	
80.	The no. of electrical couplers between the units of EMU are _____.				( )
	a)	4	**b)**	5	
	c)	6	**d)**	3	

81.	The no. of electrical couplers between the units of MEMU are _____.				( )
	a)	4	**b)**	5	
	c)	6	**d)**	3	
82.	_____ Pressure will be admitted in to the brake cylinder during EP application				( )
	a)	BP Res.	**b)**	MR Res	
	c)	Control Res	**d)**	Parking Brake Res	
83.	When the BCH is moved to auto application _____ kg/cm^2 max. Pressure is admitted in to the trailer coach brake cylinder of MEMU.				( )
	a)	1.6	**b)**	2	
	c)	1.8	**d)**	5	
84.	EP units are having _____ electro valves.				( )
	a)	Neutralized magnet	**b)**	Holding and Application magnet	
	c)	Semi Holding and Application	**d)**	parking brake magnet	
85.	The transformer rating of MEMU/EMU is _____ KVA				( )
	a)	900	**b)**	1000	
	c)	1800	**d)**	3000	
86.	The maximum permissible speed of MEMU is _____.				( )
	a)	120 Kmph	**b)**	90 Kmph	
	c)	100Kmph	**d)**	110 Kmph	
87.	The speed of the MEMU in case, loco pilot is driving from rear MC is _____ KMPH.(when leading MC brake equipment not working.)				( )
	a)	40 Kmph	**b)**	15 Kmph	
	c)	30 Kmph	**d)**	60 Kmph	
88.	For isolation of TM 3, ____ switch to be kept in _____ position				( )
	a)	MCS2 - 4out	**b)**	MCS2 - 3out	
	c)	MCS1 - 3out	**d)**	MCS1 - 4out	
89.	Controlling MCB for LTR is _____.				( )
	a)	2.5 A MCB	**b)**	5 A MCB	
	c)	15 A MCB	**d)**	2.5 Sync MCB	
90.	Joint brake test will conduct by _____.				( )
	a)	Loco Pilot	**b)**	Station Master	
	c)	Guard	**d)**	Both LP & GD	
91.	NVR is provided in _____ circuit				( )
	a)	Aux 1	**b)**	Aux 2	
	c)	Power	**d)**	Low Tension	
92.	The operating keys available at loco pilot, while taken over charge are _____.				( )
	a)	BL, BIV-2, Reverser & Guard	**b)**	BL, BIV, Reversor, Guard	
	c)	BL,BIV, Reversor-2,Guard	**d)**	BL-2,BIV,Reversor,Guard	
93.	Gear ratio of traction motor is_____ in EMU/MEMU				( )
	a)	16:61	**b)**	19:91	
	c)	21:91	**d)**	20:91	
94.	For releasing of brake binding _____ cocks to be closed				( )
	a)	EPIC, AIC	**b)**	BIC1, BIC2	
	c)	EPIC, AIC, BIC1, BIC2	**d)**	EPIC, BIC1&2	
95.	Horse power of Main compressor is_____.				( )
	a)	20 HP	**b)**	12 HP	
	c)	16 HP	**d)**	10 HP	
96.	While units on run, loco pilot should not bring _____ to _____ position				( )
	a)	Reversor, Neutral	**b)**	BIV, off	
	c)	MPT, off	**d)**	AWS, on	

97.	TL will be in circuit at every _____ notches			
	a)	Odd	**b)**	Even
	c)	upto 10	**d)**	upto 12
98.	During emergency application position_____ ports will be in closed condition in puppet valve (in WSF brake system)			
	a)	B&C	**b)**	A & B
	c)	C&D	**d)**	A&D
99.	If DMH pilot valve become defective _____cock to be closed to avoid BP leakage.			
	a)	AIC	**b)**	BIC 1&2
	c)	EPIC	**d)**	DMH
100.	BIV to be open only after building up maximum _____ pressure			
	a)	PB Gauge	**b)**	RS
	c)	BP	**d)**	MR
101.	Horns reservoir charged with _____ pressure			
	a)	PB Gauge	**b)**	RS
	c)	BP	**d)**	MR
102.	If rectifier fan is not working _____relay will de-energies.			
	a)	CLR 1&2	**b)**	LTR
	c)	RFAR	**d)**	CBAR
103.	If middle motor coach fan earthed _____ relay will energies and trips _____.			
	a)	EFRP &VCB	**b)**	EFRAII &VCB
	c)	CBAR&VCB	**d)**	NVR&VCB
104.	For resetting OL, _____MCB should be in good condition			
	a)	2.5 A MPT	**b)**	5 A MPT
	c)	15 A MPT	**d)**	2.5 Sync MPT
105.	Auxiliary reservoir charged with _____ pressure.			
	a)	PB Gauge	**b)**	RS
	c)	BP	**d)**	MR
106.	During NO TENSION _____ lamps will remain glowing			
	a)	ASR & BCFR	**b)**	MSTWL & UFL
	c)	VCB OFF& BCFR	**d)**	VCB OFF& ASR
107.	Air pressure leakage from the tap changer box, _____ cock to be closed to maintain MR pressure.			
	a)	DMH	**b)**	VEPT
	c)	BP Angle coc	**d)**	CR
108.	TTR will act when temperature of the transformer exceeds ___ oC			
	a)	85degree C	**b)**	100 degree C
	c)	95degree C	**d)**	70 degree C
109.	If pressure in transformer exceeds ____relay will energies			
	a)	TTR	**b)**	PRV
	c)	CBAR	**d)**	ABR
110.	Pressure in control reservoir is _____kg/cm2			
	a)	5kg/cm^2	**b)**	6 kg/cm^2
	c)	7kg/cm^2	**d)**	3.5 kg/cm^2
111.	Location of EPIC coc in Motor coach			
	a)	Guard side U/frame-behind MR-CDC near rectifier box.	**b)**	LP side U/frame-behind MR-CDC near rectifier box.
	c)	In HT room	**d)**	In LT room
112.	Location of AIC coc in Motor coach			
	a)	Guard side U/frame-behind MR-CDC near rectifier box.	**b)**	Back side of BP CDC in U/F LP side near EP unit. (MC)

	c)	In HT room	**d)**	In LT room
113.	Location of Bogie isolation coc 1 & 2 in Motor coach			
	a)	BIC-1 near wheel no.1 & BIC-2 near wheel no-7	**b)**	BIC-1- near wheel no.4 & BIC-2 near wheel no-8
	c)	BIC-1 near wheel no.3 & BIC-2 near wheel no-5	**d)**	BIC-1 near wheel no.4 & BIC-2 near wheel no-8
114.	Location of EPIC coc in Trailer coach			
	a)	Under truck on MR pipe line after supplementary reservoirs	**b)**	Under truck on BP pipe line after supplementary reservoirs
	c)	Near truck 1	**d)**	Near truck 2
115.	Location of BIC1 coc in Trailer coach			
	a)	Under truck near wheel-1	**b)**	Under truck near wheel-7
	c)	Under truck near bogie-2	**d)**	Under truck near bogie-1
116.	Location of BIC2 coc in Trailer coach			
	a)	Under truck near wheel-1	**b)**	Under truck near wheel-7
	c)	Under truck near bogie-2	**d)**	Under truck near bogie-1
117.	Location of PRV in Motor coach			
	a)	On the transformer tank Guard side	**b)**	Above transformer tank in HT compartment
	c)	In LT room	**d)**	Inside the cab
118.	Location of RTL in Motor coach			
	a)	Under frame LP side	**b)**	Under frame backside of the battery box
	c)	In HT room	**d)**	In LT room
119.	Location of HEFRP in Motor coach			
	a)	Inside cab back side of LP	**b)**	In HT room
	c)	In LT room	**d)**	ON LP desk
120.	Location of HOBA in Motor coach			
	a)	In HT room	**b)**	In LT room
	c)	On LP desk	**d)**	Below Relay panel inside cab
121.	Location of CIC (Compressor's isolation COC) in Motor coach			
	a)	Near wheel No.8	**b)**	Near wheel No 7
	c)	Near wheel No. 6	**d)**	Near wheel No. 5
122.	-Location of CR CIC (control reservoir COC) in Motor coach			
	a)	In HT room near aux. compressor	**b)**	In LT room near aux. compressor
	c)	Under frame LP side	**d)**	Under frame Guard side
123.	Location of ASL in Motor coach			
	a)	LP side under frame	**b)**	In LT room
	c)	In HT room	**d)**	Guard side under frame
124.	Location of PFD in Motor coach			
	a)	In LT room	**b)**	In HT Room
	c)	Under frame GD side, Right side of Switch Group2	**d)**	Under frame LP side, Right side of Switch Group1
125.	Location of AIC in Trailer coach			
	a)	Near wheel No.1	**b)**	LP side under frame Back side of BP CDC
	c)	Near wheel No, 5	**d)**	Guard side under frame Back side of BP CDC

KEY

1.A	2C	3B	4A	5D	6A	7C	8B	9D	10A
11B	12 A	13D	14C	15C	16D	17B	18A	19D	20A
21B	22B	23B	24D	25A	26B	27A	28B	29D	30A
31A	32A	33B	34D	35A	36A	37B	38B	39D	40B
41A	42D	43A	44C	45B	46A	47C	48A	49D	50A
51A	52B	53B	54B	55C	56D	57B	58D	59C	60B
61C	62B	63A	64B	65D	66B	67A	68D	69C	70A
71C	72B	73A	74B	75D	76C	77A	78A	79D	80B
81A	82B	83C	84B	85B	86C	87B	88B	89A	90D
91A	92A	93D	94C	95B	96A	97A	98B	99D	100D
101D	102C	103B	104C	105C	106A	107D	108A	109B	110A
111A	112B	113C	114A	115D	116C	117A	118B	119C	120D
121A	122A	123C	124D	125B					

(16) Knowledge in Air Brake train working

1.The standard wheel gauge of passenger BG coaching stock is –

(a)1602mm (b)1601mm (c)**1600mm** (d) 1598mm

2.The maximum wheel gauge of passenger BG coaching stock is -

(a)1600mm (b)1601mm (c)1598.5mm **(d) 1602mm**

3.The minimum permissible wheel gauge of passenger BG coaching stock is –

(a)1601.5mm (b)1600mm **(c)1599mm** (d) 1601mm

4.Length over body of ICF BG coaches is –

(a)2334mm (b)2310mm **(c)21337mm** (d) 22132mm

5.Rigid wheelbase of ICF BG trolley is –

(a)2896mm (b)2803mm (c)2990mm (d) 2837mm

6.At what interval, the intensive cleaning of any coach is?

(a) Threemonth **(b)Onemonth** (c)Sixmonth (d) Eightmonth

7.What is the interval for cleaning coach water tank?

(a) 15days (b)25days **(c)onemonth** (d) twomonth

8.What is the period for the POH of any OCV attached to a passenger train?

(a) Ninemonth (b)12month (c)18month **(d) 24month**

9. What shall be the period for POH for a coach attached to Mail/ Express train?

(a)9month (b)12month (c)18month **(d) 24month**

10.What shall be the period for POH of PCV attached with any other then train mail/ Express train?

(a)9month **(b)12month** (c)18month (d) 24month

11.The other name of pilot valve is –

(a) PESAD **(b)PEASD** (c)PDEAS (d) EPASD

12.What is the period for POH of departmental coach except ART/ARME?

(a) 24month (b)36month **(c)42month** (d) 60month

13.Transportation code of the ladies compartment is –

(b) X (b) Z (c) **Y** (d) L

14.What is the Transportation code of second class fitted with self-generating electrical equipment?

(a) SG (b) **GS** (c) GY (d) GSD

15.What is the Transportation code of inspection carriage (Administrative)?

(a) AR (b) CR (c) IC **(d) RA**

16.Transportation codes of the pantry car is –

(a) BC (b) PC **(c) WCB** (d) CD

17.Which part is not used in ICF trolley?

(a) Dashpot (b) Side bearer (c) Shock absorber (d) **Draglink**

18.Transportation codes of vestibule second class 3- tier sleeper coach fitted with self- generating electrical equipment is –

(b) WGSCNA (b) **WGSCN** (c) MGSCN (d) GSMGCN

19.What is the Transportation code of vestibule III class two-tier sleeper coach fitted with self-generating electrical equipment and ladies compartment?

(a) WCBSCZA (b) **WGSCNY** (c) WGSCWY (d) YZZFS

20.What is the maximum permissible clearance between brake gear pin and bushes?

(a) 0.5 mm (b) 1.0 mm **(c) 1.5 mm** (d) 2.0 mm

21.As per policy circular No-4 secondary examination of mail/express has been skipped on round trip upto-

(a) 800 Km (b) 1500 Km **(c) 2500 Km** (d) 1800 Km

22.In coach, the load transmission takes place through -

(a) Center pivot (b) Bogie (c) **Sidebearer** (d) Wheel

23.The CI brake block should be changed, if worn out beyond-

(a) 10 mm (b) 15 mm (c) **20mm** (d) 22 mm

24.The 'L' type composite brake block should be changed, if worn out beyond-

(a) 10 mm (b) 15 mm (c) 20 mm (d) 22 mm

25.The 'K' type composite brake block should be changed, if worn out beyond-

(a) 10 mm **(b) 12 mm** (c) 20 mm (d) 22 mm

26.Std. packing pieces of ICF coach is –
(a) 13,14,26 mm (b) 13,22,28 mm (c) **13,26,38,48 mm** (d) 22,26,32 mm

27.Coaching stock accident involving human life enquiry by-
(a) CME (b) **CRS** (c) Sr.DME (d) ADRM

28.Yellow strips on end body of ICF indicate is –
(a) **Antitclescopic** (b) Dualbrake (c) In built air brake (d) Non-Antitalescop

29. What is the new wheel diameter of LHB wheel?
a) 910 mm **b) 915 mm** c) 912 mm d) 725 mm

30.What defect is detecting UST test?
(a) **Internal crack** (b) external crack (c) Air flow crack (d) None of the above

31.The original HAL bogies with speed potential of -
(a) 92 km/h (b) **92km/h** (c) 92 km/h (d) 92 km/h

32.What is Codal life of steel bodied coaches (Including dining / pantry cars) -
(a) 40 years (b) 30 years (c) **25 years** (d) 22 years

33.What is codal life of IRS coaches?
(a) 40 years (b) **30 years** (c) 25 years (d) 20 years

34.Codal life of light utilisation categories of coaches is -
(a) 40 years (b) 30 years (c) 25 years (d) 20 years

35.Periodicity of periodic overhauls earning less then 2.5 lakhs Kms per annum is -
(a) 12Month (b) 18 Month (c) 24 Month (d) 30 Month

36.The standard thickness of compensating rings is -
(a) 2 mm (b) 4 mm **(c) 6mm** (d) 8 mm

37.Tare weight of the WGS CZAC coach is -
(a) 50.30t (b) **49.30t** (c) 48.77 t (d) 47.22 t

38.Payload of the WGSCZAC coach is -
(a) 6.38t (b) 7.22 t (c) **5.680 t** (d) 4.889 t

39.Gross weight of the WGSCZAC coach is -
(a) **54.98 t** (b) 56.36 t (c) 59.22 t (d) 52.23t

40.Tare weight of the WGSCWAC coach is -
(a) 49.75 t (b) 49.30 t (c) **50.00 t** (d) 46.50 t

41.Total payload of the WGSCWAC coach is –
(a) 1.440 t (b) 5.680 t (c) **3.680 t** (d) 2.275 t

42.Tare weight of the GS coach is –
(a)36.99t (b) 46.99 t (c) 38.03 **t** (d) 37.70 t

43.Normal payload of the GS coach is -
(a) 6.98 t (b)**5.85t** (c) 6..67 t (d) 7.21 t

44.What is overload of the GS coach?
(a) 85% (b) 90% **(c) 100%** (d) 150%

45.Total payload of the GS coach is -
(a) 5.79 t (b) 12.60 t **(c)11.70t** (d) 14.04 t

46.In tare condition the bogie frame bolster clearance of non-AC, GS, SDC, SCN coach is - (a) 48 +/– 3mm
(b) 40 +/–5mm (c) 47 +/–2mm (d) 29 +/–3mm

47.In gross load condition, the bogie frame bolster clearance of non AC, GS coach is - (a) 75 +/–3mm
(b) 78 +/–2mm **(c)74+/–3mm** (d) 71 +/–2mm

48.In tare condition the body bogie clearance of non AC, GS, SDC, SCN coach is -

(a) 70 +/–3mm (b) 72 +/–3mm (c) 75 +/–3mm (d) 78 +/–2mm

49.In gross load condition, the body bogie clearance of non-AC, GS, coach is -

(a) 26 +/–3mm (b) 29 +/–2mm (c) 30 +/–2mm **(d) 36 +/–3mm**

50.What shall be the period for cleaning of carpet of AC compartment?
(a) Two month **(b) one month** (c) 15 day (d) Three month

51.All newly built coaches shall be given IOH after -
(a) One month (b) six month **(c) one year** (d) two year

52.The revised maximum payloads of NMG coaches are -
(a) 7.39 t (b) 8.23 t **(c)9.20t** (d) 10.32 t

53.The length of over body of IRS coach is -
(a)21337mm (b)21336mm (c)21996mm **(d) 21030mm**

54.The length over buffer of ICF/ RCF coach is -

(a) 22297 mm (b)22299mm (c)21996mm (d) 21030 mm

55.What is the length of coach over buffer of IRS coach?

(a)22297mm (b)22296mm (c)21336mm **(d) 21996mm**

56.Over all width of ICF/ RCF coach is -

(a)3251mm (b)3250mm **(c)3245mm** (d) 3991 mm

57.In IRS coach, what is the of overall width?

(a)3251mm (b)3250mm (c)3245mm (d) 3.991 mm

58.The height from rail level of ICF/ RCF coach is -

(a)3886mm **(b)4025mm** (c)3991mm (d) 3251 mm

59.In IRS coaches, the maximum height from rail level top of the roof is -

(a)4025mm (b)3991mm (c)3786mm **(d) 3886mm**

60.In ICF coach, replace Headstock if the thickness is reduce more than -

(a) 2 mm (b) 8 mm **(c)4mm** (d) 6 mm

61.Maintenance and repair procedure for hydraulic shock absorbers used on coaching stock, what RDSO technical pamphlet is used -

(a)C-7512 (b)C-7301 **(c) C-6803** (d) C-7607

62.Maintenance and repair procedure for wheel and axle manual, what RDSO's technical pamphlet is used.-

(a)C-7512 **(b)C-7907** (c)C-7901 (d) C-7809

63.Instruction for Inspection/ maintenance of air brake equipment on passenger coaches, what RDSO's technical pamphlet is used -

(a)C-7512 (b)C-7907 **(c) C-8805** (d) C-87033

64.Description of water raising system to SK- 86209 and instruction for filling water for air brake coaches, what RDSO's technical pamphlet is used -

(a)C-9009 (b)C-9011 (c)C-9103 (d) C-9105

65.Maintenance manual for IRSA-600 slack adjuster, what RDSO's technical pamphlet is used -

(a) G-92 (b)G-97 (c)G-67 (d) G-94

66.At what schedule the painting of lavatories from inside is done –

(a) 'B' schedules (b) 'A' schedule (c) 'C' schedule (d) Special schedule

67.Permitted luggage allowed for II[ad] class pass is –

(a) 35 Kg/ head **(b)50Kg/head** (c) 70Kg/ head (d) 100 Kg/ head

68.Permitted luggage allowed for I[st] class pass is –

(a) 35 Kg/ head (b) 50Kg/ head **(c)70Kg/ head** (d) 100 Kg/ head

69.Re painting of coaching stock as per "C" schedule is done at every –

(a) 3.0year (b)3.5year (c)4.5year **(d) 5.0year**

70.Rehabilitation of coaching stock is carried out between –

(a) 10 to12 year **(b)12to15year** (c) 15 to 18 year (d) 18 20 year

71.How many emergency windows provided in AC ICF/RCF coaches are –

(a) Two (b)Three **(c)Four** (d) Five

72.Rehabilitation cost of coaching stock is –

(a) 15%ofthetotalcost (b)20%ofthe totalcost

(c)25%ofthetotalcost (d)35%ofthe totalcost

73.At what interval, the schedule 'C' examination of a BG coach is?

(a) One month ± 3 days (b) Three month ± 3 days

(c)Sixmonth±7days (d) Nine month ± 7days

74.What is the interval of schedule 'A' examination of a coach?

(a) **Onemonth±3days** (b) Two months ± 3 days

(c)Three months ± 6 days (d) None of the above

75.What is the interval of schedule 'B' examination of a coach?

(a) One month ± 3 days

(c) Three months ± 7 days

76.What is the purpose of manipulator?

(a) For testingroller bearing

(c) For ROH

77.What is the interval of metallic commode chute panting?

(a) Every15days

(c)Every45days

78.What is the interval of cleaning/ flushing of overhead water tank?

(a) Everytrip (b) **Every month**

(c)Everythreemonth (d) Every Sixmonth

79.At what interval, check the anticorrosive paint in commode?
(a) Onemonth (b) Three month

(c)Sixmonth (d) None of the above

80..At what interval IOH of ICF coaches is done -
(a) Two month (b) Three month □ 15 days

(c) Six month □ 7 day **(d) Six month □ 15 day**

81.What do you mean by FRP?
(a) Fibre recalling panel **(b) Fibre reinforcedplastic**

(c)Firstreductionplastic (d) Fine reinforcedpanel

82.At what interval, the IOH of shatabdi coaches is?

(a) 12 months or four lake km which is earlier

(b) **9 months or two lake km which is earlier**
(c) 6 months or one lake km which is earlier

(d) None of theabove

83.The identification of bogie mounted air brake system coach is –

(a) 'A' iswrittennearcoachNos

(b) 'B' iswrittennearcoachNos

(c) **'AB' is written near coach Nos**
(d) None of theabove

84.What is the periodicity for IOH of ICF coaches expect Rahdhani & Shatabdi?

(a) 9 month or 250,000 Km whichever is earlier

(b) 12 month or 250,000 Km whichever is earlier

(c) **6 month or 250,000 Km whichever is earlier**
(d) None of theabove

85.Where has been distraction tube provided in ICF/RCF coaches?

(a) **Between main head stock and axially head stock**

(b) Outer main headstock

(c) With axially headstock

(d) None of theabove

Answers: Chapter -1

1.01–(c)	1.02 –(d)	1.03–(c)	1.04 – (c)	1.05 – (a)	1.06 – (b)
1.07–(c)	1.08 –(d)	1.09–(d)	1.10 – (b)	1.11 – (b)	1.12 – (c)
1.13–(c)	1.14 –(b)	1.15–(d)	1.16 – (c)	1.17 – (d)	1.18 – (b)
1.19–(b)	1.20 –(c)	1.21–(c)	1.22 – (c)	1.23 – (c)	1.24 – (a)
1.25–(b)	1.26 –(c)	1.27–(b)	1.28 –a)	1.29 – (b)	1.30 – (a)
1.31–(b)	1.32 –(c)	1.33–(b)	1.34 – (a)	1.35 – (a)	1.36 – (c)
1.37–(b)	1.38 –(c)	1.39–(a)	1.40 –(c)	1.41 – (c)	1.42 – (a)
1.43–(b)	1.44 –(c)	1.45–(c)	1.46 – (b)	1.47 – (c)	1.48 – (a)
1.49–(d)	1.50 –(b)	1.51–(c)	1.52 – (c)	1.53 – (d)	1.54 – (a)
1.55–(d)	1.56 –(c)	1.57–(a)	1.58 – (b)	1.59 – (d)	1.60 – (c)
1.61–(c)	1.62 –(b)	1.63–(c)	1.64 – (a)	1.65 – (a)	1.66 – (a)
1.67–(b)	1.68 –(c)	1.69–(d)	1.70 – (b)	1.71 – (c)	1.72 – (c)
1.73–(c)	1.74 –(a)	1.75–(c)	1.76 – (b)	1.77 – (b)	1.78 – (b)
1.79–(a)	1.80 –(d)	1.81–(b)	1.82 – (b)	1.83 – (c)	1.84 – (c)
1.85 – (a)					

CHAPTER -2

1.Capacity of air reservoir (AR) of the coach is –

(a)150Lit. **(b)200Lit** (c)250Lit. (d) 300Lit.

2.In twin pipe system, the time taken for releasing of the brake is -

(a) 45sec **(b)27sec** (c) 75sec (d) 120sec

3.'A' dimension of a passenger train (Non AC coach) is –

(a) 14±2mm **(b)16+2/-0mm** (c) 16±4mm (d) 18 ± 2mm

4.In an AC coach, 'A' dimension should be –

(a) 18±2 mm (b) 20±2 mm (c) 22±2 mm **(d) 22+2/-0mm**

5.In a passenger train 'e' dimension is –

(a) 378± 20 mm **(b) 375±25 mm** (c) 370±10 mm (d) 380±20 mm

6.In the passenger train, the diameter of brake pipe & feed pipe is –

(a) 20.0 mm **(b) 25.0 mm** (c) 28.0 mm (d) 30.0 mm

7.In the passenger train, the diameter of branch pipe is –

(a) 15.0 mm (b) 18.0 mm **(c) 20.0 mm** (d) 22.0 mm

8.How many angle cocks are provided in a vehicle in twin pipe system?

(a) Two (b) Three **(c) Four** (d) Six

9.What is the diameter of branch pipe attached to PEAV?

(a) 15.0 mm (b) 25.0 mm (c) 30.0 mm **(d) 20.0 mm**

10.What is the diameter of branch pipe in between PEAV to PEASD?

(a) 10.0 mm (b) 25.0 mm (c) 30.0 mm (d) 20.0 mm

11.BP pressure in working train is –

(a) 6.0± 0.1 Kg/cm^2 (b) 5.5±0.1 Kg/cm^2 **(c) 5.0± 0.1 Kg/cm^2** (d) 5.2± 0.1 Kg/cm^2

12.During charging position, Air pressure in Auxiliary reservoir is –

(a) 6.5 Kg/cm^2 (b) 6.1 Kg/cm^2 **(c) 6.0** Kg/cm^2 (d) None of the above

13.During full service application, Brake pipe pressure is dropped to –

(a) 2.0 Kg/cm^2 (b) 1.0 Kg/cm^2 (c) 3.0 Kg/cm^2 **(d) 1.5 Kg/cm^2**

14.The en route brake power percentage of mail train should be –

(a) 80% (b) 75% **(c) 95%** (d) 90%

15.The full form of BP is –

(a) Bypass **(b) Brakepipe** (c) Bentpipe (d) None of the above

16.In twin pipe system, the AR pressure should be –

(a) 5.0 Kg/cm^2 **(b) 6.0** Kg/cm^2 (c) 7.0 Kg/cm^2 (d) 8.0 Kg/cm^2

17.Full form BC is –

(a) Brake control (b) Beside coach (c) **Brake cylinder** (d) Branch cylinder

18.At originating station the brake power percentage for mail/express train should be – (a) 85% (b) 90%
(c) 100% (d) 75%

19.Cut off angle cock can be fitted to-

(a) FP (b) BP (c) **BP & FP both** (d) None of the above

20.What is the piston stroke of air brake coaching train?

(a) 60 **±10 mm** (b) 80±10 mm (c) 85±15 mm (d) 85±5 mm

21.What is the diameter of bogie mounted brake cylinder?
(a)220mm (b)210mm (c)**202mm** (d) 200mm

22.Dimension 'A' of the slack adjuster of the high-speed coach is –
(a)16.0mm (b)20.0mm (c)**20±2/0mm** (d) 18.0mm

23.In conventional air brake system, the No of brake cylinder is-
(a)3 **(b)2** (c)1 (d)4

24.The size of reduced socket of control reservoir is–

(a)13*28mm (b)25*32mm (c)25*32mm (d) 20*25mm

25.The brake cylinder diameter of conventional air brake system is –
(a)205mm (b)**1305mm** (c)325mm (d) 305mm

26.The piston stroke of air brake system when brake blocks are touching to wheel is– (a)50-100mm
(b)88-100mm (c)**50-70mm** (d)75-100mm

27.The rate of air leakage in single car testing should not be more then –
(a) 0.02Kg/cm^2/min (b)1.0Kg/cm^2/min **(c)0.2**Kg/cm^2/min (d) 0.1Kg/cm^2/min

28.In emergency application the brake cylinder pressure rises from 0-3.6 kg/cm^2 in – (a)**15-20sec**
(b)5-10sec (c)3-5sec (d)8-10sec

29.Brake should not apply during insensitivity test with in -
(a) 50sec (**b)60sec** (c)40sec (d) 30sec

30.During release after full service application, release time of Mail/Express coach is–
(a) 5to10Sec (b)10to15Sec (c)**15to20Sec** (d) 20 to 30 Sec

31.Check valve with choke allows air from –
(a) BPtoFP (b)FPtoCR (c)**FPtoAR** (d) AR toBC

32.Feed pipe diameter of Rajdhani coach is –
(a)20.0mm (b)**25.0mm** (c)30.0mm (d) 35.0mm

33.When brake is manually released by QRV, which pressure will be vent out?
(a) BC pressure (b) AR pressure (c)BP pressure (d) **CR pressure**

34.What is the pressure of control reservoir in coaching trains?
(a)6.0 Kg/cm^2 (b)5.0Kg/cm^2 (c)6.0to.2Kg/cm^2 (d) 4.8Kg/cm^2

35.In coaching trains, auxiliary reservoir is charged to -
(a)5.0Kg/cm^2 (b)**6.0**Kg/cm^2 (c)4.8Kg/cm^2 (d) 5.5Kg/cm^2

36.Brake pipe throughout the length of train is charged with compressed air at -
(a)6.0Kg/cm^2 (b)5.8Kg/cm^2 **(c)5.0**Kg/cm^2 (d) 4.8Kg/cm^2

37.Feed pipe throughout the length of train is charged with compressed air at -
(a)6.0kg/cm2 (b)5.5kg/cm2 (c)5.0kg/cm2 (d) 4.8kg/cm2

38.After brake application, the control reservoir is disconnected from the -
(a) **Brakepipe** (b) Auxiliary reservoir (c) Brake cylinder (d) Feed pipe

39.After the brake application, the auxiliary reservoir is however continuously charged from feed pipe at -
(a)5.0Kg/cm^2 (b)4.8Kg/cm^2 (c)5.8Kg/cm^2 **(d) 6.0**Kg/cm^2

40.Reduction in BP pressure for minimum application is -

(a)1.0to1.5Kg/cm^2 (b)0.8to1.0Kg/cm^2 **(c)0.5to0.8**Kg/cm^2 (d)0.1to05Kg/cm^2

41.Reduction in BP pressure for service application is -

(a)1.0to05Kg/cm^2 (b)1.0to1.5Kg/cm^2 (c)0.5to0.8Kg/cm^2 **(d)0.8to1.0**Kg/cm^2

42.Reduction in BP pressure for full service application is -

(a)1.0to1.5 Kg/cm^2 (b)0.8to1.0Kg/cm^2 (c)0.5to0.8Kg/cm^2 (d)0.1to05Kg/cm^2

43.Reduction in BP pressure for emergency application is -

(a)1.0to1.5Kg/cm^2 **(b)1.5to3.8**Kg/cm^2 (c)0.5to0.8Kg/cm^2 (d)3.8to5..0Kg/cm^2

44.Afterbrakereleased,isolatethebrakecylinderfromtheauxiliaryreservoirbythe-

(a) **Distributorvalve** (b)Controlreservoir (c)Brakepipe (d) Feedpipe

45.The colour of brake pipe in coaching trains is -
(a) Black (b) Yellow **(c)Green** (d) White

46.The colour of feed pipe in coaching trains is -
(a) Black (b) Yellow (c)Green **(d) White**

47.Cut off angle cock fitted on the brake pipe is painted -
(a) Black (b) Yellow **(c)Green** (d) White

48.Cut off angle cock fitted on the feed pipe is painted -
(a) Black (b) Yellow (c)Green **(d) White**

49.How many air brake cylinders are fitted in under frame mounted air brake system on every coach?
(a) One **(b)Two** (c) Three (d) None of the above

50.How many dirt collectors are fitted with under frame mounted air brake system on every coach?

(a) **Two** (b) One (c) Three (d) None of the above

51. What is the choke diameter of guard's emergency brake valve?
(a) 4.0 mm **(b) 5.0 mm** (c) 6.0 mm (d) 8.0 mm

52. A device provided in the brake rigging for automatic adjustment of clearance/ slack between brake block and wheel it's called -
(a) Brake cylinder **(b) Brake Regulator** (c) Distributor valve (d) Control Reservoir

53. What type of slack adjuster is used in passenger coaches?
(a) DRV-600 (b) None **(c) IRSA-450** (d) IRSA- 600

54. For testing C3W DV, the AR charging time from 0 to 4.8 kg/cm2 is –
(a) 170 ± 10 sec **(b) 175 ± 30 sec** (c) 280 ± 30 sec (d) 210 ± 20 sec

55. For testing KE type DV, the AR charging time from 0 to 4.8 kg/cm2 is-
(a) 160 to 210 sec (b) 210 to 260 sec (c) 260 to 280 sec (d) 180 to 200 sec

56. For testing C3W DV, the CR charging time from 0 to 4.8 kg/cm2 is –
(a) 170 ± 10 sec **(b) 165 ± 20 sec** (c) 160 ± 10 sec (d) 210 ± 20 sec

57. For testing KE type DV, the CR charging time from 0 to 4.8 kg/cm2 is –
(a) 170 ± 10 sec **(b) 160 ± 40 sec** (c) 160 ± 10 sec (d) 210 ± 20 sec

58. The three-branch pipe attached to common pipe bracket, where the middle pipe lead to
(a) CR (b) DV (c) BC **(d) AR**

59. The help of cut of angle cock, the air pressure in train pipe is exhaust or close-
(a) **True** (b) False (c) None of the above

60. For testing C3W/KE type DV, after full service application. The brake cylinder filling time from 0-to 3.6 kg/cm^2 is-
(a) **3 to 5 sec** (b) 5 to 10 sec (c) 10 to 15 sec (d) 12 to 8 sec

61. For testing C3W/KE type DV, after releasing the brake cylinder release time from max BC pressure from 3.8 ± 0.1 kg/cm^2 to 0.4 kg/cm^2 is –
(a) 3 to 5 sec (b) 5 to 10 sec (c) 10 to 15 sec **(d) 15 to 20 sec**

62. For testing C3W/KE type DV, after emergency application, the brake cylinder filling time from 0 to 3.6 kg/cm2 is –
(a) **3 to 5 sec** (b) 5 to 8 sec (c) 8 to 10 sec (d) 10 to 15 sec

63. During brake release, air from BC goes to

(a) AR (b) CR (c) DV **(d) Atmosphere**

64. What type of isolating cocks are provided in the passenger coaches

(a) **Ball type** (b) Wall type (c) Done type (d) C3W type

65. The diameter of ball in internal ball valve of cut of angle cock is

(a) 15 mm (b) 13 mm (c) 17 mm **(d) 10 mm**

66. At what interval, check for 'A' and 'e' Diamension of passenger coach?

(a) **Every trip** (b) Two month (c) Three month (d) Six month

67. At what schedule, the manual brake release test is carried out on every coach of the rake?

(a) 'C' schedules **(b) 'A' schedule** (c) 'B' Schedule (d) Special schedule

68. At what schedule, testing of pressure gauge and replacement of the defective or accurate gauge (for SIR/ guard compartment)?

(a) **'C' schedules** (b) 'A' schedule (c) 'B' Schedule (d) Special schedule

69. What type of grease to be used after cleaning and inspection all parts of slack adjuster?

(a) **Servo-gem-4** (b) Graphite grease (c) Servo- germ-RR-3 (d) None of the above

70. The type of dirt collector, used in bogie mounted passenger coach is -

(a) **2-way** (b) 4-way (c) 3-way (d) Single way

71. The total no. of MU washer used in a twin pipe passenger coach in a rake is - (a) 3 **(b) 4**
(c) 2 (d) 6

72. At what schedule, when single car test is carried out -

(a) **'C' schedules** (b) 'A' schedule (c) 'B' Schedule (d) None of the above

73. In single car leakage test, the air pressure drop should not exceed –

(a) 0.35 kg/cm^2/min **(b) 0.2** kg/cm^2/min (c) 0.28 kg/cm^2/min (d) 0.3 kg/cm^2/min

74. At what interval, test rig or with a locomotive testing is carried out -

(a) Every round trip (b) One month (c) Three month **(d) Six month**

75. When DV is working condition the position of DV handle is –

(a) Horizontal (b) Inclined **(c) Vertical** (d) Parallel

76. As per population of air brake stock the percentage of distribution valve should be kept as spares –

(a) 10% **(b) 5%** (c) 2% (d) 10%

77. The en-route brake power percentages of M/E BG coaching train is –

(a) 85% **(b) 90%** (c) 100% (d) Not specified

78. The en-route brake power percentages of passenger BG coaching train is –

(a) 85% (b) 90% (c) 100% **(d) Not specified**

79. What shall be the identification next to the coach number at the coach side shall be painted; Air coaches with 24 V?

(a) Y **(b) AY** (c) A (d) No marking

80. What shall be the identification next to the coach number at the coach side shall be painted; Air

brake coaches with 110 V?

(a) Y (b) AY **(c) A** (d) No marking

81. What is the capacity of control reservoir of passenger coach?

(a) 6.0 litre (b) 7.0 litre **(c) 9.0 litre** (d) 10.0 litre

82. Length of air braked Hose is –

(a) 790 mm (b) 660 mm **(c) 839 mm** (d) 844 mm

83. What should be the effective maximum pressure in brake cylinder during full service application is

(a) 3.6 ± 0.1 Kg/cm^2 (b) 3.7 ± 0.1 Kg/cm^2 **(c) 3.8 ± 0.1 K**g/cm^2 (d) 4.1 ± 0.1 Kg/cm^2

84. DV is directly mounted on -

(a) AR (b) Brake pipe (c) Brake cylinder **(d) Common pipe bracket**

85. Which component supplies compressed air to DV?

(a) FP (b) AR (c) BP **(d) Main valve**

86. Which one of the following valve in DV controls charging of CR?

(a) Main valve (b) **Cut off valve** **(c)** Quick service valve (d) Limiting device

87. Arrange the following parts of BC in the sequence they are arranged in BC assembly-

(i) Dome cover (ii) Wear ring (iii) Spring (iv) Piston packing

(a) i,iii,ii,iv (b) i,ii,iv,iii (c) iv,iii,ii,i (d) iv,i,ii,iii

88. 'A' dimension of high speed air brake coach is-

(a) 24+4/-0 mm (b) 26+3/-0 mm

(c) 22+4/-0 mm (d) 20±5 mm

89. The angle cock of wagon can be fitted on coach provided it is having?

(a) Nut (b) Nut & Bolt

(c) Reducer (d) **Reducer with inner & outer threads**

90. Cut of angle cock is open position of handle is –

(a) **Parallel to pipe** (b) Parallel to pipe or perpendiculars to

(c) Pipe perpendicular to pipe (d) None of the above

91. The full from of CR is –

(a) Central reservoir (b) cylindrical reservoir

(c) Control reservoir (d) None of the above

92.Full from of AR is –

(a) Accidentreservoir
(b) Axle reservoir
(c) Auxiliary reservoir
(d) None of the above

93.In air brake system of coach, the following is fitted?

(a) 1BP 1FP 1DC
(b) 1BP 2FP 1DC
(c) 1BP 1FP 2DC
(d) 2BP 2 BP 2DC

94.In air brake system of one coach, How many MU washers are fitted?
(a) **Four MU washer**
(b) Three MU washer
(c) Two MU washer
(d) None of the above

95.Control reservoir in air brake system is –

(a) To control FP pressure
(b) To control DV valve
(c) **To control Brake system**
(d) None of the above

96.Auxiliary reservoir is assisting in –

(a) Charging of DV
(b) Charging of BP
(c) Sending air to BC
(d) Charging of CR

97.Air hose can be connected to –

(a) FP cut of angle cock
(b) BP cut of angle cock
(c) **BP & FP cut of angle cock**
(d) None of the above

98.The Driver reduced the BP pressure by 1.2 Kg/cm2, then it is called?
(a) **Full Service application**
(b) Service application
(c) Emergency application
(d) None of the above

99.Dirt Collector should be cleaning within –

(a) At the time of IOH
(b) At the time of 'A' schedule
(c) At the time of POH
(d) At the time of 'B' schedule

100.In air brake system, brake should apply when the rate of drop of air pressure in BP is –
(a) 0.6Kg/cm^2/min **in six sec**
(b) 0.3 Kg/cm^2 in one sec
(c) 0.4Kg/cm^2 in one sec
(d) 0.1 Kg/cm^2 in one sec

101.In air brake system, brake should not apply when the rate of drop of air pressure in BP is

(a) **0.3**Kg/cm^2 **in 60 sec**
(b) 0.4 Kg/cm^2 in 4 sec
(c) 0.5Kg/cm^2 in 30 sec
(d) 0.8 Kg/cm^2 in 8 sec

102.The function of main valve of C3W type DV is to supply requisite amount of pressure into the brake cylinder when –

(a) **BP pressure is reduced** (b) FP pressure is reduced

(c) CR pressure is reduced (d) BP & FP is also reduced

103.The main valve in DV exhausts pressure from brake cylinder to atmosphere, when–

(a) **BP pressure is raised** (b) BP pressure is reduced

(c) FP pressure is reduced (d) FP pressure is raised

104.The function of non-return valve used in air brake system is –

(a) To reduce BP (b) **To prevent flow of air from AR to FP**

(c) To prevent CR to be charged (d) To prevent flow of air from CR to BP

105.The trouble shooting for twin pipe system is -

(a) By pass AR (b) Isolate DV and release brake

(c) Release BC and open vent plug (d) **Isolate AR, DV and release brake**

106.What do you mean of SCTR?

(a) Single Car test rubber (b) Sliding car test rig
(c) Single car test rig (d) None of the above

107.What do you mean of SCTD?

(a) **Single Car test device** (b) Single container tensile data

(c) Schematic car test data (d) None of the above

108.The last step of releasing in conventional air brake system brake after brake binding is

(a) Open vent plug of BC **(b) Take out pin of palm end**

(c) Rotate SAB (d) Take out pin of SAB

109.For releasing brakes, SAB is rotated to -

(a) Clock wise **(b) Towards trolley in anti clockwise**

(c) Towards trolley in clockwise (d) Anti clockwise

110.To uncouple BP or FP air hose it is essential to –

(a) **Close adjacent angle cocks** (b) Open adjacent angle cocks

(c) Close supply of air from loco (d) None of the above

111.BC vent plug is used for -

(a) Brakeapplication (b) Air leakage to stop

(c)Brakerelease (d) Air pressuremaintenance

112.For bypass the special device essential is –

(a) **ForIP&BPconnector** (b) FP & BP exhauster

(c)FP&BPreducer (d) BP & FP jointer

113.What shall be function of check valve of C3W distributor valve?

(a) ChargingtheCR **(b) To prevent back flow of AR**

(c) Charging the BC (d) None of the above

114.Cut of angle cock can be fitted with

(a) Brake pipe **(b) Feed pipe & brake pipe both**

(c)Feedpipe (d) None of the above

115.The control reservoir is mounted on the face of -

(a) Distributionvalve **(b) Common pipe bracket**

(c)Brakepipe (d) Auxiliary reservoir

116.he function of dirt collector is to segregate dirt particle from the air -

(a) AftercomingDV **(b) Before coming DV**

(c) Both (a) & (b) (d) None of the above

117.The MR pressure of engine should be

(a)8.0to10.0 Kg/cm^2 (b) 6.0 to 8.0Kg/cm^2

(c)10.0to12.0Kg/cm^2 (d) 12.0 to 15.0 Kg/cm^2

118.In air brake system branch pipe of DV to BC via common pipe bracket is –

(a) At the top **(b) At thebottom**

(c)Inmiddle (d) None of the above

119.In air brake system branch pipe of DV to AR via common pipe bracket is –

(a) Atthebottom **(b) Inmiddle**

(c)Atthetop (d) None of the above

120.The position of handle to open angle cock is –

(a) **Parallel to pipeline** (b) Perpendicular to pipeline

(c)Centertopipeline (d) None of the above

121.The position of handle to closed cut of handle

(a) **Perpendicular to pipe line** (b) Parallel to pipe line

(c) Center to pipe line (d) None of the above

122.Which equipment are not charged, when DV is isolated

(a) **Control reservoir and brake cylinder** (b) Brake cylinder

(c) Control reservoir auxiliary reservoir (d) Auxiliary reservoir and brake cylinder

123.In air brake system sensitivity test is performed to know –

(a) **Working sensation of DV to decided valve**. (b) The release time of brake.

(c) Leakage in BC pressure. (d) Release time BC piston stroke.

124.If there is leakage of air from outlet Guard van valve when handle is in off position than the reason can be –

(i) Ball seat arrangement is sticky (ii) Ball fitting is eccentric

(iii) Ball has developed scratches. (iv) Seat rings are damaged.

(a) i,ii,iii **(b) ii,iii,iv** (c) iii,iv,i (d) iv,i,ii

125.If there is leakage from drain plug of dirt collector than the reason can be –

(a) Filter choked (b) Gasket damaged

(c) Hexagonal nut not full damaged (d) Sealing washer damaged

126.Slow charging from outlet of dirt collector can be due to –

(a) Filter choked **(b) Gasket damaged**

(c) Hexagonal nut not full damaged (d) Sealing washer damaged

127.In a SAB double acting means –

(a) Provided braking action on both the brake shoes

(b) Correct the clearance on both brake shoes

(c) Spindle inside the barrel moves in both direction

(d) Brake shoes clearance is adjusted to its correct value both ways

128.What is the function of SAB?

(a) To developed automatic adjustment

(b) Regulate working of BC.

(c) To provided extra support to brake block

(d) To transfer the push of piston rod.

129. If in BC the piston movement is sticky in both application and release than it can be due to –

(a) Piston return comp spring week.

(b) Hexagonal nuts not equally tighten.

(c) Piston rubber packing running dry

(d) Piston rubber packing cut or worn out.

130. If in brake cylinder there is leakage from front cover joint during brake application than it can be due to–

(a) Piston return comp spring week.

(b) Piston cover not sealed properly.

(c) Piston rubber packing running dry.

(d) Piston rubber packing cut of worn out.

131. If the handle of cutoff angle cock rotates all around and does not stop at specific position that the reason can be –

(a) Leaf spring has lost its compression effect.

(b) Rubber seats are not properly placed

(c) "O" ring defective.

(d) Stopper lug of cap broken or stopper plate defective.

132. If there is a leakage from vent hole in an open position from cutoff angle cock than it can be due to –

(a) Rubber seal are not properly placed.

(b) Both or any of the seal surface is defective.

(c) Any foreign particle sticking on the surface of the ball.

(d) Defective "O" ring has been assembled.

133. What is the function of leaf spring provided in the handle of cut-off angle cock?

(a) To avoid leakage from pipe.

(b) To keep operating handle in off-on position firmly

(c) To maintain properly and easily working of cutoff angles cock.

(d) None of the above

134. What is the function of seating washer in air hose?

(a) Provide strength, which prevent the coupling to open during normal running.

(b) Leak proof joints

(c) To provided support to pipe (Hose) for strength

(d) Supply air to various components.

135.The vent hole, provided in the cut off angle cock to (when angle cock is closed)

(a) Exhaust air pressure of air hose into atmosphere
(b) The amount of vacuum

(c) None of the above

136.POH periodically of DV is

(a) 3 year or 8 lacks km which ever is earlier
(b) 5 year or 6 lacks km which ever is earlier

(c) 4 year

(d) 4 year or 4 lacks km which ever is earlier

137.If DV is having leakage

(a) Close the isolating cock of the AR

(b) Close the isolating handle of DV

(c) Close the isolating cock of the BP branch pipe
(d) None of the above

138.Air hose pipe are connected to

(a) Feed pipe cut of angle cock

(b) Brake pipe cut of angle cock

(c) Brake pipe and feed pipe cut of angle cock
(d) None of the above

139.The function of return spring provided in a brake cylinder is –

(a) To push the spring out side the piston

(b) To push the piston inside the cylinder
(c) To push the deadlever

(d) To push the controlrod

140.'E' dimension is measured to –

(a) **From protection tube to 'V' grove made on the spindle rod**.

(b) From control rod to anchor pin.

(c) From SAB barrel tube 'V' grove to control rod.

(d) None of the above.

141.What is the function of SAB?

(a) To maintain the slacks between pull rod and wheel.

(b) To maintain the slack between piston and BC.

(c) To maintain the slack between brake bloke and wheel treads.

(d) None of the above

142.Measured 'A' dimension between-

(a) Control rod head to anchor pin

(b) Pull rod to anchor pin

(c) Pull rod to control rod head

(d) Control rod head and barrel face

143 If the 'A' dimension of the SAB is reduced-

(a) Piston stock is increase.

(b) Piston stock is reduced.

(c) Pistons stock shorter the control rod.

(d) None of the above

144 Warranty period of distributor valve is –

(a) 24 month from the date of delivery or 34 months for date of fitment whichever is earlier

(b) 36 month from the date of delivery or 24 months for date of fitment whichever is earlier

(c) 48 month from the date of delivery or 24 months for date of fitment whichever is earlier

(d) 36 month from the date of delivery or 12 months for date of fitment whichever is Earlier

Answers:

2.001 – (b)	2.002 – (b)	2.003 – (b)	2.004 – (d)	2.005 – (b)	2.006 –(b)
2.007 – (c)	2.008 – (c)	2.009 – (d)	2.010 – (a)	2.011 – (c)	2.012 – (c)
2.013 – (d)	2.014 – (c)	2.015 – (b)	2.016 – (b)	2.017 – (c)	2.018 – (c)
2.019 – (c)	2.020 – (a)	2.021 – (c)	2.022 – (c)	2.023 – (b)	2.024 – (-)
2.025 – (b)	2.026 – (c)	2.027 – (c)	2.028 – (a)	2.029 – (b)	2.030 – (c)
2.031 – (c)	2.032 – (b)	2.033 – (d)	2.034 – (a)	2.035 – (b)	2.036 – (c)
2.037 – (a)	2.038 – (a)	2.039 – (d)	2.040 – (c)	2.041 – (d)	2.042 – (a)
2.043 – (b)	2.044 – (a)	2.045 – (c)	2.046 – (d)	2.047 – (c)	2.048 –(d)
2.049 –(b)	2.050 – (a)	2.051 – (b)	2.052 – (b)	2.053 – (c)	2.054 –(b)
2.055 – (a)	2.056 – (b)	2.057 – (b)	2.058 – (d)	2.059 – (a)	2.060 – (a)

2.061 – (d)	2.062 – (a)	2.063 – (d)	2.064 – (a)	2.065 – (d)	2.066 – (a)
2.067 –(b)	2.068 – (a)	2.069 – (a)	2.070 – (a)	2.071 – (b)	2.072 – (a)
2.073 – (b)	2.074 – (d)	2.075 – (c)	2.076 – (b)	2.077 – (b)	2.078 –(d)
2.079 – (b)	2.080 – (c)	2.081 – (c)	2.082 – (c)	2.083 – (c)	2.084 –(d)
2.085 – (d)	2.086 – (b)	2.087 – (a)	2.088 – (c)	2.089 – (d)	2.090 – (a)
2.091 – (c)	2.092 – (c)	2.093 – (c)	2.094 – (a)	2.095 – (c)	2.096 – (c)
2.097 – (c)	2.098 – (a)	2.099 – (b)	2.100–(a)	2.101 – (a)	2.102 – (a)
2.103 – (a)	2.104 – (b)	2.105 – (d)	2.106 – (c)	2.107 – (a)	2.108 –(b)
2.109 – (b)	2.110 – (a)	2.111 – (c)	2.112 – (a)	2.113 – (b)	2.114– (b)
2.115 – (b)	2.116 – (b)	2.117 – (a)	2.118 – (b)	2.119 – (b)	2.120 – (a)
2.121 – (a)	2.122 – (a)	2.123–(a)	2.124 – (b)	2.125 – (c)	2.126 –(b)
2.127 – (d)	2.128 – (a)	2.129 – (b)	2.130 – (c)	2.131 – (d)	2.132 – (c)
2.133 – (b)	2.134 – (a)	2.135 – (a)	2.136 – (a)	2.137 – (c)	2.138 – (c)
2.139 – (b)	2.140 – (a)	2.141 – (c)	2.142 – (d)	2.143 – (b)	2.144 –(b)

Chapter: 3

1.In air brake coach, PEAV & PEASD is connected to branch pipe is –

(a) FP **(b)BP** (c) BC (d) DV

2.The pulling force required for alarm chain testing should not be more then -

(a) 12 kg (b**)10kg** (c) 20 kg (d) 30 kg

3.On application of pulling force of 6.4 kg, the alarm chain should be –

(a) Work (b)**Notwork** (c) None of the above

4.The drop in vacuum for a vacuum brake rake on pulling of alarm chain is –

(a) 12 –15 cm (b)**13–18cm** (c) 10 –12 cm (d) 9 –18 cm

5.Manually operated pilot vent valve is –

(a) **PEASD** (b) PEAV (c) ACP (d) PEAMTD

6.What is the diameter of control pipe attached from PEASD to PEAV?

(a) 15.0 mm (b)**10.0mm** (c) 20.0 mm (d) 25.0 mm

7.What is the choke size of PEAV is -

(a) 4.0 mm (b) 5.0 mm (c) 6.0 mm **(d)8.0mm**

8.What is the chock size of Guard emergency brake valve?

(a)8.0mm (b)6.0mm (c)5.0mm (d)4.0mm

9.Passenger emergency alarm signal device are mounted on the –

(a) Underframe (b)sidepanel **(c)endwall** (d) Roofpanel

10.At what schedule, the over hauling and testing of alarm chain apparatus is –

(a)'A' schedule (b) **'B' schedules**

(c)'C' schedule (d) Special schedule

11.The full name of PEAV is –

(a) Powerenergyvalve (b) Passenger entrance valve

(c) **Passenger emergency alarm valve** (d) Pipe emergencyvalve

12.The full name of ACP is –

(a) Air condition pipe (b) Air coolerpipe

(c) **Alarm chain-pulling** (d) Air cylinderpiston

13.After ACP, it is reset and brakes are released by-

(a) DV quickreleased valve (b) ISO lastinghandle

(c**)PEAV** (d) PEASD

14.The pulling force required for alarm chain application should be more then – (a) 7–15kg

(b) **7 –10kg**

(c) 7–12kg (d)7–18kg

15.In alarm chain, the pull applied vertically downward a drop of vacuum to the extent of –

(a) 110mm to 130mm **(b) 130 mm to 180 mm**

(c)140mmto170mm (d) 150 mm to 200 mm

16.What shell be the periodical overhauling of the alarm signal apparatus for each coach?

(a) Every one month **(b) Every three month**.

(c)Every six month (d) Every one year

17.The full name of PEASD is –

(a) Passenger emergency alarm shut down

(b) Passenger emergency alarm signal device

(c) Passenger entrance admission signal device

(d) Passenger emergency admission signal device

18.PEAV & PEASD can be isolated by-

(a) Isolate isolating cock between branch pipe of BP & DV

(b) Isolate isolating cock between branch pipe of FP& BP

(c) Isolate isolating cock fitted in branch pipe

(d) Isolate isolating cock of BC

Answers:

3.01 – (b)	3.02 – (b)	3.03 – (b)	3.04 – (b)	3.05 – (a)	3.06 – (b)
3.07 – (d)	3.08 – (a)	3.09 – (c)	3.10 – (b)	3.11 – (c)	3.12 – (c)
3.13–(c)	3.14 – (b)	3.15 – (b)	3.16 – (b)	3.17 – (b)	3.18 – (c)

Chapter: 4:

1.Primary Spring should be checked with what load?

(a) 3 tons (b) 4 tons (c) 3.5 tons (d**) 3.8 tons**

2.What is the free height of 13 tons bolster spring?

(a)**385 mm** (b)415 mm (c)405 mm (d) 420 mm

3.What is the free height of 16.25 tons axle box spring?

(a)360 mm (b)365 mm (c)**375mm** (d)380 mm

4.What is the free height of non-AC coach axle box spring?

(a)355mm (b)**360mm** (c)367mm (d)370mm

5.What is the inside length of bolster spring suspension hanger in new condiction? (a)380mm (b) **384mm** (c)386mm (d)388mm

6.What is the new diameter of B.S.S hanger pin?

(a)35mm (b)36mm (c)**37mm** (d) 39mm

7.What is the condemning diameter of B.S.S hanger pin?

(a)35mm (b)**35.5mm** (c)36mm (d) 36.5mm

8.Free height of 16.25 tons AC coach bolster spring is –

(a)385mm (b)390mm (c)**400mm** (d) 410mm

9.At what load, the 16.25 tons AC coach bolster spring is –

(a) 4tons (b)**6tons** (c)8tons (d) 10tons.

10.In tare condition axle box spring height of ICF bogie in GS coach is -

(a)260±2mm **(b)**289±4/3mm (c)290±2/4mm (d) 298± 2/3mm

11.Free height of all non-AC ICF type axle box spring is -

(a)375mm (b)372mm **(c)360mm** (d) 315mm

12.Free height of all AC ICF type axle box spring is -

(a)375mm (b)360mm (c)372mm (d) 337mm

13.Free height of high capacity parcel van axle box spring is -

(a)375mm (b)360mm (c)337mm **(d) 315mm**

14.Free height of non-AC ICF type bolster spring is -

(a)375mm **(b)385mm** (c)400mm (d) 416mm

15.Free height of AC ICF type bolster coil spring is -

(a)375mm (b)385mm **(c)400mm** (d) 416mm

16.Free height of high capacity parcel van bolster coil spring is -

(a)375mm (b)386mm **(c)393mm** (d) 286mm

17.What is co lour code of 'A' group coil spring is

(a) **Yellow** (b)Green (c)oxfordblue (d) White

18. What is co lour code of 'B' group coil spring is -

(a) **Oxfordblue** (b)White (c)Green (d) Yellow

19.What is co lour code of 'C' group coil spring is -

(a) Oxfordblue (b)White **(c)Green** (d) Yellow

20.Whatshouldbetheheightof13tonsbolsterspringwithaloadof3.8tons? (a)280to285 mm (b) 287 to 300 mm

(c)**287to306mm** (d)300to310mm

21.Whatshouldbetheheightof16.25tonsaxleboxspringwithaloadof3.0tons? (a)260to280mm (b) 280 to 290 mm

(c)**256to275mm** (d)246to256mm

22.Whatshouldbetheheightofaxleboxspringwithcheckloadof3tons? (a)**267to284 mm** (b) 270 to 290 mm

(c)290to300mm (d) None of the above

23.Capacity of hydraulic shock absorber other than power car is -

(a) **±600kgataspeedof10cm/sec** (b) ± 500 kg at a speed of 10 cm/sec

(c)±45kgataspeedof15cm/sec (d) none of the above

24.Which types of suspension are used in double acting telescopic type shock absorbers?

(a) Primary suspension **(b) Secondarysuspension**

(c)Primary&Secondarysuspension (d) None of the both

4.01 – (d)	4.02 – (a)	4.03 – (c)	4.04 – (b)	4.05 – (b)	4.06 – (c)
4.07 – (b)	4.08 – (c)	4.09 – (b)	4.10 – (b)	4.11 – (c)	4.12 – (a)
4.13 – (d)	4.14 – (b)	4.15 – (c)	4.16 – (c)	4.17 – (a)	4.18 – (a)
4.19 – (c)	4.20 – (c)	4.21 – (c)	4.22 – (a)	4.23 – (a)	4.24 –(b)

CHAPTER -5

1.The no. of brake cylinder fitted in a coach bogie mounted air brake system is -

(a) One (b) Two **(c) Four** (d) None of the above

2.What is the diameter of brake cylinder of bogie mounted brake system - (a) 12" (b) 10"

(c) 9" **(d) 8"**

3.External slack adjuster have been eliminated in bogie mounted air brake system

(a) True (b)False (c) None of the above

4.Piston stroke (coach) of bogie mounted brake cylinder is –

(a) 28 mm **(b) 32 mm** (c) 36 mm (d) 38 mm

5. In bogie mounted brake system, what is the diameter of pneumatic pipeline has been lied over bogie frame to inner connect the brake cylinder of one bogie?

(a) 20mm (b) 22mm (c) 18mm **(d) 15mm**

6.The average coefficient of friction of composite brake block is –

(a) 0.20 **(b) 0.25** (c) 0.30 (d) 0.35

7.In BMBS hole adjustment of curved pull rod to be done when wheel diameter reaches to -

(a) 839 mm (b) 842 mm (c) 846 mm (d) None of the above

8.In BMBC snout position is –

(a) 9.0' Clock (b) 10.0' Clock (c) 11.0' Clock (d) None of the above

Answers:

5.01 – (c) 5.02 – (d) 5.03 – (a) 5.04 – (b) 5.05 – (d) 5.06–(b)
5.07 – (a) 5.08 – (a)

CHAPTER - 6

1.What is the berth capacity of AC-2- Tier LHB coach?

(a) **54**berth (b) 72 berth (c) 46 berth (d) 64 berth

2.Berth capacity of AC-3-Tier LHB coach is –

(a) 54 berth **(b) 72** berth (c) 46 berth (d) 64 berth

3.Length over body of LHB coach is –

(a)21770mm (b)21337mm **(c) 23540 mm** (d) 25540 mm

4.Maximum width of LHB coach is –

(a)3250mm **(b)3240mm** (c)3245mm (d) 3325 mm

5.Height over roof of LHB coach is –

(a)4039mm (b)4025mm (c)4026mm (d) 4047 mm

6.What is the length over buffer of LHB coach?

(a)2444mm (b)2424mm (c)22100mm **(d) 24000mm**

7.Rigid wheelbase of LHB coach is –

(a)2560mm (b)2896mm (c)2444mm (d)2440mm

8.Distance between Inner axle distances of LHB coach are –

(a)12344mm **(b) 12340 mm** (c)12445mm (d) 14783 mm

9.What is the bogie center distance or flexible wheelbase of LHB coach?

(a)12340mm (b)14783mm **(c)14900mm** (d) 14770mm

10.No of the toilet provided in LHB coach is –

(a)Four (b) Two **(c)Three** (d) None of the above

11.Maximum CBC height drop under load and worn condition of LHB coach is –

(a)70mm **(b)75mm** (c) 78mm (d) 82mm

12.Which bogies are provided for higher passengers ride index comfort?

(a) ICF(allcoil) (b)IRS type (c) BEML type **(d) Fiat–SIG type**

13.Maximum ride index of LHB coach is –

(a)2.75 **(b)3.25** (c)3.65 (d) 3.45

14.The slide valve of controlled discharge toilet of LHB coach opens automatically at speeds above –

(a)10.0Km/h (b)20.0Km/h **(c)30.0**Km/h (d) 45.0Km/h

15.What is the thickness of flooring panels of LHB coach?

(a)10.0mm (b)18.0mm (c)**16.0mm** (d) 20.0mm

16.New disign features of LHB coach having speed of 160 KMPH upgradable upto – (a) 180 Km/h **(b)**

200 Km/h (c) 210 Km/h (d) 220 Km/h

17.How much length of LHB coach is increased in compression of ICF coach?

(a) Appx-2.0 meter (b) Appx-3.0 meter (c) Appx-1.5 meter (d) None of the above

18.Braking distance of LHB coach from a speed of 160 KMPH is –

(a) 800 m (b) 1000 m **(c) 1200m** (d) 1500 m

19.Nos of yaw dampers in LHB coach are –

(a) 01 **(b) 02** (c) 03 (d) 04

20.At what interval for amenity fitting repair/replacement schedule for all type of LHB coach?

(a) Three month **(b) Six month** (c) One month (d) One year

21.Maximum tare weight of the LHB coach is –

(a) 40.28 t **(b) 41.31t** (c) 41.88 t (d) 42.03 t

22.Condemning wheel diameter of LHB coach is –

(a) 813 mm (b) 840 mm **(c) 845 mm** (d) 874 mm

23.How many type water tanks are provided in LHB coach?

(a) One type **(b) Three type** (c) Two type (d) Four type

24.Water supply in wash basin is controlled by in LHB coach is –

(a) Digital switch (b) **Electromagnetic switch** (c) Analog switch (d) Both a&b

25.The roof seat, side wall seat and end floor seat are fabricated of –

(a) Cast steel (b) Silicon steel (c) Mild steel **(d) Stainless steel**

26.The under frame of LHB coach is fabricated of –

(a) Cast steel (b) Silicon steel **(c) Mild steel** (d) Stainless steel

27.Codal life of LHB coach is –

(a) 40 year (b) 45 year **(c) 50 year** (d) 60 year

28.Piston stroke of brake cylinder of LHB coach is –

(a) 8-10mm (b) 15-20 mm (c) 22-25 mm (d) 30-32 mm

29.How many speed sensors have been provided in LHB coaches wheel?

(a) Two (b) Three **(c) Four** (d) Five

30.Diameter of chock in PEAV of LHB coach is –

(a) 10.0 mm (b) 15.0 mm **(c) 19.0mm** (d) 22.0 mm

31.The capacity of air reservoir of LHB coach is –

(a) 125litre (b) 150 litre (c) 175 litre (d) 200 litre

32.Every wheel is provided Dump valve –

(a) 01No. (b) 03 No. (c) 04 No. (d) None

33.The brake accilater are fitted in –

(a) BP (b) FP (c) DC (d) DV

34.How many sliding valve in CDTS system?

(a) 01 **(b) 02** (c) 03 (d) 04

35.The CDTS resaved the compressed air from –

(a) Services Reservoir (b) Main Reservoir

(c) Auxiliary Reservoir (d) None of the above

36.What type of coupler used in LHB coaches?

(a) 'H' type coupler (b) **Tightlockcouplerwithanticlamping feature**

(c) CBC type (d) None of the above

37.Heightofcenterlineofcouplerfromraillevelundertareconditionof LHBcoachis–

(a)1105+0/-15mm (b) 1095+0/-15 mm

(c) 1110±15 mm (d) 1110±5 mm

38.What do you mean by CDTS?

(a) Control distancetesting system **(b) Controlled discharge toilet system**

(c) Compact disc type system (d) None of the above

39.At what interval of schedule 'Q' for all type LHB coaches?

(a) Onemonth±15days **(b) Three monthly±15 days**

(c) Sixmonthly±15days (d) Yearly ± 30 days

40.At what interval for IOH (SS-I) of all type LHB coach?

(a) Onemonth±15days (b) Three monthly±15 days

(c) Sixmonthly±15days **(d) Yearly ± 30 days**

41.At what interval for POH (SS-II & SS-III) of all type LHB coach?

(a) Twoyearly±60days (b) Three monthly±30 days

(c) Sixmonthly±30days (d) Yearly ± 60 days

42. How many brake pipe connection and feed pipe connection is provided in each of the coach?

LHB

(a) 1 FP and 1 BP on one end

(b) 2 FP and 2 BP on one end

(c) 2 FP and 2 BP on each end

(d) 2 BP and 1 FP on each end

43 Why inbuilt slack adjuster of BMBC is called single acting –

(a) Because at take up the slack in return spring

(b) Because at take up the slack is not return spring

(c) Both a & b

(d) None of the above

6.01 – (a)	6.02 – (b)	6.03 – (c)	6.04 – (b)	6.05 – (a)	6.06 –(d)
6.07 – (a)	6.08 – (b)	6.09 – (c)	6.10 – (c)	6.11 – (b)	6.12 –(d)
6.13 – (b)	6.14 – (c)	6.15 – (c)	6.16 – (b)	6.17 – (a)	6.18 – (c)
6.19 – (b)	6.20 – (b)	6.21 – (b)	6.22 – (c)	6.23 – (b)	6.24 –(b)
6.25 – (d)	6.26 – (c)	6.27 – (c)	6.28 – (a)	6.29 – (c)	6.30 – (c)
6.31 – (a)	6.32 – (a)	6.33 – (a)	6.34 – (b)	6.35 – (a)	6.36 –(b)
6.37 –(a)	6.38 – (b)	6.39 – (b)	6.40 – (d)	6.41 – (a)	6.42 – (c)
6.43 –(b)					

CHAPTER 1

1. The standard wheel gauge of Goods wagon is-

(a) 1602 mm (b) 1601 mm (c) 1600 mm (d) 1599 mm

2. The minimum wheel gauge of Goods wagon is-

(a) 1599 mm (b) 1601 mm (c) 1600 mm (d) 1602 mm

3. The maximum wheel gauge of Goods wagon is-

(a) 1601.5 mm (b) 1600 mm (c) 1598.5 mm (d) 1602 mm

4. Permissible variation in new wheel tread diameter for four-wheeled trolley on the same axle on BG bogie wagon is -

(a) 0.45 mm (b) 0.5 mm (c) 0.35 mm (d) 0.3 mm

5. Permissible variation in wheel tread diameter for four-wheeled trolley on the same trolley on BG bogie wagon while changing the wheel is -

(a) 10 mm (b) 13 mm (c) 12 mm (d) 15 mm

6. Permissible variation in wheel tread diameter for four-wheeled trolley on the same wagon on BG bogie wagon while changing the wheel is -

(a) 13 mm (b) 25 mm (c) 30 mm (d) 28 mm

7. Permissible variation in new wheel tread diameter for six-wheeled trolley on the same axle on BG bogie wagon is -

(a) 0.45 mm (b) 0.50 mm (c) 0.35 mm (d) 0.48 mm

8. Permissible variation in wheel tread diameter for six-wheeled trolley on the same trolley on BG bogie wagon while changing the wheel is -

(a) 5.0 mm (b) 6.0 mm (c) 10.0 mm (d) 8.0 mm

9. Permissible variation in wheel tread diameter for six-wheeled trolley on the same wagon on BG bogie wagon while changing the wheel is -

(a) 6 mm (b) 13 mm (c) 12 mm (d) 15 mm

10. Permissible variation in new wheel tread diameter for six-wheeled unit on the same axle on BG bogie wagon wheel is -

(a) 0.8 mm (b) 0.5 mm (c) 0.6 mm (d) 0.7 mm

- 11.Permissible variation in wheel tread diameter for six-wheeled unit on the same trolley on BG bogie wagon while changing the wheel is -

  (a)4.0mm (b)8.0mm (c)6.0mm (d) 10.0mm
- 12.Permissible variation in wheel tread diameter for six-wheeled unit on the same wagon on BG bogie wagon while changing the wheel is -

  (a)4.0mm (b)5.0mm (c)6.0mm (d) 8.0mm
- 13.Permissible variation in new wheel tread diameter for four-wheeled unit on the same axle on BG bogie wagon is -

  (a)0.3mm (b)0.5mm (c)0.7mm (d) 0.6mm
- 14. Permissible variation in wheel tread diameter for four-wheeled unit on the same wagon on BG bogie wagon while changing the wheel is -

  (a)10mm (b)15mm (c)20mm (d) 25mm
- 15.The composite Brake block in yard for air Bk. train should be changed when thickness is- (a)10.0mm (b)15.0mm (c)20.0mm (d) 25.0mm
- 16. The Std. Gap between wheel & bk. Block in BOX wagon is -

  (a)8mm (b)8.5mm (c)6.25mm (d) 6.8mm
- 17.Of which brake van the quick coupling is the part-

  a. BVZT (b)BVZX (c)BVZC (d) BVZM
- 18. The 'f' type vacuum cylinder of 533- mm diameter is used in -

  a. BWL (b)Box (c)BRH (d) BOXN
- 19.In BOX/BCXT wagon the distance between Headstock & end of train pipe is -

  (a)200mm (b)216mm (c)300mm (d)516mm
- 20.What is the length over Headstock of the BOXN wagon?

  (a)9774mm (b)9784mm (c)9777mm (d) 9848mm
- 21. Tare weight of the BOXN wagon is -

  (a)22.37tons. (b)22.47tons. (c)22.91tons. (d) 22.90tons.
- 22. Tare weight of the BRN wagon is -

  (a)25.2tons. (b)24.4tons. (c)23.80tons. (d) 24.80tons.

- 23. What is the length over couplers of the BOXN wagon?

  (a)10713mm (b)10813mm (c)11002mm (d) 10100mm

- 24.What is the length over couplers of the BCN wagon?

  (a)15400mm (b)15443mm (c)15429mm (d) 15562mm

- 25.What is the length over coupler s of the BRN wagon?

  (a)14645mm (b)14564mm (c)14332mm (d) 14463mm

- 26. Gross load of the BOXN wagon is -

  (a)78.92t (b)81.28t (c)86.78t (d) 88.81t

- 27.Gross load of the BRN wagon is -

  (a)78.92t (b)81.28t (c)81.3t (d) 82.4t

- 28.Axle load of the brake van goods (BVG) is -

  (a)14.2t (b)15.3t (c)16.3t (d) 16.9t

- 29.What is the wheel diameter on tread of the brake van goods (BVG)?

  (a)1000mm (b)1050mm (c)1060mm (d) 1090mm

- 30.In accident manual, train parting is under –

  a. J3class (b)J4class (c)J5class (d) J10class

- 31.Overall height of BOBR wagon from rail level is –

  (a)3735mm (b)3998mm (c)4324mm (d) 4532mm

- 32.In what type of depot, the ROH of air brake wagon should not be carried out -

  a. 'A' category (b)'B' category (c)'C' category (d) 'D' category

- 33.In welding repair in UIC trolley, what RDSO pamphlet is used?

  (a) R9 (b) R7 (c) R10 (d) R21.42

- 34.Minimum pressure required for door operation on BOBR wagon is –

  (a)5.0kg/cm^2 (b)4.92kg/cm^2 (c)3.9kg/cm^2 (d) 6.3kg/cm^2

- 35.The 'F' type vacuum cylinder of 560 mm diameter used in –

  a. BWL (b)BOBX (c)BOX (d) BVG

- 36.What is the diameter of side operated hand brake wheel for BOXN wagon is –

  (a)630mm (b)610mm (c)620mm (d)600mm

- 37.Tare weight of the BCN wagon is -

  (a)22.47tons. (b)25.37tons. (c)27.20tons. (d) 27.80tons.

- 38.What type of draw gear used in brake van goods (BVG)?

  a. Screw coupling (b) CBC (c) HT coupling (d) NT coupling

- 39.Maximum pressure for door operation on BOBR wagon should not exceed -

  (a) 8.56 kg/cm2 (b) 8.90 kg/cm2 (c) 9.14 kg/cm2 (d) 9.90 kg/cm2

- 40.Length over buffer/coupler of the brake van match truck (BVM) is –

  (a) 7213 mm (b) 7313 mm (c) 7412 mm (d) 7122 mm

41.Wheel base of the brake van match truck (BVM) is –

(a) 3510 mm (b) 3515 mm (c) 3505 mm (d) 3525 mm

- 42.Newly built BOXN wagon first POH periodicity is –

  a. 4.5 year (b) 5.5 year (c) 6.0 year (d) 6.5 year

- 43. Newly built BLC containers wagon first POH periodicity is –

  a. 4.5 year (b) 2.0 year (c) 6.0 year (d) 3.5 year

- 44. The BOX bogie is designed for an axle load of –

  (a) 20.50 t (b) 20.80 t (c) 20.30 t (d) 20.10 t

- 45. Board gauge track gauge is –

  (a) 1676 mm (b) 1667 mm (c) 1698 mm (d) 1500 mm

- 46. Types of brake system used in brake van goods (BVG) is –

  a. Air brake (b) Dual brake (c) vacuum brake (d) Non of the above

- 47. POH of BG brake van is –

  a. 3.5 year (b) 2.0 year (c) 2.5 year (d) 3.0 year

- 48. Torque value of Cartridge type roller bearing cap screw is –

  (a) 42.0 kg-m. (b) 40.0 kg-m. (c) 38.0 kg-m. (d) 44.0 kg-m.

- 49.The distances between centers of brake cylinder fulcrum bracket and the piston rod eye which shall be –

  (a) 780±5 mm (b) 782±5 mm (c) 784±5 mm (d) 788±5 mm

- 50.The clearance between pins and bushes should not exceed -

  (a) 1.0 mm (b) 0.5 mm

  (c) 1.5 mm (d) None of the above

- 51.Which type of composite brake block is used in freight stock of underframe mounted brake system?

  a. ‘K’ type (b) ‘L’ type

  (c) ‘KL’ type (d) ‘Modified K ’ type

- 52.During rolling out examination, it is seen that -
  a. Flat place on tyre (b) Smoke is coming from axle box
  (c) No brake binding (d) Broken spring
- 53.After RDSO Recommendation, What material in used BVG brake van in place of wood dust bag?
  a.Glass wool (b) Cotton wood
  (c) Steel wood (d) None of the above
- 54.Broad gauge roller bearing radial clearance is –
  (a) 123 to .132mm (b) 0.132 to 0.145mm
  (c) 0.145 to 0.19mm (d) 0.19 to 0.25mm
- 55.C- class ODC shall be moved during –
  a.Day light (b) Day-night time
  (c) Only night time (d) None of the above
- 56. What type of coupler used in brake van match truck (BVM)?
  a.Screw coupling (b) CBC
  (c) Non-transition (d) None of the above
- 57.In air brake system, the thread joints are tightened with which type of tape?
  a.Cello tape (b) Teflon tape
  (c) Paper tape (d) None of the above
- 58.The 'E' type vacuum cylinder of 457mm diameter is used in -
  a.BOBR wagon (b) Box wagon
  (c) Bk. van (d) Four Wheeled wagon
- 59.Instructions for maintenance and operation of BOX wagon, What RDSO's technical pamphlet is used?

  (a) G-71 (b) G-73 (c) G-18 (d) G-16
- 60.What RDSO's technical pamphlet is used, for maintenance manual of Alliance-II coupler?

  (a) G-45H (b) G-78 (c) G-62 (d) G-40
- 61.Instructions for inspection and maintenance of BOXN wagon fitted with CASNUB bogies and twin pipe air brake system, What RDSO's technical pamphlet is used?

  (a) G-90 (b) G-70 (c) G-97 (d) WT-77
- 62.Instructions for inspection and maintenance of BOBR wagon, What RDSO's technical pamphlet is used?

  (a) G-73 (b) G-78 (c) G-97 (d) G-16
- 63.Instructions for inspection and maintenance of CASNUB bogies, What RDSO's technical pamphlet is used?

  (a) G-97 (b) G-86 (c) G-90 (d) G-95
- 64. Instructions for inspection and maintenance of Air brake, What RDSO's technical pamphlet is used?

  (a) G-97 (b) G-81 (c) G-73 (d) G-71
- 65.As per Railway Board, In effective percentage of wagon in open line is –

  (a) 3.5% (b) 2.5% (c) 4.0% (d) 10%

- 66. 'A' category depot will issue BPC of CC Rake valid up to Km –

(a) 4500 Km (b) 5000 Km (c) 6000 Km (d) 6500 Km

- 67. Depot, other then 'A' category will issue BPC of CC rake valid up to Km –

(a) 4500 Km (b) 5000 Km (c) 6000km (d) 6500 Km

- 68. what time relaxation of period has been given to a loaded BOX wagon for returning for POH-

a. After 15 days (b) After 30 days (c) Before 30 days (d) before 15 days

- 69. The mini rake will have composition of minimum –

a. 10 wagon (b) 20 wagon (c) 25 wagon (d) 30 wagon

- 70. The free time for loading/unloading of mini rake shall be –

a. 6 Hours (b) 8 Hours (c) 5 Hours (d) 2 Hours

71. The mini rake scheme will be applicable only to –

- a. Covered wagon (b) Open wagon (c) Tank wagon (d) Both of this
- 72. As per new wagon numbering scheme, first two digits will indicate-
- a. Owning Railway (b) Type of wagon (c) Year of manufacture (d) Cheek digit
- 73. what time relaxation of period has been given to a empty BOX wagon for returning for POH-
- a. Before 15 days (b) After 30 days (c) Before 30 days (d) before 15 days
- 74. What do you mean by PME?
- a. Pre medical examination (b) Pre maintenance examination

(c) Periodical maintenance examination (d) Power mechanical equipment

- 75. What do you mean by CC rakes?
- a. Content contact pad. (b) Close circuit rake

(c) Complete coal rake (d) b & c

Answers: Chapter-1

1.01–(c)	1.02–(a)	1.03–(d)	1.04–(b)	1.05 – (b)	1.06 – (b)
1.07–(b)	1.08–(b)	1.09–(a)	1.10–(b)	1.11 – (c)	1.12 – (c)
1.13–(b)	1.14–(d)	1.15–(a)	1.16–(c)	1.17 – (c)	1.18 – (c)
1.19–(b)	1.20–(b)	1.21–(b)	1.22–(b)	1.23 – (a)	1.24 – (c)
1.25–(a)	1.26–(b)	1.27–(c)	1.28–(c)	1.29 – (d)	1.30 – (c)
1.31–(a)	1.32–(d)	1.33–(b)	1.34–(b)	1.35 – (c)	1.36 – (b)
1.37–(c)	1.38–(a)	1.39–(c)	1.40 –(a)	1.41 – (c)	1.42 – (c)
1.43–(c)	1.44–(c)	1.45–(a)	1.46–(c)	1.47 – (b)	1.48 – (b)
1.49–(b)	1.50–(c)	1.51–(b)	1.52–(c)	1.53 – (a)	1.54 – (c)
1.55–(a)	1.56–(b)	1.57–(b)	1.58–(d)	1.59 – (d)	1.60 – (c)
1.61–(b)	1.62–(a)	1.63–(d)	1.64 –(a)	1.65 – (b)	1.66 – (c)
1.67–(a)	1.68–(b)	1.69–(b)	1.70–(c)	1.71 – (a)	1.72 – (b)
1.73–(c)	1.74–(c)	1.75 – (b)			

CHAPTER-2:

1. The minimum permissible buffer height above rail line to center of H/Stock under loaded condition is -

(a) 1105 mm (b) 1145 mm (c) 1115 mm (d) 1030 mm

2. Standard buffer projection from Headstock is -

(a) 650 mm (b) 635 mm (c) 620 mm (d) 660 mm

3.Min Permissible buffer projection from Headstock is-

(a) 635 mm (b) 605 mm (c) 590 mm (d) 584 mm

4.Standard diameter of knuckle pivot pin is -

(a) 50 mm (b) 43 mm (c) 41.28 mm (d) 34 mm

5.Permissible diameter of knuckle pivot pin is -

(a) 41 mm (b) 38.5 mm (c) 39.5 mm (d) 40.5 mm

6.Standard diameter of Clevis pin is -

(a) 35 mm (b) 38 mm (c) 39 mm (d) 37 mm

7.Permissible diameter of Clevis pin is -

(a) 35.8 mm (b) 38.5 mm (c) 36.5 mm (d) 37 mm

8.Standard dimension of shank wear plate for AAR coupler is -

(a) 12 mm (b) 8 mm (c) 6 mm (d) 14 mm

9.Standard dimension of distance between the nose of Knuckle and guard arm is -

(a) 140 mm (b) 150 mm (c) 127 mm (d) 12 mm

10.Wear limit of distance between the nose of Knuckle and guard arm is -

(a) 140 mm (b) 155 mm (c) 125 mm (d) 130 mm

11.For goods train, max. Buffer height from rail level is -

(a) 1105 mm (b) 1115 mm (c) 1015 mm (d) 1100 mm

12.The maximum permissible free slack in the draft gear in service is –

(a) 35 mm (b) 30 mm (c) 25 mm (d) 20 mm

13.No. of CBC gauge are –

(a) 5 (b) 8 (c) 12 (d) 2

14.For short case, what shall be the max buffer projection from the Headstock on BG wagon?

(a) 480 mm (b) 456 mm (c) 460 mm (d) 510 mm

15.For short case, what shall be the min. buffer projection from the Headstock on BG wagon? (a) 420 mm (b) 440 mm (c) 410 mm (d) 406 mm

16.What is the max. Permissible wears in Draw Bars shackle pinhole?

(a) 5.23 mm (b) 6.35 mm (c) 7.21 mm (d) 6.69 mm

17.What is the max. Permissible wear in draw Bars cotter pin hole?

(a)10.7mm (b)12.3mm (c)12.7mm (d) 13.1mm

18.What is the weakest link of the center buffer coupler?

(a) Knuckle (b)Draft gear (c)Lock (d) Yoke pin

19.The high capacity draft gears is -

(a) Mark-20 (b)Mark50 (c)CF21 (d) DF39

20.The high capacity draft gears is -

(a)RF361 (b)RF-401 (c)RF-600 (d) RF-21

21.To Adjust buffer height for 930 mm wheel diameter on BCN wagon except CASNUB 22 W, packing piece used is –

(a)38mm (b)37mm (c)33mm (d)32mm

22.What type of center buffer coupler used in Indian Railway?

(a) APRTtype (b)AARPtype (c)AARtype (d) ARPAtype

23.What type of head and shank are used in AAR type center buffer coupler?

(a) E&GType (b)E&FType (c)F&EType (d) H&FType

24.The yield strength of knuckle of material AAR –M- 201 Grade 'C' (STD) is – (a)180t

(b)171t (c)142t (d)132t

25.The yield strength of knuckle of material AAR –M- 201 Grade 'E' (HT) is –

(a)180t (b)171t (c)142t (d)132t

26.The yield strength of coupler body of AAR Grade 'C' (STD) is –

(a)180t (b)169t (c)179t (d) 159t

27.The yield strength of coupler body of material AAR-M- 211 Grade 'E' (HT) is – (a)180t

(b)200t (c)205t (d) 211t

28.The yield strength of the knuckle is 180t compared to 132t in standard coupler the draft capacity of HT coupler is –

(a) 45% higher (b)36% higher (c)22% higher (d) 18% higher

29.The working strength of center buffer coupler is -

(a)100t (b)120t (c)140t (d) 180t

30.The diameter of knuckle pivot pin is –

(a)40.0mm (b)38.0mm (c)37.0mm (d) 35.0mm

31.In(HR-40I)Draftgear,thepackwith11Nosofrubberpadsand10Nosofspacerplates, when assembled in the housing with follower shall not be less then –

(a)638mm (b)632mm (c)660mm (d) 620mm

32.The ultimate tensile strength of coupler body of AAR –M- 201 & 211 Grade 'C' (STD) is –

(a)300t (b)320t (c)290t (d)270t

33.The ultimate tensile strength of coupler body of AAR –M- 201 & 211 Grade 'E' (HT) is-

(a)300t (b)330t (c)320t (d) 370t

34.The ultimate tensile strength of knuckle of AAR-M- 201 & 211 Grade 'C' (STD) is –

(a)240t (b)250t (c)241t (d) 251t

35.The ultimate tensile strength of knuckle of AAR-M- 201 & 211 Grade 'E' (HT) is – (a)250t (b) 280t (c)295t (d) 305t

36.Theconventionalscrewcouplinghasaworkingloadof–

(a)2.9t (b)22.5t (c)24.3t (d) 20.3t

37.The working strength of center buffer coupler is –

(a)180t (b)160t (c)120t (d) 80t

38.The working strength of Alliance –II coupler is -

(a)100t (b)80t (c)70t (d) 54t

39.Which among the buffer gear assembly absorbing the buffer impact?

(a) Bufferspring (b)Plunger (c)Buffercasting (d) Spindle

40.The tractive effort of the Loco to the individual wagons is transmitted with the help of -

(a) CBC (b)Draw gear (c)Knuckle (d) Side frame

41.Material AAR –M- 201 & 211 Grade 'E' coupler is called as –

(a) Hightensile (b)Non-Tensile (c)Standard (d)None of the above

42.Clevis and Clevis pin are the part of –

(a) Alliance- II coupler (b) Non- Transitioncoupler

(c)Transitioncoupler (d) Draw bar

Chapter-2 Answers:

2.01 – (d)	2.02 – (b)	2.03 – (d)	2.04 – (c)	2.05 – (c)	2.06 – (b)
2.07 – (c)	2.08 – (c)	2.09 – (c)	2.10 – (d)	2.11 – (a)	2.12 – (c)
2.13 – (b)	2.14 – (b)	2.15 – (d)	2.16 – (b)	2.17 – (c)	2.18 – (a)
2.19 – (b)	2.20 – (a)	2.21 – (b)	2.22 – (c)	2.23 – (b)	2.24 – (d)
2.25 – (a)	2.26 – (b)	2.27 – (c)	2.28 – (b)	2.29 – (b)	2.30 – (a)
2.31 – (b)	2.32 – (c)	2.33 – (b)	2.34 – (d)	2.35 – (c)	2.36 – (b)
2.37 – (c)	2.38 – (d)	2.39 – (a)	2.40 – (b)	2.41 – (a)	2.42 – (c)

Chapter-3:

1.Standard diameters of wheel on tread on BOXN Wagon is -

(a)1010mm (b)1000mm (c)950mm (d) 906mm

2.Minimum diameters of wheel on tread on BOXN Wagon during service is -

(a)1000mm (b)960 mm (c)906mm (d) 915mm

3.Standard diameter of wheel on treads on BOX Wagon is -

(a)960mm (b)1000mm (c)906mm (d) 860mm

4.Minimum diameter of wheel on treads on BOX Wagon during service is -

(a)860mm (b)960 mm (c)906mm (d) 990mm

5.The axle load of BOXN, BCN, BRN, BOBR, BTPN wagon is -

(a)22.9t (b)20.32t (c)16.6t (d) 12.2t

6.The axle load of BOX, BCX, BRH wagon is -

(a)22.9t (b)20.32t (c)16.3t (d) 12.2t

7.The axle capacity of BVZC, CRT, BTAL, BTAG, BTPGL wagon is -

(a) 22.9t (b) 20.3t (c) 16.3t (d) 12.2t

8.The axle capacity of TPR, TORS, and TCL wagon is –

(a) 22.9t (b) 20.3t (c) 16.3t (d) 12.2t

9.The wheel gauge should be measured on–

(a) Off load condition (b) Loaded wagon (c) Both condition (d) Empty wagon

10.The lowest wheel dia permitted by workshop for BOXN wagon is -

(a) 919 mm (b) 906 mm (c) 925 mm (d) 860 mm

11.In CTRB the grease use per Axle box is -

(a) 455±30 gms (b) 490±15 gms (c) 500±35 gms (d) 550±20 gms

12.Maximums permissible wear on outer collar size of journals 255*127, 254*127, 229*114 are –

(a) 6.0 mm (b) 11 mm (c) 8.0 mm (d) 5.0 mm

13.RDSO has stipulated three intermediate profile BOXN/BCN wagon with flange thickness as 20,22 and -

(a) 28 mm (b) 25 mm (c) 24 mm (d) 23 mm

14.The condemning wheel diameter of BVG is -

(a) 919 mm (b) 906 mm (c) 925 mm (d) 990 mm

15.The condemning diameter of wheel of B0I wagon is -

(a) 990 mm (b) 906 mm (c) 813 mm (d) 860 mm

16.The new diameter of wheel for BOY wagon is -

(a)990mm (b)1090mm (c)1000mm (d) 915mm

17.The condemning diameter of BOBR wheel is -

(a)815mm (b)906mm (c)990mm (d) 860mm

18.The condemning diameter of BTPN wheel is -

(a)813mm (b)990mm (c)906mm (d) 860mm

19.The condemning diameter of BWL wheel is -

(a)813mm (b)906mm (c)915mm (d) 860mm

20.The radius at the root of the flange of new worn wheel profile is -

(a)14mm (b)16mm (c)18mm (d) 120mm

21.Permissible maximum flat surface on tread on other BG wagon are –

(a)75mm (b)60mm (c)75mm (d) 70mm

22.What should be permissible limit of ovality and taper on the journal?

(a)0.5mm (b)0.05mm (c)0.1mm (d) 0.15mm

23.Permissible maximum flat surface on tread on IRS BG wagon is –

(a)75mm (b)50mm (c)60mm (d) 70mm

24.What is the minimum lateral play between axle box lug and horn check for UIC type trolleys?

(a)20mm (b)22mm (c)18mm (d) 12mm

25.What is the maximum lateral play between axle box lug and horn check for UIC type trolleys?

(a) 20 mm (b) 22 mm (c) 25 mm (d) 28 mm

26.Minimum longitudinal clearance between axle box lug and horn check for UIC type trolleys are –

(a) 10 mm (b) 12 mm (c) 14 mm (d) 16 mm

27.Maximum longitudinal clearance between axle box lug and horn check for UIC type trolleys are –

(a) 12 mm (b) 14 mm (c) 16 mm (d) 18 mm

28.Maximum permissible wear on length of journal size of 255*127, 254*127,229*144 are- (a) 6.0 mm

(b) 11 mm (c) 5.0 mm (d) 8.0 mm

29.Maximum permissible wear on inner collar size of journal 255*127,254*127,229*144 are-

(a) 6.0 mm (b) 11 mm (c) 5.0 mm (d) 8.0 mm

30.The wheel gauge measures-

(a) The distance between flanges of two wheels on same axle.

(b) The distance between dia and axle.

(c) The distance between journal and bearing.

(d) The distance between two wheel.

31.What is an integrated portion of the axle?

(a) Cap (b) Roller bearing

(c) **Journal** (d) None of the above

32.For measuring the diameter of ovality & taper of the journal, how many locations are needed?

(a) Two Location both the vertical and horizontal axis

(b) Three locations both the vertical and horizontal axis

(c) Three location only vertical axis

(d) None of the above

Chapter:3 Answers:

3.01 – (b)	3.02 – (c)	3.03–(b)	3.04 –(a)	3.05–(b)	3.06–(b)
3.07 – (b)	3.08 – (c)	3.09–(a)	3.10 –(a)	3.11–(a)	3.12–(d)
3.13 – (b)	3.14 – (d)	3.15–(b)	3.16 –(c)	3.17–(b)	3.18–(c)
3.19 – (d)	3.20 – (a)	3.21–(b)	3.22 –(c)	3.23–(a)	3.24–(a)
3.25 – (c)	3.26 – (b)	3.27–(d)	3.28 –(b)	3.29–(a)	3.30–(a)
3.31 – (c)	3.32 – (b)				

CHAPTER 4

1.Standard dimension 'e' in SAB on Goods stock is -

(a) 570 mm (b) 575 mm (c) 580 mm (d) 565 mm

2.In yard leaving, minimum Permissible dimension 'e' in SAB on Goods stock is - (a) 555 mm

(b) 570 mm (c) 565 mm (d) 580 mm

3.The colour coding of distributor valve of air brake goods stock is –

(a) Yellow (b) Black (c) Green (d) White

4.In air brake empty stock end-to-end goods rakes, The empty rake after unloading should be offered for intensive examination before-

(a) Next station (b) Next Loading (c) Next Unloading (d) 36 Hours

5.In air brake end-to end rakes, After intensive examination validity of BPC remain up to the –

(a) Next station (b) Loading point (c) Destination point (d) 72 Hours

6.Control rod diameter of air brake wagon is –

(a) 30 mm (b) 32 mm (c) 38 mm (d) 40 mm

7.Piston stroke of BOXN wagon in empty conditions is -

(a) 85±10 mm (b) 70±15 mm (c) 75±5 mm (d) 80±10 mm

8.Piston stroke of BOXN wagon in loaded conditions is -

(a) 140±15 mm (b) 130±10 mm (c) 120±15 mm (d) 125±15 mm

9. Piston stroke is empty conditions of BOY wagon is -

(a) 90±10 mm (b) 90±5 mm (c) 90±15 mm (d) 90±10/5 mm

10. Piston stroke is loaded conditions of BOY wagon is -

(a) 135±5 mm (b) 135±10 mm (c) 135±20 mm (d) 120±10 mm

11. In air brake stock, BPC becomes invalid, if the rake is stabled in any examination yard-

(a) 24 hours (b) 36 hours (c) 48 hours (d) 12 hours

12. Dirt collector should be cleaned within-

(a) At the time of ROH (b) 2 month (c) 6 month (d) 3 month

13. What is the capacity of control reservoir in goods train?

(a) 4 Lit. (b) 6 Lit (c) 8 Lit. (d) 10 Lit.

14. How much air pressure should be dropped in brake van/ last vehicle for continuity test? (a) 0.8 Kg/Cm2

(b) 1.0 Kg/Cm2 (c) 1.2 Kg/Cm2 (d) 1.5 Kg/Cm2

15. The Colour of Brake Pipe in Twin pipe brake system is -

(a) Black (b) Yellow (c) Green (d) White

16. The Colour of Feed Pipe in twin pipe wagon is -

(a) Black (b) Yellow (c) Green (d) White

17. What should be the brake pipe pressure in engine?

(a) 4.8 Kg/Cm^2 (b) 4.7 Kg/Cm^2 (c) 5.0 Kg/Cm^2 (d) 6.0 Kg/ Cm^2

18. The BP pressure in Brake Van of 56 -BOXN wagon load should not be less than – (a) 4.5 kg/Cm^2

(b) 3.7 kg/Cm^2 (c) 4.8 kg/Cm^2 (d) 5.8 kg/Cm^2

19. What should be the effective pressure in brake cylinder during full service application? (a) 3.6 Kg/Cm^2

(b) 3.2 Kg/Cm^2 (c) 3.8 Kg/Cm^2 (d) 4.1 Kg/ Cm^2

20. When we release manually KE type DV, the air pressure release form -

(a) CR & AR (b) BC & AR (c) BC & CR (d) AR & DV

21. The diameter of branch pipe of BP to DV for wagon is –

(a) 25 mm (b) 20 mm (c) 13 mm (d) 22 mm

22. If ELD handle is kept on loaded position of empty wagon, the result will be -

(a) Air Brake Power (b) Brake binding (c) None of the above

23.In one BOXN wagon total no. of brake block are -

(a) 4 (b) 8 (c) 12 (d) 16

24.'A' dimension in Boxn wagon is -

(a) $70\pm^{2}_{0}$mm (b) 172±3mm (c) 175±4mm (d) 175+1mm

25.For testing Air pressure locomotive the test plate hole diameter is-

(a) 8.2mm (b) 7.5mm (c) 9.5mm (d) 10mm

26.D.V. is directly attachedwith-

(a) Brakecylinder (b)Brakepipe (c) AR (d) Common pipe bracket

27.The diameter of air brake cylinder BOXN wagon is-

(a) 300mm (b) 355mm (c) 360mm (d) 315mm

28.The diameter of air bake cylinder in BVZC (Wagon) is -

(a) 300mm (b) 295mm (c) 305mm (d) 315mm

29.The capacity of Auxiliary Reservoir (wagon) in air brake except Bk.Van is-

(a) 200litre (b) 100litre (c) 300litre (d) 150litre

30.In Single pipe system the time taken in releasing of the wagon brake is-

(a) 60Sec. (b) 120Sec. (c) 210Sec. (d) 90Sec.

31.Distance between the control rod head and the barrel of SAB is named as -

(a) 'E' dimensions (b) 'C' dimension (c) 'A' dimension (d) "d"dimension

32.The capacity of compressor machine for air brake testing of rake is –

(a) 12-15 Kg/Cm^2 (b) 8-10 Kg/Cm^2 (c) 7-12 Kg/Cm^2 (d) 7-8 Kg/Cm^2

33.In single pipe air brake system, BP is charged with –

(a) 6 □ 0.2 Kg/Cm2 (b) 5 □ 0.1 Kg/Cm2 (c) 5.0 □ 0.2 Kg/Cm2 (d) 6.0 □ 0.1 Kg/Cm2

34.At the originating point, minimum brake power of premium end-to-end rake is - (a) 85%

(b) 95% (c) 90% (d) 98%

35.In twin pipe system the Auxiliary Reservoir pressure should be -

(a) 6.0 kg/Cm^2 (b) 4.8Kg/Cm^2 (c) 5.0Kg/Cm^2 (d) 6.5 Kg/ Cm^2

36. With The help of cut of angle cock, the air pressure in air hose is exhaust or closed-

(a) True (b) false (c) None of the above

37. The brake power of CC rake from nodal point is –

(a) 90% (b) 100% (d) 85% (d) 75%

38. Brake power certified issued for such Premium end-to-end rakes will be valid for–

(a) 7±4 days (b) $10\pm^{2}_{0}$ days (c) 15±3days (d) one month

39. The amount of air pressure in control reservoir of twin pipe system is -

(a) 3.8Kg/Cm^2 (b) 6.0Kg/Cm^2 (c) 5.0Kg/Cm^2 (d) 4.8 Kg/ Cm^2

40. What is the function of DC (Dirt collector)?

(a) Collect dirt (b) Collect air (c) Clean air (d) Clean CR

41. How much pressure should drop in a minute after putting a test plate in locomotive? (a) 0.8 Kg/Cm^2

(b) 1.0 Kg/Cm^2 (c) 1.2 Kg/Cm^2 (d) 1.5 Kg/Cm^2

42. Diameter of brake pipe and feed pipe is (In a good train)-

(a) 28 mm (b) 34 mm (c) 32 mm (d) 36 mm

43. The three branch pipe attached to common pipe bracket, where the middle pipe lead to-

(a) CR (b) DV (c) BC (d) AR

44. How many cut of angle cock are provided in a vehicle in twin pipe system-

a. Two (b) Four (c) Six (d) None

45. While isolating DV, the position of the handle in relation to rail line shall be

a. Horizontal (b) vertical (c) None of the above

46. If brake block is not releasing, pin is remove to release the brake -

(a) Anchor link pin (b) control rod pin (c) Pull rod pin (d) equaliging pin

47. During Brake application, air flow from -

(a) AR to BC (b) PB to BC (c) BP to BC (d) CR to BC

48.The position of handle to close angle cock is -

(a) Horizontal to pipe line (b) Perpendicular to pipe line (c) Center to pie line

49.The position of handle to open angle cock is -

(a) Parallel to pipe line (b) Perpendicular to pipe line (c) Center to pie line

50.The leverage Ratio is obtained by -

(a) Brake cylinder (b) Tie Rod (c) Empty Rod (d) L/E Dives

51.BP pressure in working train is -

(a) 6.0Kg/Cm^2 (b) 5.5Kg/Cm^2 (c) 5.0Kg/Cm^2 (d) 15.2 Kg/ Cm^2

52.The colour for brake power certificate for Premium end-to-end rake is-

(a) Green (b) White (c) Pink (d) Yellow

53.The en-route Brake power percentage of goods train should be -

(a) 85% (b) 75% (c) 95% (d) 90%

54.For testing DV the time required for brake cylinder draining from 3.8 to .04 kg/cm^2 is- (a) 30-40 sec

(b) 40-50 sec (c) 45-60 sec (d) 50-75 sec

55.What is the piston stroke of BVZC wagons?

(a) 50±10 mm (b) 70±10 mm (c) 85±10 mm (d) 90± 5mm

56.What is the empty piston stroke of BOBR/BOBRN wagon is -

(a) 70±10 mm (b) 75±10 mm (c) 80±10 mm (d) 100±10 mm

57.The diameter of piston rod of 355-mm brake cylinder is -

(a) 40 mm (b) 38 mm (c) 30 mm (d) 25mm

58.The diameter of piston rod of 300-mm brake cylinder is –

(a) 40 mm (b) 36 mm (c) 32 mm (d) 30 mm

59.'A' dimension of the BOBRN wagon is -

(a) 29^{+2}_{0} mm (b) 27^{+2}_{0} mm (c) 33 ± 2 mm (d) 25^{+5}_{2} mm

60.What is the colour of BPC of air brake system?

(a) Red (b) Pink (c) Green (d) Yellow

61.What is the colour of BPC of air brake CC rake?

(a) Red (b) Pink (c) Green (d) Yellow

62.During brake release, air from BC goes to -

(a) AR (b) CR (c) DV (d) Atmosphere

63.In twin pipe system, the FP is directly joined to branch pipe of -

(a) CR (b) BC (c) DV (d) AR

64.The max. Air pressure in BC after brake release is -

(a) 4.8 Kg/Cm^2 (b5 Kg/Cm^2 (c) 0.0 Kg/Cm^2 (d) 2.5 Kg/Cm^2

65.The max. Air pressure in BP during application is -

(a) 4.8 ± 1 Kg/Cm^2 (b) 5.0 Kg/Cm^2 (c) 3.8 ± 0.1 Kg/Cm^2 (d) 3.8 Kg/Cm^2

66.The capacity of AR for wagon is-

(a) 200 lit. (b) 200 lit. (c) 100 lit. (d) 150 lit.

67.In conventional air Brake system, the diameter of brake cylinder is-

(a)255mm (b)155mm (c)355mm (d) 455 mm

68.The air pressure during charging in single pipe system is -

i In AR- (a) 5 kg/ cm^2 (b) 5.2 kg/ cm^2 (c) 6.1 kg/ cm^2 (d) 5.5 kg/ cm^2

ii In CR- (a) 6 kg/ cm^2 (b) 5 kg/ cm^2 (c) 6.1 kg/ cm^2 (d) 5.5 kg/ cm^2

iii In BP- (a) 6 kg/ cm^2 (b) 5 kg/ cm^2 (c) 6.1 kg/ cm^2 (d) 5.5 kg/ cm^2

69.As per population of air brake stock the percentage of distribution value should be kept as spares -

(a)10% (b)2% (c)5% (d) 10%

70.The diameter of ball in internal ball valve of cut of angle cock is -

(a)15mm (b)13mm (c)17mm (d) 10 mm

71.The diameter of air brake cylinder for BVZC is -

(a)400mm (b)300mm (c)355mm (d) 295 mm

72.The diameter of Std. Air brake Pressure gauge is-

(a)60mm (b)70mm (c)90mm (d) 100 mm

73.What type of cut of angle cock fitted in goods stock?

(a) Flattype (b)Balltype (c)Squaretype (d)None of the above

74.Full form of BP is -

(a) Bigpipe (b)Brakepipe (c)Bentpipe (d)None of the above

75.For testing DV the time required for filling BC in single pipe system from 0-36 kg/cm2 is -

(a)20-25sec (b)18-30sec (c)15-25sec (d) 30-40sec

76.What should be the pressure in feed pipe?

(a) 3.8Kg/cm^2 (b)5.0Kg/Cm^2 (c)6.0Kg/Cm^2 (d)none of the above

77.When DV is working condition the position of DV handle is -

(a) Vertical (b)Horizontal (c)Inclined (d) Parallel

78."e" dimension for SAB-600, in wagon is -

(a)444–474mm (b)555-575mm (c)500-575mm (d) 440- 575mm

79.Control rod of SAB when rotated for one round, control rod head moves by a distance of - (a)6.0mm (b) 4.0mm (c)2.0mm (d) 1.0mm

80.Piston stroke of the BVZC is -

(a)60±10mm (b)70±10mm (c)65±10mm (d) 75±10mm

81.For testing DV the time required for charging CR from 0-48 kg/cm2 is -

(a)290±20sec (b)150±20sec (c)185±25sec (d) 200±20sec

82.In air brake system branch pipe of DV to AR is connected via common pipe bracket is -

(a) At the bottom (b)In Middle (c) At Top (d) To AR

83.The type of joint for FP& BP is -

(a) Grip seal (b)Flange (c)Thread coupling (d) knuckle

84.In air brake system branch pipe of DV to BC is connected via common pipe bracket is -

(a) At the bottom (b)In Middle (c) At the Top (d) To AR

85.FP charges -

(a) AR (b) CR (c) DV (d) BP

86. Which equipments are not charged, when C3W DV is isolated in twin pipe system?

(a) Brake cylinder only (b) Control reservoir and brake cylinder

(c) Control reservoir and auxiliary reservoir (d) Auxiliary reservoir and Brake cylinder

87. The leakage rate in BP or FP in air brake system is -

(a) 04kg/cm^2/Min (b) 0.25 kg/cm^2/Min

(c) 0.3kg/cm^2/Min (d) 0.1 kg/cm^2/Min

88. The pressure of Auxiliary reservoir makes to work -

(a) Common pipe bracket (b) Brake cylinder

(c) Control Reservoir (d) DV

89. With what pressure of AR twin pipe system works -

(a) BP Pressure only (b) FP Pressure only

(c) BP&FP Pressure (d) BC Pressure

90. In single pipe system works -

(a) BP Pressure (b) FP Pressure

(c) BP&FP Pressure (d) none of the above

91. In wagon, hand brake is used when -

(a) Standing in yard (b) Running in down gradient

(c) Running in up gradient (d) None of the above

92. SAB adjust clearance between -

(a) Wheel and brake block (b) Tie Rod and Brake block

(c) Anchor pin to control rod (d) None of the above

93.The M.R. pressure of engine should be-

(a) 6.0 to 8.0 Kg/Cm^2 (b) 8.0 to 10.0 Kg/ Cm^2

(c) 10.0 to 12.0 Kg/Cm^2 (d) 12.0 to 15.0 Kg/ Cm^2

94.What do you mean of SWTR?

(a) Single wagon test rubber (b) Single wagon test rig

(c) Sliding wagon test ring (d) None of the above

95.In an air brake goods wagon in empty condition the handle of E/L box if kept in loaded condition, it resettled in -

(a) Brake winding (b) Brake power

(c) Poor brake power (d) None of the above

96.SAB fitted in-

(a) End pull rod (b) Main pull rod

(c) Control rod (d) Dead equaliging lever

97.Dropping BP pressure to do full service application is -

(a) 2.0 to 3.0 kg/cm^2 (b) 3.0 to 3.2 kg/ cm^2

(c) 1.3 to 1.6 kg/cm^2 (d) 1.5 kg/cm^2

98.The function of dirt collector is to segregate dirt portion from the air -

(a) After coming DV (b) Before coming to DV (c) None of the above

99.What is the function of Control reservoir in air Brake system?

(a) To control the air pressure (b) To control the DV main valve

(c) To control the brake system (d) To control the AR

100.Auxiliary reservoir is assisting in –

(a) Charging of DV (b) Charging of BP

(c) Sanding air to BC (d) Charging of CR

101. When isolating handle of C3W type DV is kept in horizontal at charging position -

(a) Piston rods of BC come out (b) Piston rod of BC close not come out

(c) Brake applies and releases (d) Nothing happens

102. the control reservoir is mounted on the other face of –

(a) Distributor valve (b) Brake cylinder

(c) Common pipe bracket (d) Axially reservoir

103. Cut of angle cock can be fitted with –

(a) Feed pipe only (b) Brake pipe only

(c) Feed pipe & brake pipe both (d) None of the above

104. BP & FP Air hose pipe can be fitted to cut off angle cock by-

(a) Socket (b) Coupling

(c) Flange (d) Nut

105. The main BP pressure in brake van of working train with 56 wagon is -

(a) 4.8 +/- 0.1kg/cm^2 (b) 4.5+/- 0.1kg/ cm^2 (c) 6.0 +/- 0.1kg/ cm^2 (d) None of the above

106. While some defect is notice in brake pipe in twin pipe system, the train can be worked as single pipe system -

(a) Bypassing BP (b) Not worked

(c) Work, any change (d) None of the above

107. If C3W type DV is manually released, pressure is released from -

(a) AR (b) Control reservoir

(c) Brake cylinder (d) All above

108.Full form of AR is -

(a) Accident of reservoir (b) Axle ring

(c) Auxiliary reservoir (d) None of the above

109.Full form of BC is -

(a) Brake control (b) Beside coach

(c) Brake cylinder (d) None of the above

110.The positions of Cut of angle cock handle while open is -

(a) Parallel to pipe (b) Perpendicular to pipe

(c) None of the above (d) Parallel to pipe & Perpendicular to pipe

111.The full form of CR is -

(a) Central Reservoir (b) Cylindrical Reservoir

(c) Control reservoir (d) None of the above

112.During twin pipe charging position, air pressure in Auxiliary Reservoir is -

(a) 6.5kg/cm^2 (b) 5.8kg/cm^2 (c) 6.0kg/cm^2 (d) None of the above

113.What shall be the function of check valve of C3W type distributor valve?

(a) Charging the AR (b) Charging the CR

(c) Charging the BC (d) None of the above

114.For by pass the special device essential is -

(a) FP & BP exhauster (b) FP & BP reactor

(c) Bypass coupler (d) BP FP jointer

115. In twin pipe system, the BP is directly jointed to branch pipe of -

(a) AR (b) BC

(c) DV (d) Common pipe bracket.

116.BC vent plug is used for-

(a) Brakeapplication (b) Brake release

(c)Airleakagetostop (d) Air pressure maintenance

117.Brake system can be defective due to-

(a) Trainmovement (b) Airflow

(c)Bk. application&release (d) Cattle runover

118.The length of air hose is -

(a)796+-6mm (b) 784+-6 mm

(c)790+-6.1mm (d) 660+-6 mm

119.Inairbrakesystem,duringsensitivitytestBrakeshouldapplywhentherateofdropofair pr in BP is-

(a) 0.3 kg/cm^2in3sec (b) 0.4 kg/ cm^2 in4 sec

(c)0.5kg/cm^2in5sec (d) 0.6 kg/ cm^2 in 6 sec

120.In air brake system, during insensitivity test Brake should not apply when the rate of drop of air pr in BP is -

(a) 0.8kg/cm^2in8sec (b) 0.4 kg/ cm^2 in 4 sec

(c)0.5kg/cm^2in5sec (d) 0.3 kg/ cm^2 in 60 sec

121.the permissible leakage rate in air brake system in centrifugal dirt collector is -

(a) 02kg/cm^2/min (b) 0.2 kg/cm^2/min

(c)0.20kg/cm^2/min (d) No leakage

122.To uncouple BP or FP air hose it is essential to

(a) Openadjacentanglecock (b) Close adjacent angle cocks

(c) Close supply of air from loco (d) None of the above

123. In air Bk. system the rate of leakage should not be more then -

(a) 0.025 kg/cm^2/min (b) 0. 25 kg/cm^2/min

(c) 0.0025 kg/cm^2/min (d) 0.255 kg/cm^2/min

124. For running 1200mt long train, it is essential to have -

(a) Single pipe graduated release air bk. System

(b) Twin pipe graduated release air bk. System

(c) Single & double pipe-graduated release air bk. System

(d) None of the above

125. In working train having 56 wagon, the air pressure in Bk. van is -

(a) 0.25 kg/cm^2 less then 5kg/cm^2 (b) 0. 2 kg/cm^2/min less then 5kg/cm^2

(c) 4.8 kg/cm^2 (d) None of the above

126. For releasing Brakes, SAB is rotated -

(a) Toward end panel clockwise (b) Toward trolley in clockwise

(c) Toward trolley in anticlockwise (d) Toward end panel Anti clockwise

127. The std. free heights and exert force of BC return spring is - (a) 600 mm-
200 kg/cm2 (b) 700 mm- 250 kg/cm2 (c)
730mm-125kg/cm2 (d) 800 mm- 100 kg/cm2

128. The ELB device indicator plate shows -

(a) Yellow empty, black loaded (b) Blue empty, black loaded

(c) White empty, black loaded (d) black empty, blue loaded

129. When isolating handle of KE type DV is kept in horizontal at charging position -

(a) Piston rods of BC come out (b) Piston rod of BC close not come out

(c) Brake applies and releases (d) Nothing happens

130. The trouble shooting for branch pipe broken of DV to BC is -

(a) Pipe to be tightened by wire and DV, AR to be isolated followed by manual releasing

(b) Pipe to be tightened by wire, release brake by rotating SAB and run train

(c) Non of the above

131. The first step of releasing brake binding in conventional A/B system is to -

(a) Open vent plug of BC (b) Rotate SAB

(c) Take out pin of SAB (d) Isolate DV & release manually.

132. The total no. of MU washer in a twin pipe wagon is –

(a) 4 (b) 4 palm & rubber sealing ring

(c) 4 coupling head no washer (d) 6

133. The Type of dirt collector, used in wagon is -

(a) 2-way (b) 3-way

(c) Branch pipe of BP to DV (d) In BP

134. The trouble shooting for twin pipe system, AR broken is -

(a) Isolate DV and release brake (b) Isolate DV, AR & release brake

(c) Release BC & open vent plug BC (d) By-pass AR

135. After isolating DV, handle should be -

(a) Tightened with thread (b) Keep horizontal and tightened with wire

(c) Tightened with wire (d) Open the handle

136. The function of double release valve of the DV is -

(a) To release the brake automatically

(b) To release the BC pressure

(c) To release the brake manually when a spring brief pull is given to the lever

(d) To release brake pipe pressure on AR chamber

137. The function of Non return valve used in air brake system is-

(a) To prevent flow of BP

(b) To prevent flow of air from AR to FP

(c) To prevent flow of Air from CR to BP

(d) To prevent CR to be charged

138. The function of main valve is to supply requisite amount of pressure into the brake cylinder when-

(a) BP pressure is reduced

(b) FP pressure is reduced

(c) BP & FP is also reduced

(d) BP pressure is reduced

139. The main valve in DV exhausts pressure from brake cylinder to atmosphere, when

(a) BP pressure is reduced

(b) BP pressure is raised

(c) FP is reduced

(d) FP pressure is raised

140. What type of grease to be used after cleaning and inspection all parts of slack adjuster?

(a) Graphite grease

(b) Servogan -2

(c) Servo-germ4

(d) None of the above

141. The function of Return spring provided in air brake cylinder is -

(a) To push the spring out side the piston

(b) To push the piston inside the cylinder

(c) To push the deedlever

(d) To push the controlrod

142. Air Hoses are connected to-

(a) Feed pipe cut of angle cocks only

(b) Brake pipe cut of angle cocks only

(c) Brake pipe & Feed pipe cut of angle cocks both

(d) None of the above

143.If DV is having leakage -

(a) Isolate DV

(b) Close the isolating cock of the AR

(c) Close the isolating cock of the BP/FP branch pipe

(d) None of the above

144.'A' dimension is measured between-

(a) SAB barrel & control rod head

(b) SAB nut & control road nut

(c) Anchor pin & Control Rod head

(d) None of the above

145.POH periodicity DV is done -

(a) 6 year or 5 Lakh km which ever is earlier

(b) 5 year or 5 Lakh km which ever is earlier

(c) 4 year

(d) 4 year or 4 Lakh km which ever is earlier

146.The vent hole, provided in the cut of angle cock to exhaust (when angle cock is closed)-

(a) Air hose side air pressure into atmosphere

(b) Twin pipe side air pressure to atmosphere

(c) None of the above

147.In case air brake CC rake are used as mini rakes, Close circuit pattern will be followed with BPC being valid for –

(a) 2000 Km or 20 days Which ever is earlier

(b) 4500 Km or 20 days Which ever is earlier

(c) 6000 Km or 30 days Which ever is earlier

(d) 3000 Km or 10 days Which ever is earlier

Chapter-4: Answers:

4.001 – (b)	4.002 – (a)	4.003 – (a)	4.004 – (b)	4.005 – (c)	4.006 –(b)
4.007 – (a)	4.008 – (b)	4.009 – (a)	4.010 – (b)	4.011 – (a)	4.012 – (a)
4.013 – (b)	4.014 – (b)	4.015 – (c)	4.016 – (d)	4.017 – (c)	4.018 – (c)
4.019 – (c)	4.020 – (c)	4.021 – (b)	4.022 – (b)	4.023 – (b)	4.024 – (a)
4.025 – (b)	4.026 – (d)	4.027 – (b)	4.028 – (c)	4.029 – (b)	4.030 – (a)
4.031 – (c)	4.032 – (b)	4.033 – (b)	4.034 – (b)	4.035 – (a)	4.036 – (a)
4.037 –(b)	4.038 – (b)	4.039 – (c)	4.040 – (c)	4.041 – (b)	4.042 – (c)
4.043 – (d)	4.044 – (b)	4.045 – (a)	4.046 – (c)	4.047 – (a)	4.048 –(b)
4.049 – (a)	4.050 – (d)	4.051 – (c)	4.052 – (a)	4.053 – (d)	4.054 – (c)
4.055 –(b)	4.056 – (d)	4.057 – (a)	4.058 – (d)	4.059 – (b)	4.060 – (c)
4.061 – (d)	4.062 – (d)	4.063 – (d)	4.064 – (c)	4.065 – (c)	4.066 – (c)
4.067 – (c)	4.068i–(a)	4.068 ii–(b)	4.068 iii–(b)	4.069 – (c)	4.070 –(d)
4.071 – (b)	4.072 – (d)	4.073 – (b)	4.074 – (b)	4.075 – (b)	4.076 – (c)
4.077 – (a)	4.078 – (b)	4.079 – (c)	4.080 – (b)	4.081 – (c)	4.082 –(b)
4.083 – (b)	4.084 – (a)	4.085 – (a)	4.086 – (b)	4.087 – (b)	4.088 –(b)
4.089 – (b)	4.090 – (a)	4.091 – (a)	4.092 – (a)	4.093 – (b)	4.094 –(b)
4.095 – (a)	4.096 – (b)	4.097 – (c)	4.098 – (b)	4.099 – (b)	4.100 – (c)
4.101 – (a)	4.102 – (c)	4.103 – (c)	4.104 – (d)	4.105 – (a)	4.106 – (a)
4.107 – (d)	4.108 – (c)	4.109 – (c)	4.110 – (a)	4.111 – (c)	4.112 – (c)
4.113 – (a)	4.114 – (c)	4.115 – (d)	4.116 – (b)	4.117 – (d)	4.118 –(d)
4.119 – (d)	4.120 – (d)	4.121 – (d)	4.122 – (b)	4.123 – (b)	4.124 –(b)

4.125 – (c)	4.126 – (c)	4.127 – (b)	4.128 – (a)	4.129 – (c)	4.130 – (a)
4.131 – (d)	4.132 – (a)	4.133 – (b)	4.134 – (b)	4.135 – (c)	4.136 – (c)
4.137 –(b)	4.138 – (a)	4.139 –(b)	4.140 –(b)	4.141 –(b)	4.142 – (c)
4.143 – (a)	4.144 – (a)	4.145 – (a)	4.146 – (a)	4.147 –(b)	

CHAPTER 5

1.Standard thickness of UIC/CASNUB bogies composite brake block is-

(a) 60 mm (b) 45 mm (c) 55 mm (d) 58 mm

2. Permissible thickness of UIC/CASNUB bogies composite brake block is -

(a) 20 mm (b) 10 mm (c) 9.0 mm (d) 8 mm

3.Standard clearance between side bearers on UIC stock is-

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

4.Permissible clearance between side bearers on UIC stock is-

(a) 6 mm (b) 4 mm (c) 3 mm (d) 2 mm

5.How many types of CASNUB version in Indian Railway have been used? (a) 4 (b) 6

(c) 10 (d) 7

6.What is the permissible variation in a group for load bearing & sunbber spring? (a) 2.0 mm

(b) 3.0 mm (c) 4.0 mm (d) 5.0 mm

7.The length of brake block of BOXN wagon is –

(a) 350 mm (b) 400 mm (c) Not specified (d) 450 mm

8.Variation in camber between any two spring on a bogie under load shouldnot exceed–

(a) 10 mm (b) 11 mm (c) 13 mm (d) 14 mm

9.What is the Std. thickness of brake block of BOXN wagon is –

(a) 52 mm (b) 54 mm (c) 56 mm (d) 58 mm

10.How many side frame fitted in CASNUB trolley / bogie?

(a) 2 (b) 1 (c) 3 (d) Nil

11.What is the axle load of CASNUB trolley expects CASNUB 22HS?

(a) 19.2 ton (b) 22.9 ton (c) 20.3 ton. (d) 20.9 ton

12.What is the new wheel diameter CASNUB 22 w (Retrofitted)?

(a) 1000 mm (b) 960 mm (c) 956 mm (d) 946 mm

13.What type of side bearers fitted in CASNUB 22w bogie?

(a) CC type (b) Roller type (c) EM Type

14.What type of side bearers fitted in CASNUB 22w(m) bogie?

(a) CC type (b) Spring type (c) Roller type

15.What type of pivot used in CASNUB 22w trolley?

(a) IRS type (b) spherical type (c) other type

16.What type of pivot used in CASNUB 22w(m), 22NL and other type of CASNUB trolley?

(a) IRS type (b) UIC spherical type (c) other type

17.What is the nominal leteral clearance between side frame & bolster in CASNUB 22HS?

(a) 18 mm (b) 10 mm (c) 25 mm (d) 22 mm

18.What is the wear limit of axle box/adopter sides (Cylindrical roller bearing) in CASNUB bogie?

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

19.What is the nominal leteral clearance between side frame & bolster in CASNUB 22W, 22WM, 22NL, 22NLB?

(a) 16 mm (b) 11mm (c) 18 mm (d) 20 mm

20.What is the nominal longitudinal clearance between side frame & Axle box/adopter of 22W(M) bogie?

(a) 5 mm (b) 8 mm (c) 10 mm (d) 12 mm

21.What is the nominal longitudinal clearance between side frame & Axle box/adopter 22W, 22W(Retro) trolley?

(a) 2 mm (b) 4 mm (c) 6 mm (d) Nil

22.What is the nominal leteral clearance between side frame & axle box/adopter Casnub 22NL, 22NLB, 22HS bogie?

(a) 18 mm (b) 16 mm (c) 22 mm (d) 25 mm

23.What is the standard wheel profile use in CASNUB bogie after the route radius? (a) 1 in 20

(b) 1 in 22 (c) 1in 18 (d) 1 in 25

24.What is the condemning wheel diameter in all CASNUB versions?

(a) 916 mm (b) 906 mm (c) 936 mm (d) 963 mm

25.What the condemning dimension of narrow jaw/wide jaw Adopter thrust shoulder? (a) 0.4 mm (b) 0.6mm (c) 0.7 mm (d) 0.9 mm

26.What the condemning/wear limit of narrow jaw/wide jaw Adopter crown lugs?

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

27. What is the leteral clearance between side frame & Axle box/adopter Casnub 22W, 22W(M)?

(a) 18 mm (b) 16 mm (c) 22 mm (d) 25 mm

28. What is the wear limit of axle box/adopter crown seat (Cylindrical roller bearing) in CASNUB bogie?

(a) 2 mm (b) 3 mm (c) 3.5 mm (d) 4.5 mm

29. What is the wear limit of axle box/adopter side lugs (Cylindrical roller bearing) in CASNUB bogie?

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

30. What is the new renewal/dimension of axle box sides (Cylindrical roller bearing) in CASNUB bogie?

(a) 270 mm (b) 264 mm (c) 266 mm (d) 268 mm

31. What the worn/condemning dimension of axle box sides (Cylindrical roller bearing) in CASNUB bogie?

(a) 266 mm (b) 262 mm (c) 264 mm (d) 260 mm

32. What is the new renewal/dimension of axle box side lugs (Cylindrical roller bearing) in CASNUB bogie?

(a) 136 mm (b) 134 mm (c) 130 mm (d) 132 mm

33. What is the new/renewal dimension of wide jaw adopter crown lugs?

(a) 155 mm (b) 156 mm (c) 154 mm (d) 152 mm

34. What the worn/condemning dimension of axle box/adopter side lugs (Cylindrical roller bearing) in CASNUB bogie

(a) 136 mm (b) 140 mm (c) 132 mm (d) 134 mm

35. What is the new renewal/dimension of axle box crown seat (Cylindrical roller bearing) in CASNUB bogie?

(a)32.5mm (b)36.5mm (c)37.5mm (d) 38.5mm

36.What the worn/condemning dimension of axle box crown seat (Cylindrical roller bearing) in CASNUB bogie?

(a)32mm (b)31mm (c)33mm (d) 34mm

37.What is the new renewal/dimension of axle box crown lugs (Cylindrical roller bearing) in CASNUB bogie?

(a)160mm (b)159mm (c)158mm (d) 157mm

38.What is the new/renewal dimension of narrow jaw adopter crown lugs?

(a)154.5mm (b)155.5mm (c)156.5mm (d) 157.5mm

39.What is the wear limit of wide/narrow jaw adopter crown seat?

(a)2.5mm (b)3.5mm (c)4.5mm (d) 5.5mm

40.What is the new/renewal dimension of wide jaw adopter bore seat to crown seat? (a)46.5mm

(b)47.5mm (c)48.5mm (d)49.5mm

41.What is the new/renewal dimension of narrow jaw adopter bore seat to crown seat? (a)25.2mm (b)

26.2mm (c)28.5mm (d) 27.5mm

42.What is the new/renewal dimension of modified wide jaw adopter bore seat to crown seat? (a)20.5mm (b)

25.5mm (c)30.5mm (d) 35.5mm

43.What the worn/condemning dimension of axle box crown lugs (Cylindrical roller bearing) in CASNUB trolley?

(a)165mm (b)166mm (c)167mm (d) 168mm

44.Worm limit of wide jaw adopter bore seat to crown seat is-

(a) 45 mm (b) 247 mm (c) 48 mm (d) 49 mm

45. Worm/condemning limit of modified wide jaw adopter bore seat to crown seat is-

(a) 25 mm (b) 22 mm (c) 27 mm (d) 29 mm

46. Worm/condemning limit of narrow jaw adopter bore seat to crown seat is-

(a) 20 mm (b) 22.5 mm (c) 22.7 mm (d) 24.5 mm

47. How many type of adopters used in CASNUB trolley?

(a) 2 (b) 1 (c) 3 (d) 4

48. What is the wear limit of wide/narrow jaw adopter side lugs?

(a) 1.0 mm (b) 3.0 mm (c) 5.0 mm (d) 2.0 mm

49. New/Renewal dimension of wide jaw adopter side lugs is -

(a) 130 mm (b) 132 mm (c) 134 mm (d) 131 mm

50. New/Renewal dimension of narrow jaw adopter side lugs is -

(a) 100 mm (b) 97 mm (c) 99 mm (d) 92 mm

51. Worm/condemning limit of wide jaw adopter side lugs is -

(a) 140 mm (b) 136 mm (c) 134 mm (d) 132 mm

52. Worm/condemning limit of narrow jaw adopter side lugs is -

(a) 101 mm (b) 102 mm (c) 103 mm (d) 104 mm

53. The condemning size of BK block of goods stock is -

(a) 30 mm (b) 10 mm (c) 20 mm (d) 15 mm

54.Free camber of 10 plated laminated spring of BOX type wagon is -

(a) 47+6/-0 mm (b) 49 mm (c) 52 mm (d) 58 mm

55.Free camber of 13 plated laminated spring used to IRS type four-wheeled stock is – (a) 75.5 mm (b) 76+6/-0 mm (c) 78.2 mm (d) 51.5mm

56.Free camber of 9(Nine) plated laminated spring used to CRT wagon is -

(a) 55 mm (b) 57 mm (c) 58 mm (d) 59 mm

57.Nominal free height of inner spring of Casnub bogie except 2HS is –

(a) 260 mm (b) 262 mm (c) 264 mm (d) 266 mm

58.Clearance along the length of shackle pin assembly with shackle plate, scroll Iron, spring eye and cotter for vacuum brake stock is -

(a) Max. 1.5 mm (b) Max 2.00 mm (c) Max 2.5-mm (d) Max. 3 mm

59.What is the clearance between shackle pin diameter and shackle plate hole?

(a) Max. 1.5 mm (b) max 2.00 mm (c) max 1.0-mm (d) max. 2.5 mm

60.What is the nominal thickness of elastomeric pad of Casnub bogie?

(a) 49 mm (b) 46 mm (c) 48 mm (d) 52 mm

61.Condemning size of elastomeric pad for Casnub bogie is -

(a) 44 mm (b) 43 mm (c) 42 mm (d) 40 mm

62.Nominal dimension of side bearer rubber pad for Casnub bogie is -

(a) 114 mm (b) 116 mm (c) 118 mm (d) 120 mm

63.Condemning size of side bearer rubber pad for Casnub bogie is -

(a)111mm (b)110mm (c)109mm (d) 108mm

64.IS–spec of lubricant used to lubricate center pivot of the Casnub trolley?

(a) IS:495 (b)IS:449 (c)IS:455 (d)None of the above

65.Maintenance manual of Casnub bogie is –

(a)G97 (b)G80 (c)G95 (d) G72

66.The nominal inside length of the shackle for BOX bogie is –

(a)330±1mm (b)332+1/-0mm (c)333±2mm (d) 325±1mm

67.New dimension of side frame anti-Rotation lug for all Casnub bogie is –

(a)520mm (b)522mm (c)524mm (d) 528mm

68.New pedestal crown roof for 22NL/NLB/HS Casnub bogie is –

(a)300mm (b)320mm (c)323mm (d) 330mm

69.For BOX/UIC wagons, condemning limit of lateral clearance between axle box lug and horn Check is -

(a)25mm (b)28mm (c)23mm (d) 20mm

70.The new limit of lateral clearance available between spring buckle and horn gap stiffener for UIC bogie is–

(a)28mm (b)25mm (c)30mm (d) 32mm

71.What is the wear limit of axle box crown lugs (cylindrical roller bearing) in CASNUB bogie?

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

72.Thickness of 10-platted bearing spring plate for BOX bogie is –

(a)16+0.32/-0.24mm (b)18+3.0/-2.0 (c)15+0.32/-0.24 (d)17+0.32/-0.24

73.For BOX/ UIC wagons, the new limit of nominal lateral clearance between axle box lug and horn Check is-

(a) 25 mm (b) 23 mm (c) 28 mm (d) 20 mm

74.Condemning dimension of side frame anti-Rotation lug for all Casnub bogies is– (a) 530 mm

(b) 522 mm (c) 528 mm (d) 524 mm

75.Length of 10 platted bearing spring for BOX bogie is –

(a) 1205±3 mm (b) 1200±3 mm (c) 1155±3 mm (d) 1185±3 mm

76.Size of eye 10 platted bearing spring for BOX bogie is –

(a) 34+1/-0 mm (b) 33±2 mm (c) 36+1/-0 mm (d) 38±2 mm

77.Wear limit of pedestal sides for Casnub bogie is –

(a) 1 mm (b) 2 mm (c) 4 mm (d) None of the above

78.New dimension of all Casnub bogie crown sides is –

(a) 151 mm (b) 152 mm (c) 154 mm (d) 155 mm

79.New dimension of 22W, 22W(M) Casnub bogie pedestal sides is –

(a) 100 mm (b) 105 mm (c) 110 mm (d) None of the above

80.New dimension of 22 NL/NLB/HS Casnub bogie pedestal sides is –

(a) 80 mm (b) 85 mm (c) 81 mm (d) 82 mm

81.Wear limit of pedestal crown roof for Casnub bogie is –

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

82.New pedestal crown roof for 22W(M) Casnub bogie is –

(a)310mm (b)318mm (c)320mm (d) 322 mm

83 Distance between new pedestal jaw (long) of Casnub bogie is –

(a)230mm (b)232mm (c)234mm (d) 236 mm

84.Wear limit of pedestal jaw (long) of 22NL/NLB/HS Casnub bogie is –

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

85.Distance between new pedestal jaw (short) of 22NL/NLB/HS Casnub bogie is- (a)182mm

(b)186mm (c)188mm (d)190 mm

86.New dimension of pedestal jaw for Casnub 22W, 22W(Retro) bogie is –

(a)270mm (b)272mm (c0268mm (d) 190 mm

87.New dimension of pedestal jaw for Casnub 22W(M) bogie is –

(a)270mm (b)274mm (c)278mm (d) 290 mm

88.Wear limit of crown sides for Casnub bogie is –

(a)4.0mm (b)3.0mm (c)2.0mm (d) 5.0 mm

89.New dimensions of bolster column inner gibs of all Casnub bogies are –

(a)144mm (b)136mm (c)138mm (d) 132 mm

90.Wear limit of bolster column inner gibs of all Casnub bogies are –

(a)2.0mm (b)5.0mm (c)6.0mm (d) 8.0 mm

91.New dimensions of over bolster land surface of all Casnub bogies are –

(a)444mm (b)446mm (c)448mm (d) 450mm

92.New dimension of over rotation stop lugs of all Casnub bogies are –

(a)516mm (b)518mm (c)520mm (d) 522mm

93.Wear limit of bolster land surface of all Casnub bogies are –

(a)2.0mm (b)3.0mm (c)5.0mm (d) 7.0mm

94.Wear limit of bolster rotation stop lug of all Casnub bogies are –

(a)1.0mm (b)2.0mm (c)3.0mm (d) 5.0mm

95.Nominal free height of snubber spring of Casnub bogie except 22 HS is –

(a)260mm (b)270mm (c)282mm (d) 294mm

96.Nominal free height of inner spring of Casnub 22 HS bogie is –

(a)261mm (b)252mm (c)243mm (d) 246mm

97.Nominal free height of sunbber spring of Casnub 22 HS bogie is –

(a)291mm (b)294mm (c)296mm (d) 293mm

98.New dimension of bolster column outer gibs of Casnub bogie is-

(a)224mm (b)234mm (c)243mm (d) 246mm

99.New dimension of bolster column outer gibs of Casnub 22HS bogie is –

(a)232mm (b)236mm (c)241mm (d) 243mm

100.Wear limit of bolster column outer gibs of Casnub bogie is –

(a)2.0mm (b)3.0mm (c)5.0mm (d) 6.0mm

101.New dimension of friction shoes wedge block of Casnub bogie is –

(a) 60 mm (b) 62 mm (c) 63 mm (d) 61 mm

102.Condemning dimension of friction shoes wedge block of Casnub bogie is – (a) 54 mm

(b) 56 mm (c) 58 mm (d) 8.0 mm

103.Wear limit of vertical surface in friction shoes wedge block of Casnub bogie is – (a) 5.0 mm

(b) 6.0 mm (c) 7.0 mm (d) 8.0 mm

104.Wear limit of slope surface in friction shoes wedge block of Casnub bogie is – (a) 1.0 mm

(b) 2.0 mm (c) 3.0 mm (d) 4.0 mm

105.Nominal free height of outer spring of Casnub bogie is –

(a) 260 mm (b) 262 mm (c) 264 mm (d) 266 mm

106.What type of side bearers fitted in CASNUB 22HS trolley?

(a) Metal CC type (b) Spring loaded CC type side bearer & PU type

(c) Roller type (d) none of the above

107.Which types of steel are used in side frame column friction plates of Casnub bogie?

(a) Mild steel (b) Carbon steel

(c) Silico manganese steel (d) None of the above

Chapter-5 Answers:

5.001 – (d)	5.002 – (a)	5.003 – (b)	5.004 – (a)	5.005 – (c)	5.006 –(b)
5.007 – (c)	5.008 – (c)	5.009 – (d)	5.010 – (a)	5.011 – (b)	5.012 – (c)
5.013 – (b)	5.014 – (a)	5.015 – (a)	5.016 – (b)	5.017 – (c)	5.018 – (a)
5.019 – (c)	5.020 – (c)	5.021 – (a)	5.022 – (b)	5.023 – (a)	5.024 –(b)
5.025 – (c)	5.026 – (b)	5.027 – (d)	5.028 – (c)	5.029 – (b)	5.030 –(d)

5.031 – (b)	5.032 – (c)	5.033 – (b)	5.034 – (a)	5.035 – (b)	5.036 – (c)
5.037–(b)	5.038 – (b)	5.039 – (b)	5.040 – (c)	5.041 – (b)	5.042 –(b)
5.043 – (c)	5.044 – (a)	5.045 – (b)	5.046 – (c)	5.047 – (c)	5.048 –(b)
5.049–(a)	5.050 – (b)	5.051 – (b)	5.052 – (c)	5.053 – (b)	5.054 – (a)
5.055 – (b)	5.056 – (b)	5.057 – (b)	5.058 – (a)	5.059 – (c)	5.060 –(b)
5.061 – (c)	5.062 – (a)	5.063 – (c)	5.064 – (a)	5.065 – (c)	5.066 –(b)
5.067–(b)	5.068 – (c)	5.069 – (a)	5.070 – (b)	5.071 – (c)	5.072 – (a)
5.073 – (d)	5.074 – (c)	5.075 – (b)	5.076 – (c)	5.077 – (b)	5.078 –(b)
5.079 – (b)	5.080 – (c)	5.081 – (b)	5.082 – (b)	5.083 – (d)	5.084 – (c)
5.085 – (d)	5.086 – (a)	5.087 – (c)	5.088 – (a)	5.089 – (b)	5.090 –(b)
5.091 – (a)	5.092 – (b)	5.093 – (b)	5.094 – (c)	5.095 – (d)	5.096 – (c)
5.097 –(d)	5.098 –(b)	5.099 –(c)	5.100–(c)	5.101 –(d)	5.102 – (a)
5.103 –(c)	5.104 –(c)	5.105 – (a)	5.106 – (b)	5.107 –(c)	

(17) Knowledge in WTT (latest No. 75) of SC div.

1	Working time table issued by Ans:**(D)** A) PCOM B)CPTM C) DRM **D) PCOM &CPTM**
2	The classification of all stations of division shall be mentioned in Ans: (A) **A)WTT** B) SWR C)WTT&SWR
3	LP should follow Arrivals and departures of passenger trains at a class D station Ans: **(A)** **A)WTT** B)SWR C)Local instructions D)All of the above
4	Condition for movement of ISMD/ODC of Class B loads: Ans: D A) Speed not to exceed 40 Kmph on BG B) Spp[ed not to exceed 25 Kmph on MG C) Permitted to run both during day & night D) All the above
5	As per GR 4.10, the speed at Non Interlocked points: Ans: C A) 8 kmph B) 10 kmph C) 15 kmph D) None of the above
6	In section SC-KZJ, the type of bridge (over head structure) located between SC-LGD Ans: B A) Fly over bridge B) Skew bridge C) Both A & B D) None of the above
7	Maximum speed of BRNAHS empty wagons in Wadi-HYB section Ans: A A) 90 kmph B) 75 kmph C) 100 kmph D) Both
8	Attaching of dead locos in coaching trains (except Rajadhani/Shatabdi/Duranto) between KZJ-SC/HYB section Ans: D A) One live loco + one dead loco B) Two Live locos+ one dead loco C) Two Live Diesel Locos (WDM2, WDG3A, WDM3A, WDM3D)+ Two dead diesel locomotives (WDM2, WDG3A, WDM3A, WDM3D) D) All the above
9	Gross Load of BVZI Ans: D A) 24.5T B) 13.8T C) 10.77T D) 23.5T

10	By preventing detention for one hour for Loco type of WAP-7, we can save Ans: A A) Rs. 23174/- B) Rs. 21333/- C) Rs. 21125/- D) Rs. 20000/-
11	WTT No. 75 was in force from Ans: A A) 01.07.2019 B) 01.07.2020 C) 07.07.2019 D) 07.07.2020
12	WTT No. 75 was divided into how many parts: Ans: B A) 2 parts B) 3 parts C) 1 part D) None
13	Letter 's' denotes: Ans: C A) Public departure B) Skip C) Skip/Public departure D) None
14	Part C in WTT includes: Ans: B A) JPOs & Circulars B) JPOs, Circulars & other important documents C) Non-timing sections D) Timing sections
15	Type of ART (LUKAS) at KZJ station Ans: B A) B class B) A class C) A& B class D) None
16	Location of Rolling –In examination Ans: BDCR A) BDCR B) KMT C) VKB D) MLY
17	Intersectional bare running time KZJ-BPQ for freight trains as in WTT No.75 Ans: C A) 331 minutes B) 313 minutes C) 316 minutes D) 361 minutes
18	Length of ruling gradient UP raising 1 in 150 in KZJ-BPA

	Ans: A A) 20.30 Kms B) 20.03 Kms C) 20.00 Kms D) None
19	Critical block sections in KZJ-BPQ section. Ans: C A) SRUR-VEM B) JMKT-BGSF C) Both a & b D) None
20	Out lysing siding is located between Ans: B A) CHZ-MLY B) LGD –SC C) PGDP-BN D) CKN-BKL

(18) STATION WORKING RULES

1.Station working rules must be read in conjunction with

(a)G&SR Only

(b)G&SR and accident manual

(c)G&SR and block working manual

(d)All of the above

Ans: c

2.Trains are working between SC-MJF is under _____ and the trains are working between SC-STPD is under _____

(a)absolute block system & automatic block system

(b)automatic block system & absolute block system

(c)automatic block system & automatic block system

(d)absolute block system & absolute block system

Ans:c

3.Trains are working on 3rd main line between SC-LGD block stations is under _____ and trains are working between SC-SCMS siding block stations is under _____

(a)absolute block system & automatic block system

(b)automatic block system & absolute block system

(c)automatic block system & automatic block system

(d)absolute block system & absolute block system

Ans:d

4. Station section of SC station SCMS Line is from UP advanced starter No.____ at HSJ end up to the down advanced starter No. _____at SCMS end

(a)61 & 17 respectively

(b)61 & 19 repectively

(c)17 & 61 respectively

(d)19 & 61 respectively

Ans:b

5. At SC station, _____ gradient is From a point 50m beyond down home signal No.1 To a point 120m beyond the outermost facing point No.101 on the down line

(a)1 in 100 falling gradient

(b)1 in 115 falling gradient

(c)1 in 100 raising gradient

(d)1 in 115 raising gradient

Ans:c

6.At SC Station, PF No._____ is the non platform line

(a)PF No.6

(b)PF No.7

(c)PF No.8

(d)PF No.11

Ans:c

7. At SC Station, to facilitate berthing of two trains, with the provision of crossovers, Road Numbers _____, _____, _____ are divided into two portions

(a)4,5&6

(b)5,6&7

(c)5,7&8

(d)No such provision available at SC station

Ans:b

8. Which of the following arrangement is/are provided for working UP and DOWN trains on the 3rd mainline single line section between SC&LGD block stations

(a)Continuous track circuiting only

(b)Inter-station slotting arrangement only

(c) both a & b

(d) neither a&b

Ans:c

9.SC-SCMS section is under _____territory and SC-MJF section is under _____ territory

(a)RE territory & non-RE territory respectively

(b) Non RE territory & RE territory respectively

(c)Both RE territory

(d)Both Non RE territories

Ans:d

10.SC station is provided with which type of interlocking

(a)standard 1 interlocking

(b)standard 2 interlocking

(c)standard 3 interlocking

(d)None of the above

Ans:a

11.At SC Yard, which lines are track circuited

(a)All running lines

(b)all non-running lines

(c)both a&b

(d)Entire station except non-running lines

Ans:d

12.At SC station, the trains which are meant for going to KCG & MJF should not be received on Road No. _____ & _____

(a)1&2

(b)2&3

(c)3&4

(d)9&10

Ans:a

13. How many “D” class stations are located between HYB and HSJ block stations

(a)1

(b)2

(c)3

(d)4

Ans:c

14.How many non-running lines are there in HYB station

(a)8

(b)10

(c)12

(d)None of the above

Ans:c

15.HYB Station is a ___ class station and is provided with _____ interlocking

(a)A & standard-1

(b)B & Standard-2

(c)A & standard-2

(d)B & Standard-1

Ans:d

16. As HYB is a terminal station, which speed limit to be maintained from home signal

(a)8kmph

(b)10kmph

(c)15kmph

(d)No such speed restriction

Ans:b

17. _____ number of crank handles are provided in HYB Cabin's SM office for emergency operation of motor operated points

(a)2

(b)3

(c)4

(d)5

Ans:b

18.While receiving a train on platform No.1 at HYB station, a train from Road No. __ & ___ can be despatched

(a)3&4

(b)4&5

(c)5&6

(d)Any line Other than road no.1

Ans:c

19.Sanath nagar station is situated between

(a)HFZ-HSJ

(b)HFZ-AMQ

(c)Both a&b

(d)None of the above

Ans:c

20.How many "D" class stations are there in between SNF-HFZ block stations

(a)1

(b)2

(c)3

(d)4

Ans:c

21.How many “D” class stations are there in between SNF-HSJ block stations

(a)1

(b)2

(c)3

(d)4

Ans:c

22.The trains working between SNF-HSJ block stations under _____ system and the trains working between SNF-AMQ block stations under _____ system

(a)Absolute & Absolute

(b)Automatic & automatic

(c)Absolute & automatic

(d)Automatic & absolute

Ans:D

23. The level grade existing at AMQ end of SNF station changes into a _____ from a point 25m short of the down home signal.

(a)Steep UP gradient of 1 in 100

(b)steep falling gradient of 1 in 100

(c)Level gradient

(d)Undulating gradient

Ans:b

24.How many non-running lines are there at SNF station Yard

(a)12

(b)14

(c)16

(d)18

Ans:d

25.Between SNF-AMQ, trains are working under _____ system and on _____line

(a)Automatic block system & Double line

(b)Absolute block system & Double line

(c)Automatic block system & Single line

(d)Absolute block system & Single line

Ans:d

26.Handle type tokenless block instrument (cooperative type) with station-to-station telephone attached is installed in _____ of SNF for working Up and Down trains on the single line section between SNF-AMQ block stations.

(a)Cabin ‘A’

(b)Cabin ‘B’

(c)At Station masters room

(d)None of the above

Ans:b

27. SNF station is provided with which type of interlocking

(a)Standard 1

(b)Standard 2

(c)Standard 3

(d)None of the above

Ans:b

28.MLY Station working rules must be read in conjunction with G&SR and

(a) BWMD

(b) BWMS(TL)

(c) Both a&b

(d) BWMS(T)

Ans:c

29. MLY station is classified as which station

(a) Class ‘A’

(b) Class ‘B’

(c) Special class

(d) Special class & Class’B’

Ans:d

30.Trains working between MLY-LGD is under _____ block system and trains working under MLY-CHZ is under _____ block system

(a)Absolute & Absolute

(b)Automatic & automatic

(c)Absolute & automatic

(d)Automatic & absolute

Ans:d

31.MLY UP Home signal No.20 of ‘C’ cabin is of

(a)steep falling geadient

(b)steep raising gradient

(c)level gradient

(d)undulating gradient

Ans:b

32.How many non-running lines are there at MLY station

(a)15

(b)16

(c)17

(d)18

Ans:c

33._____ is provided for the DN M/L and UP M/L at SC end of MLY station yard due to existence of steep falling gradient towards block section

(a) Catch siding

(b) Slip siding

(c) Both a & b

(d) None of the above

Ans:b

34.SGE type lock and block instrument (non-cooperative type), with station-to-station telephone attached, is installed in _____ cabin of MLY station for working Up and Down trains on the double line section between MLY–CHZ block stations

(a) Cabin A

(b)Cabin B

(c)Cabin C

(d) SM office

Ans:c

35.MLY station is provided with type of panel interlocking

(a)standard 1

(b)standard 2

(c)standard 3

(d)None of the above

Ans:b

36.KZJ Station working rules must be read in conjunction with G&SR and

(a) BWMD

(b) BWMS(TL)

(c) Both a&b

(d) BWMS(T)

Ans:c

37.How many non-running lines are there in KZJ station area

(a)13

(b)14

(c)15

(d)16

Ans:c

38. Time delay for the overlap of signals is reduced from ____ seconds to _____ seconds for goods R&D Lines No.1,2,3 and all slots released by Goods Cabin of KZJ

(a)90 & 45 respectively

(b)180 & 90 respectively

(c)150 & 90 respectively

(d)120 &60 respectively

Ans:d

39. At present at KZJ, MRV is stabled on goods R&D Line _____ to facilitate direct dispatch

(a)Line no.7

(b)Line no.6

(c)Line no.8

(d)Line no.4

Ans:a

40.MRV stationed at KZJ is stored with which scale medical equipment

(a)Scale 1

(b)Scale 2

(c)Both

(d)None of the above

Ans:a

41.The target time for moving MRV from KZJ for direct despatch during day time is

(a)5 Mins

(b)10 Mins

(c)15 Mins

(d)20 Mins

Ans:c

42. At KZJ, self propelled ART is stabled on marshalling Line number ____ & 140/T Crane is stabled on Marshalling Line number __

(a)3&5

(b)5&3

(c)4&6

(d)6&4

Ans:c

43.KZJ station is provided with type of panel interlocking

(a)standard 1

(b)standard 2

(c)standard 3

(d)None of the above

Ans:a

44. How many outlying sidings taking off from RDM-PPZ or RDM-RGPM block section

(a)1

(b)2

(c)3

(d)0

Ans:d

45.How many Non running Lines are there in RDM station yard

(a)6

(b)7

(c)8

(d)9

Ans:c

46.In RDM station yard, which lines are provided with track circuiting

(a)All running lines

(b)Running lines & collieries line

(c)Running line & bypass line

(d)Running lines, collieries line & bypass line

Ans:d

47. Trains shall not be drawn up to signal no _____ and held on steep gradient for the reception of down trains from BPQ direction on any line in the passenger yard

(a)B26/B27 or BP24/BP25

(b)B36/B37 or BP24/BP25

(c)B26/B27 or BP25/BP26

(d)B36/B37 or BP25/BP26

Ans:B

48. which lines of RDM station yard,No load should be stabled without a live engine attached

(a)UP M/L

(b)DN M/L

(c)UP& DN M/L

(d) UP,DN M/L & Common loop

Ans:c

49. RDM station is provided with type of panel interlocking

(a)standard 1

(b)standard 2

(c)standard 3

(d)None of the above

Ans:c

50. How many cabins are situated in BPA station

(a)1

(b)2

(c)NIL

(d)None of the above

Ans:b

51. How many Non running lines are there in BPA Yard

(a)4

(b)5

(c)6

(d)7

Ans:d

52. BPA station is provided with type of panel interlocking

(a)standard 1

(b)standard 2

(c)standard 3

(d)None of the above

Ans:c

53. For Gate control in BPA cabin “A”, what is the Colour of control knobs

(a)Red

(b)Black

(c)White

(d)Yellow

Ans:B

54.At BPA station Yard, Goods lines 7 to 11 are

(a)Not track circuited

(b)Not provided with axle counters

(c)Both a & b

(d)All lines are track circuited

Ans:B

55. At BPA station yard, DN loop line and common loop line are

(a)provided with axle counters

(b)track circuited

(c)a & b

(d) None of the above

Ans:b

56. DKJ station is provided with type of panel interlocking

(a)standard 1

(b)standard 2

(c)standard 3

(d)None of the above

Ans:c

57._____ “D” class station is provided between DKJ-KRA and _____ “D” class station is provided between DKJ-GUU block stations

(a)GARLA & POCHARAM

(b)POCHARAM & GARLA

(c)NO & GARLA

(d)POCHARAM & NO

Ans:b

58.Non running lines at DKJ station yard are

(a)3

(b)4

(c)5

(d)6

Ans:b

59.At DKJ station yard, Road No.7,8,9 are provided with

(a)provided with axle counters

(b)track circuited

(c)a & b

(d) None of the above

Ans:a

60.Level crossing gate no. _____ is at KM No:456/7-9 between DKJ-GUU is completed closed for road traffic by construction of ROB

(a)88

(b)86

(c)84

(d)89

Ans:A

61.BDCR station working rules must be in conjunction with G&SR and_____

(a)BWMS-Token less

(b)BWMS-Token

(c) BWMD-Token less

(d)BWMD-Token

Ans:a

62.BDCR station is a class___station

(a)a

(b)b

(c) c

(d)none of the above

Ans:b

63.BDCR station is provided with standard___ interlocking

(a)STD1

(b)STD2

(c) STD3

(d)None of the above

Ans:a

64. How many non running lines are there at BDCR station yard

(a)13

(b)11

(c)10

(d)9

Ans:a

65.At BDCR station track circuiting is provided at

(a)M/L & L/L

(b)M/L, L/L, Goods R&D Line No.1

(c)M/L, L/L, Goods R&D Lineno.2

(d)All of the above

Ans:d

66.How many non running lines are there at MUGR station yard

(a)2

(b)3

(c)4

(d)5

Ans:c

67. MUGR station is provided with which type of panel interlocking

(a)standard 1

(b)standard 2

(c)standard 3

(d)None of the above

Ans:a

68.At MUGR station, for performing shunting

(a)T-806 required

(b)T-806 not required

(c)Shunting staff nominated for this purpose

(d)a & c

Ans:d

69.First and second loop of MUGR station is

(a)provided with axle counters

(b)track circuited

(c)a & b

(d) None of the above

Ans:b

70. How many detonators are to be provided as essential equipment at MUGR station

(a)10

(b)15

(c)20

(d) 25

Ans:c

71. MTMI station is provided with which type of panel interlocking

(a)standard 1

(b)standard 2

(c)standard 3

(d)None of the above

Ans:c

72.Non running lines at MTMI station yard are

(a)Dead end siding

(b)Dead end A&D siding

(c)None of a & b

(d) Both a& b

Ans:d

73.On main line, _____ and Block instruments (non-cooperative type) with station-to-station telephone attached are installed in the SM's office for working up and down trains on the Double line section between MTMI-BKL and MTMI-MDR block stations

(a)Daido handle type

(b)SGE Type

(c)Both a & b

(d) None

Ans:b

74. On branch line, _____ Type Tokenless Block instrument (cooperative type) with station-to-station telephone attached is installed in the SM's office for working Up and Down trains on the Single line section between MTMI- MAPA Block stations.

(a)Daido handle type

(b)SGE Type

(c)Both a & b

(d) None

Ans:a

75.MTMI-BKL& MTMI-MDR sections are provided with

(a)provide with BPAC

(b)track circuited(except non running lines)

(c)a & b

(d) None of the above

Ans:c

76.LPI station is a

(a) A-class station

(b)B-class station

(c)Special class station

(d) None of the above

Ans:c

77. LPI station is provided with which type of panel interlocking

(a)standard 1

(b)standard 2

(c)standard 3

(d)None of the above

Ans:b

78.The section between LPI-HFZ is provided with _____ system and the section between LPI-TLPR is provided with _____ system

(a) absolute & automatic block system

(b) absolute & absolute block system

(c) automatic & automatic block system

(d) automatic & absolute block system

79.At LPI station yard, Board to read “Entering absolute block territory” is provided at home signal__

(a) UP Home signal No.1

(b)DN Home signal No.50

(c) UP Home signal No.50

(d) DN Home signal No.1

Ans:a

80. At LPI station yard, Board to read “Entering automatic block territory” is provided at home signal__

(a) UP Home signal No.1

(b)DN Home signal No.50

(c) UP Home signal No.50

(d) DN Home signal No.1

Ans:b

81. At LPI station yard, Board to read “AUTOMATIC BLOCK SECTION COMMENCES” is provided at,

(a) UP Home signal No.1

(b)DN Home signal No.50

(c) DN advance starter No.43

(d)UP advance starter No.43

Ans:c

82.At VKB non-running lines are

(a)6

(b)2

(c) 8

(d) 4

Ans:d

83. VKB station is provided with which type of panel interlocking

(a)standard 1

(b)standard 2

(c)standard 3

(d)None of the above

Ans:b

84.AT VKB station yard, PQRS stabling line is connected to Goods loop No.2 at

(a)GDQ end

(b)CTF end

(c)SSPD end

(d) None of the above

Ans:a

85.At VKB, For shunting

(a)T-806 not required

(b)As notified station

(c)a&b

(d) T-806 required

Ans:c

86.How many non-running lines are there at PRLI Station yard

(a)3

(b)4

(c)5

(d) 6

Ans:c

87. _____ type of tokenless block instruments (non-cooperative type) for PRLI-GTU block section and PRLI-WDN block section with station-to-station telephones attached are installed in the SM's office for working up and down trains on the single line sections between PRLI-GTU and PRLI-WDN block stations

(a) podanur push button

(b)Daido handle type

(c)SGE Type

(d)None of the above

Ans:a

88. VKB station is provided with which type of panel interlocking

(a)standard 1

(b)standard 2

(c)standard 3

(d)None of the above

Ans:a

89. Special precautions prescribed under **SR.15.26.2.2** to **15.26.2.10** should be observed while working _____ without block protection on PRLI-GTU block section

(a) Goods trains

(b)passenger trains

(c)trolley

(d) None of the above

Ans:c

90.Number of Fire extinguishers to be provided at PRLI station as essential equipment at station (as per SWR)

(a)2

(b)4

(c)1

(d)3

Ans:a

(19) Stores & Tenders

01	GST is calculated on a. Basic cost of the material b. Basic cost of the material & packing charges c. Basic cost of the raw material. d. Basic cost of the material + forwarding charges + freight charges Answer : d
02	Non stock indents above Rs 45 lakhs have to be approved by_____ a. JAG scale officer b. ADRM c. PHOD/CHOD of department. d. None of the above Ans: c
03	Which of the following exercise is being monitored by railway board on regular basis; a. PL verification b. PL allocation c. PL unification d. PL duplication Ans: (c)
04	Into how many climatic zones, Indian Railway is classified for supply of uniforms; a. 7 b. 5 c. 9 d. 18 Ans: b
05	The plan head for stores suspense is _____. a. PH-16 b. PH-30 c. PH-71 d. None of the above Ans: c
06	Money allotted for purchase of stock items is called a. Purchase money b. Purchase balance c. Purchase suspense d. Purchase grant Ans: (d)
07	The detailed distribution of budget allotment made to railway administrations is contained in ; a. Yellow book b. Green book c. Pink Book d. White Paper Ans: (c)
08	As soon as the offer of the tenderer is accepted, the contractor has to deposit SD a. Within 30 days of the posting of written notice of acceptance b. Within 25 days of receipt of the communication c. Within 21 days of receipt of the communication d. Within 14 days of the posting of written notice of acceptance Ans :D
09	Offers received after closing of tender box, but before opening of tenders , are called a. Late Tenders b. Delayed Tenders c. Limited Tenders d. Open Tender

	Ans. B
10	A firm has entered into a contract with Railway to supply an item free off any cost. In the eye of Law a. Penalty can be imposed on firm in case of failure in supply b. Contract is not enforceable. c. Contract is enforceable, but penalty cannot be imposed d. Firm should be considered in future based on supply contract Ans: (B)
11	In case of Rate Contract a. Quantity. Rate., Consignee is stipulated b. Only rate is stipulated c. Quantity and Rate is stipulated d. Quantity, rate and Delivery Period is stipulated. Ans: (B
12	Which among following is not a material inspecting agency: a) RDSO (b) DOI c) IRTS (d) RITES Ans. (c)
13	What is the name of website for login in E-auction is www. ? a. indianrailways.gov. in b. scrtrso.gov.in c. ireps.gov.in d. None of the above Ans: c
14	BSV full form a. Book sale value b. Balance sale value c. Balance stock value d. Bulk store value Ans: b
15	In which form, Materials not required are returned to the nominated stores depot as per stores code ? (a) S – 1539 (b) S-1739 (c) S-1549 (d) SS-11 Ans. (a)
16	Disposal of scrap may be done by (a) Auction (b) Sale by tender (c) Sale to other Govt. department and undertakings (d) All above Ans. (d)
17	Which of the following items need not to be verified a) Dunnage b) Petty consumable stores c) Dead Stock, Tools & Plants of low value d) All of the above Ans: (D)
18	Registration of firm is treated as provisional until the firm a)has executed satisfactorily one order b) has secured one order c) has received one tender

	d)All of the above Ans : a
19	First two digits in any price list No represent: (a) Part Number (b) Specification Number (c) Drawing Number (d) Group Number Ans: (d)
20	Special limited tender is one where a. Number of firms is just one b. Purchase value is high but Limited tender is issued c. Purchase must be restricted from few firms d. Tender is issued by Registered post Ans.b

21. under Book Examination clause, Supplier or its agency is bound to allow examination of its books within a period of _____ from the date the notice is received by the Supplier or its agencies.

(A) 120 days (B) 60 days (C) 30 days (D) 45 days **Ans: B**

22. EMD rounded off to nearest higher _____ in Stores Contracts

(A) Rs.10 (B) Re 1 (C) Rs.100 (D) Rs.5 Ans: A

23. EMD is Nil up to the _____Value of Stores Tender

(A) Rs.10 Lakhs (B) Rs. 1 Lakh (C) Rs. 20 Lakhs (D) Rs.5 Lakhs Ans: D

24. EMD is exempted in Stores Tenders at Hqrs level with prior approval of Authority competent to accept the Tender, but not level below of _____

(A) PCMM (B) CMM (C) GM (D) Dy.CMM Ans: A

25. Supplier has to deposit SD within _____ of issue of LOA – Letter of Acceptance.

(A) 30 days (B) 10 days (C) 14 days (D) 5 days Ans: C

26. SD in Stores contracts is exempted up to the value of Contract _____

(A) Rs 1 Lakh (B) Rs. 5 Lakh (C) Rs. 10 Lakhs (D) None of the above Ans: A

27. EMD is exempted in Stores Tenders at Field unit (Divisions, Depots) level with prior approval of Authority competent to accept the Tender, but not level below of _____

(A) HAG officer (B) JA Grade Officer (C) SAG Officer (D) None of the above Ans: C

28. Under the Option clause, purchaser (i.e., Railways) reserves the right to increase and/ or decrease the order quantity by a quantity not exceeding _____ of the ordered quantity.

(A) 20 % (B) 10 % (C) 30 % (D) 5 % Ans: C

29. Letter of Credit (LC) apply for Stores tenders having an estimated value of ____or above

(A)Rs. 50 Lakhs (B) Rs. 20 Lakhs (C) Rs.15 Lakhs (D) Rs. 10 Lakhs Ans: D

30. _____ to assess the value and terms & conditions of LC.

(A) Any Scheduled Bank (B) State Bank of India (C) Andhra Bank (D) SBI & any scheduled Bank

Ans: B

31. The incidental costs i.e., _____ of Contract value towards issue and operation of LC shall be borne by the supplier /contractor.

(A) 0.15 % (B) 1 % (C) 0.5% (D) 0.05% Ans: A

32. Part ___ of Model SOP is dealt with delegation of Stores powers.

(A) A (B) B (C) C (D) D Ans: D

33. Head of Stores Dept at Railway Board is _____

(A) Member /Rolling Stock (B) Member/Engineering (C) DG(RS)- Director General of Railway Stores (D) Member /Material Management Ans: D

34. Track fittings are purchased by _____ Dept.

(A) Stores (B) Traffic (C) Engineering (D) Mechanical Ans: C

35. Dead Surplus Stores comprise items of stores which have not been issued for 24 months and which, it is considered, are not likely to be utilised on any railway within next _____

(A) One year (B) Two years (C) Three years (D) Five years Ans: B

(19) **Contract Labour (Regulation & Abolition) Act, & rules and Out sourcing contracts:**

1	Tender committee (TC) recommendations with dissent note is treated as : a. Unanimous recommendation b. Formal recommendation c. Not recommended d. None of the above Ans: a
2	Time limit for submission of Performance Guarantee by the contractor a. 30 days b. 45 days c. 15 days d. None of the above Ans: a
3	Two packet system a. Contains technical & financial bids b. Contains technical I & II bids c. Contains financial bid value below 50 Lakhs d. None of the above Ans: a
4	LOA means a. Loan of authority b. Letter of authority c. Letter of acceptance d. None of the above Ans: c
5	Earnest Money for works/services estimated to cost upto Rs. 1 crore is a. 1.9% of the estimated cost of the work b. 2% of the estimated cost of the work c. 4% of the estimated cost of the work d. None of the above Ans: b
6	Principal employer is a. Railway administration b. Contractor c. Both a & b d. None of the above Ans; a
7	Form XI (Rule 223 (c)) of describes in The Contract Labour (Regulation & Abolition) Central Rules, 1971 a. Certificate of medical examination b. Employment card c. Service certificate d. Performance notice Ans: a
8	"Shram Suvidha Portal" is maintained by a. Ministry of Labour & Employment in central government b. Ministry of Home affairs in central government c. Ministry of HRD d. None of the above Ans: a
9	CONTRACT LABOUR (REGULATION AND ABOLITION) ACT, 1970 (ACT No. 37 OF 1970) came in to effect: a. 5th September, **1970**. b. 1st September, 1970

	c. 5th July, 1970 d. None of the above Ans: a
10	Form V describes : Trade **License** / Address proof Certificate. **License** Certificate or Last Renewal Certificate should be submitted for Contract Labour Licence; which is in the Form number? a. Form V b. Form VII c. Form X d. Form XI **Ans: a**
11	In Railways, who is the principal employer under contract labour? a. Contractor b. Railway administration c. Both a & b d. None of the above Ans: b
12	As per CONTRACT LABOUR (REGULATION AND ABOLITION) ACT, 1970 **e**very contractor shall upload a Unified Annual Return in the a. Form XXIV b. Form XX c. Form XI d. Form X Ans: a
13	Expand RLC a. Regional Labour Court b. Regional Labour Commissioner c. Regional Labour counsel d. None of the above Ans: b

Contracts & works:

1. In case of open tenders, the minimum period required from date of publication to the date of opening the tender shall be _____.
   a. 1month
   b. 2 months
   c. 3 months
   d. 4 months
   Ans: a
2. Copies of tender notices may be displayed in the offices of field executives, HOD's offices for a period of not less than _____.
   a. 21 days
   b. 12 days
   c. 22 days
   d. 31 days
   Ans: a
3. For limited tenders, _____ days' notice shall be given.
   a. 12
   b. 13
   c. 14
   d. 15
   Ans: d

4. In case of quotation tenders, _____ days' notice shall be given.
   a. 5
   b. 6
   c. 7
   d. 11
   Ans: c
5. The tender notice should be sent to CPRO's office _____ days in advance for publication in Hind and other national dailies.
   a. 30
   b. 40
   c. 50
   d. 15
   Ans: c
6. List of Approved works (LAW) costing_____.
   a. more than 30 lakhs & less than 50 lakhs
   b. more than Rs. 10000/-
   c. less than Rs. 10000/-
   d. none
   Ans: a
7. Works for which budget grant was not provided in the sanctioned budget are called _____.
   a. OOT
   b. Primary budget
   c. Local budget
   d. None
   Ans: a
8. _____ is the nodal officer for preparation of Works Programme and sending it to Railway Board.
   a. PCE
   b. PCME
   c. PCEE
   d. PCMM
   Ans: a
9. SEMD accepted from the contractor borne on approved list for works costing 20 lakhs and 50 lakhs shall be Rs. _____-.
   a. Rs. 50,000/-
   b. Rs. 1 lakh
   c. Rs. 10,000/-
   d. Rs. 20,000/-
   Ans: a
10. The security deposit to be paid by the contractor for works costing more than 2 lakhs and upto 2 crores shall be _____.
   a. Rs. 5 lakhs
   b. Rs. 2 lakhs
   c. Rs. 4 lakhs
   d. Rs. 1 lakh
   Ans: a
11. Earnest Money to be deposited along with tenders for works above Rs. 50 lakhs is Rs. _____.
   a. Max. 1 lakh
   b. Rs. 50,000/-
   c. Rs. 25,000/-
   d. Nil Ans: a
12. Limited tenders are called through _____.

a. contractors from approved list
b. all contractors
c. both a & b
d. none
Ans: a

13. _____ is an example for piece work contract.
a. zonal works
b. approved works
c. granted works
d. none
Ans: a

14. Deposit work means _____.
a. Works of other Government Department done by Railways
b. Pvt. Siding of Railway works
c. Railway siding works
d. Commercial department of Railways
Ans: a

15. Urgency certificate is necessary in the case of _____.
a. repairs to damages to line caused by floods
b. repair to OHE lines
c. repair to station buildings
d. repair to rolling stock
Ans: a

16. The powers of Divisional Officers to accord administrative approval to Lumpsum works is upto _____.
a. Nil
b. Rs. 1 lakh
c. Rs. 1 crore
d. No limit
Ans: A

17. The number of monetary slabs fixed for categorizing the contractors in the approved list is _____.
a. Four
b. Three
c. Two
d. One Ans: a

18. The validity of approved list of contractors is _____.
a. 3 years
b. 4 years
c. 7 years
d. 2 years Ans: a

19. The accepting authority for enlistment in the approved list of Class A contractors in Open Line is _____.
a. JAG officer
b. HOD
c. PHOD
d. Committee of JAG Ans: c

20. A profit center is the office responsible for _____.
a. Costs and Revenue
b. Only costs
c. Revenue
d. None
Ans: a

22) **Welfare**

	:
01	The amount of maintenance grants to be granted per month (on SBF) to All Gr."C" & "D" employees irrespective of their pay and nature of disease, subject to the sickness in Govt./Rly Hospital exceeding 15 days on LWP: a. Rs. 3000/- b. Rs. 1000/- c. Rs. 5000/- d. None of the above Ans: a
02	The amount of Medical assistance to be granted per month(max. 3 months) under SBF to all Gr."C" & "D" employees who themselves/their family members suffer from major diseases and chronic diseases involving major operations, on recommendation by Rly medical authorities. a. Rs. 2000/- b. Rs. 3000/- c. Rs. 1000/- d. None of the above Ans: a
03	Non-gazetted cadre in pay level in pay matrix 6 and above are eligible for duty pass travel in a. First class b. First class A c. Both a & b d. None of the above Ans: a
04	In NPS system the contribution by the central government shall be a. 14 % basic pay plus DA b. 10% basic pay plus DA c. 14% basic pay d. 10% basic pay Ans: a
05	Persons with disability may be granted SCL for period of ------ per calendar year a. 10 days b. 11 days c. 4 days d. 3 days Ans: c
06	CCL may not be granted less than ---- days at a time a. 5 days b. 2 days c. 3 days Ans: a
07	As per HRC, running duty for the purpose of preparation links only should not exceed for Mail/Express a. 8 hrs b. 9 hrs. c. 7 hrs d. None of the above Ans: a
08	An amount of additional allowance paid to Motorman per month a. Nil b. Rs.1125/- c. Rs. 750/-

	d. Rs. 2250/- Ans: b
09	NHA for grade pay 3 to 5 (VII CPC) staff a. Rs. 384/- b. Rs. 477/- c. Rs. 630/- d. None of the above Ans: b
10	waiting duty allowance paid to the running staff at the rate of a) 15 Km/hr b) 20 Km/hr c) 25 Km/hr d) 30 Km/hr Ans: a
11	Break down special & Medical Relief Train allowance paid to the running staff at the rate of (signing ON to signing Off) a) 15 Km/hr b) 20 Km/hr c) 25 Km/hr d) 30 Km/hr Ans: c
12	Ballast/material Train/Crane special Train allowance paid to the running staff at the rate of (signing ON to signing Off) a) 15 Km/hr b) 20 Km/hr c) 25 Km/hr d) 30 Km/hr Ans: b
13	Trip allowance to be paid for a) High speed trains b) Rajadhani trains c) Both a & b d) None Ans: c
14	for Learning road KMs paid a) Actual Kms b) 20% higher than actual Kms c) 30% higher than actual Kms d) None Ans: a
15	For passenger services for less than 4 hrs working, the KMs to be paid a) Actual Kms subject to minimum 120 Kms b) Actual Kms subject to minimum130 Kms c) Acutal Kms subject to minimum of 150 Kms d) None Ans: a
16	For passenger services for working 4 hrs and above and less than 5 hrs working, the KMs to be paid a) Actual Kms subject to minimum 120 Kms b) Actual Kms subject to minimum130 Kms c) Acutal Kms subject to minimum of 150 Kms d) None Ans: b
17	For passenger services for working 5 hrs and above working, the KMs to be paid a) Actual Kms subject to minimum 120 Kms

	b) Actual Kms subject to minimum130 Kms c) Acutal Kms subject to minimum of 150 Kms d) None Ans: c
18	Allowance in lieu of running room facilities are to be paid, where a) At out station, where running room is not provided b) At home station, where detained for 4 hours c) At out station train detained for 4 hours d) None of the above Ans: a
19	Allowance in lieu of running room facilities are paid, where cook is not available. a) Half of the rates admissible b) Full part of the rates admissible c) 3/4th of the rates admissible d) 1/4th part of the rates admissible. Ans: a
20	Outstation allowance to be paid for running staff after signing Off a) 70 Kms for every 24 hrs b) 70 Kms for every 16 hrs c) 60 Kms for every 16 hrs d) None of the above Ans: b
21	shunting duty allowance paid to the running staff at the rate of a) 15 Km/hr b) 20 Km/hr c) 25 Km/hr d) 30 Km/hr Ans: a
22	KMs round –Off during a month to the nearest a) Zero b) 25 c) 50 d) 100 Ans: c
23	When non-running duties are performed by Running staff at their Hqrs, they will be paid the pay element of the running allowance --- a) 55% of basic pay applicable for the day b) 30% of basic pay applicable for the day c) 120 KMs per day d) 160 KMs per day Ans: b
24	When non-running duties are performed by Running staff at outstation, they will be paid the pay element of the running allowance --- a) 55% of basic pay applicable for the day b) 30% of basic pay applicable for the day c) 120 KMs per day d) ALK Ans: d
25	The following classification of employees are eligible for Night duty allowance a) Essential Intermittent b) Continuous c) Intensive d) All the above Ans: d
26	Leave salary on LAP for running staff calculated on ------- pay for first 60 days

	a) Substantive pay b) Average pay c) Either a or b d) None of the above Ans: c
27	on commuted leave, leave salary will be equal to ------ the leave salary as admissible on LHAP a) Thrice b) Twice c) Half d) None Ans: b
28	Tower wagon drivers are classified as a) Loco running staff b) Traffic running staff c) a or b d) none Ans: a
29	Dress allowance to running staff will go up 25% for each time DA rises by a) 25% b) 50% c) 30% d) 100% Ans: b
30	The amount of Hostel Subsidy fixed per child is a) Rs. 6750/- b) Rs. 2750/- c) Rs. 2250/- d) Rs. 6250/- Ans: a

35	Leave Reserve' for Loco inspector is provided in the category of a. LP goods b. LP Pass c. LP Mail & Exp. d. None of the above Ans: b
36	Crew links are to be prepared based on a. Sanctioned strength b. WTT c. Loco link d. Rake link Ans: b
37	Running staff review should be carried out for every a. Year b. Six months c. Two years d. None of the above Ans: b
38	Loco Outage means: a. Loco outage = Engine Hours for traffic use/ 24 hrs. b. Loco outage = Engine KMs for traffic use/24 hrs. c. Both a & b d. None of the above Ans: a
39	Basic duty of TLC/Power controller a. To arrange motive power b. To guide running staff c. Planning of locos to home shed for maintenance d. All the above Ans: d
40	Norms for Manpower for Locos fitted with Hitachi Motors: a. 5.5 staff per Loco b. 6.0 staff per loco c. 7.0 staff per loco d. 4.5 staff per loco Ans: a

23) DRUNKENESS POLICY

drunken policy	
Q. No.	Subject
1	When any railway servant is intoxicated or suspected to be in a state of intoxication, written evidence of ----------witnesses shall be obtained (SR. 2.09) a. Two persons b. Two independent witnesses c. On-duty CC and BET d. CLI & CCC Ans: b
2	As per SR. 2.09, intoxicated railway servant shall be examined by summon ---------- , if a railway doctor is not available. a. Govt. Railway police b. RPF inspector c. Civil Doctor d. Chief Loco inspector Ans: c
3	As per drunken policy(ref: issued by Hqrs. letter dt. 09.11.2017); if found BA positive while sign ON in first check with record 02 mg/100 ml and then in second check with reading 20mg/100ml, then ------- reading to be considered for imposing D&AR proceedings. a. 02 mg/100 ml b. 20mg/100 ml c. a or b d. none Ans: b
4	As per drunken policy(ref: issued by Hqrs. letter dt. 09.11.2017); if found BA positive while sign-ON in first check with record 02 mg/100 ml and then in second check with reading 0mg/100ml, then ------- reading to be considered for imposing D&AR proceedings. a. 02 mg/100 ml b. 0mg/100 ml c. a or b d. none Ans: b
5	during sign Off, if found positive during second check, Minor penalty will be issued if record is a. 0mg/100 ml b. 1mg/100 ml c. 100 mg/100 ml d. Not applicable Ans: d
6	During sign Off, if found positive during first check, Major penalty will be issued if record is a. 0 mg/100 ml b. 1 mg/100 ml c. 100 mg/100 ml d. Not applicable Ans: d
7	During sign ON, if found positive during first check and negative in second check ------

	-is to be followed a. Allowed for onduty with CLI accompany b. Third test to be conducted c. 4 hr rest to be given d. Allowed for onduty Ans: c
8	As per drunken policy (ref: issued by hqrs.letter dt. 09.11.2017); CMS kiosk should be integrated with a. Camera b. BA equipment c. Bio-metric d. All the above Ans: d
9	Instructions regarding 'taking alcoholic drink …..' are stipulated in Rule ---of GR a. 2.90 b. 2.09 c. 2.19 d. 2.8 Ans: b
10	when a railway servant is in intoxicated condition. He will be allowed (as per SR. 2.09) a. To work a train with accompany CLI b. sent as spare immediately c.Relief to be arranged immediately d. sent to GRP/RPF Ans: c

(24)	**Workmen Compensation Act, 1923**
01	Under Workmen's Compensation Act, 1923 (A) Individual manager subordinate to an employer cannot act as managing agent. (B) Managing agent includes an individual manager subordinate to an employer. (C) Only employer can act as managing agent. (D) The appropriate government shall appoint managing agent. Ans: D
02	The Workmen's Compensation Act, 1923, the Maternity Benefit Act, 1965 and the Employees State Insurance Act, 1948 (A) Together can be applicable. (B) The Maternity Benefit Act and the Employees State Insurance Act can be applicable at a time. (C) The Workmen's Compensation Act and the Employees State Insurance Act can be applicable at a time. (D) If the Workmen's Compensation Act and the Maternity Benefit Act are applicable, the Employees State Insurance Act is not applicable. Ans: D
03	While working at the construction of a multi-storeyed building of a company, a worker employed by a 'contractor', supplied by a 'sirdar', faced an accident and became temporarily disabled. For paying compensation to the worker, who shall be held responsible as per law? (A) The contractor who employed the worker (B) The sirdar who supplied the worker (C) Both (A) and (B) (D) None of the above Ans: A
04	If there is willful removal or disregard by the workman of any safety guard or other device which he knew to have been provided for the purpose of securing safety of workman, (A) Employer is liable to pay compensation (B) Employer is not liable to pay compensation (C) Appropriate government is liable to pay compensation (D) The Trade Union is liable to pay compensation Ans: B
05	Under Workmen's Compensation Act, 1923, which of the following are considered as dependent of deceased workman for the purpose of paying compensation? (i) a minor brother or an unmarried sister or a widowed sister (ii) a widowed daughter-in-law (iii) a minor child of a pre-deceased son (iv) a minor child of a pre-deceased daughter where no parent of the child is alive (v) a paternal grandparent if no parent of the workman is alive; (A) i, ii & v (B) i, ii. iii & iv (C) i, ii, iii & v (D) i, ii, iii, iv & v Ans: D
06	.Under this Act, employer shall not be liable to pay compensation in respect of any injury which does not result in the total or partial disablement of the workman for a period exceeding ------- days; (A) 7

	(B) 3 (C) 5 (D) 2 Ans: B
07	Under this Act, employer shall not be liable to pay compensation in respect of any injury not resulting in death or permanent total disablement caused by an accident (A) Under the influence of drink or drugs (B) Due to the wilful disobedience of the workman to an order expressly given or to a rule expressly framed for the purpose of securing the safety of workmen (C) Due to the wilful removal or disregard by the workman of any safety guard or other device he knew to have been provided for the purpose of securing the safety of workman (D) All the above Ans: D
08	part-I of Schedule I of Workmen (Employees)compensation Act, 1923 describes a) List of injuries deemed to result in Permanent total Disablement b) List of injuries deemed to result in Permanent Partial disablement c) List of Occupational diseases d) Factors for working out Lump-sum equivalent of compensation amount in case of permanent disablement and death. Ans: a
09	part-II of Schedule I of Workmen (Employees)compensation Act, 1923 describes a) List of injuries deemed to result in Permanent total Disablement b) List of injuries deemed to result in Permanent Partial disablement c) List of Occupational diseases d) Factors for working out Lump-sum equivalent of compensation amount in case of permanent disablement and death. Ans: b
10	Schedule III of Workmen (Employees)compensation Act, 1923 describes a) List of injuries deemed to result in Permanent total Disablement b) List of injuries deemed to result in Permanent Partial disablement c) List of Occupational diseases d) Factors for working out Lump-sum equivalent of compensation amount in case of permanent disablement and death. Ans: c
11	Schedule IV of Workmen (Employees)compensation Act, 1923 describes a) List of injuries deemed to result in Permanent total Disablement b) List of injuries deemed to result in Permanent Partial disablement c) List of Occupational diseases d) Factors for working out Lump-sum equivalent of compensation amount in case of permanent disablement and death. Ans: d
12	The following disease (s) are described in Para A of Schedule III under list of occupations diseases a) Diseases caused by work in compressed air b) Diseases caused by arsenic or its toxic compounds c) Poisoning by nitrous fumes d) a & c Ans: d
13	Loss of 'absolute deafness… deemed to result in a) permanent partial disablement b) permanent total disablement c) 100% loss of earning capacity

	d) Both b & c Ans: d
14	Loss of thumb'causes ------- percentage of loss of earning capacity a) 30% b) 40% c) 50% d) 20% Ans: a
15	Loss of three fingers of one hand' causes ------ percentage of loss of earning capacity a) 30% b) 40% c) 50% d) 20% Ans: a
16	Section-4 of workmen Compensation Act,1923 describes a) Amount of Compensation b) Compensation to be paid when due and penalty for default c) a & b d) none Ans: a
17	Section-4A of workmen Compensation Act,1923 describes a) Amount of Compensation b) Compensation to be paid when due and penalty for default c) a & b d) none Ans: b
18	Method of calculating wages' mentioned in ----- section of Workmen Compensation Act, 1923. a) Section-4 b) Section-4A c) Section-5 d) Section-6 Ans: c
19	Review' mentioned in ----- section of Workmen Compensation Act, 1923. a) Section-4 b) Section-4A c) Section-5 d) Section-6 Ans: d
20	Distribution of compensation' mentioned in ----- section of Workmen Compensation Act, 1923. a) Section-7 b) Section-8 c) Section-5 d) Section-6 Ans: b

	Payment of wages & minimum wages act:
	Payment of wages Act, 1936 came into force a. 23.04.1936 b. 01.04.1936 c. 30.04.1936 d. None of the above Ans: a
	According to ---------- the wage period not to exceed one month in payment of wages act, 1936. a. Sec. 4 b. Sec. 3 c. Sec. 2 d. Sec.1 Ans: a
	The Payment of Wages (Amendment) Bill, 2017 was introduced in Lok Sabha on a. February 3, 2017 b. February 2, 2017 c. February 24, 2017 d. None of the above Ans: a
	Workmen Compensation Act, 1923 came in to force? a. 01.07.1923 b. 01.07.1924 c. 01.01.1924 d. None of the above Ans: b
	Commissioner for workmen's compensation appointed under section? a. Section 12 b. Section 20 c. Section 1 d. None of the above Ans: b
	Amount of compensation mentioned in which section in Workmen compensation act, 1923. a. Sec. 4 b. Sec. 3 c. Sec. 2 d. Sec.1 Ans: a

26	Buffer height of Loco (conventional) to be checked during a. IA schedule b. IB schedule c. IC schedule d. All the above Ans: d
27	Detailed instructions for IT, IA, IB, IC, AOH, IOH & POH will be issued by a. PCEE b. RDSO c. both a & b d. none of the above Ans: c
28	WAG-7 loco with gear ratio of 16:65 is capable to start & haul ----- load in 1 in 200 gradient (as per RDSO TC No. 17) a. 4638T b. 4538T c. 4738T d. None of the above Ans: c
29	Full form of SMI a. Special Maintenance Instructions b. Schedule Maintenance Instructions c. Standard Moving information d. None of the above Ans: a
30	Average energy cost in Rs/KWH in SCR for the year 2015-2016 a. 6.74 b. 5.12 c. 4.74 d. 3.12 Ans: a
31	What is meant by Territorial outage? a. Number Locos holding at 00:00 hrs over a railway b. Number of ineffective locos at 00:00 hrs over a railway c. Both a & b d. None of the above Ans: d
32	Class A fires can extinguished with a. Water b. Foam c. Both a & b d. None of the above Ans: a
33	Energy conservation measures a. AC loco simulators b. Shunt capacitor banks at TSS c. Switching OFF electrical lights, fans etc when not required. d. All the above. Ans: d
34	Loco performance statics “statement -18” describes a. Engine hours b. Train & engine kms c. Fuel statistics d. None of the above Ans: a

35	Leave Reserve' for Loco inspector is provided in the category of a. LP goods b. LP Pass c. LP Mail & Exp. d. None of the above Ans: b
36	Crew links are to be prepared based on a. Sanctioned strength b. WTT c. Loco link d. Rake link Ans: b
37	Running staff review should be carried out for every a. Year b. Six months c. Two years d. None of the above Ans: b
38	Loco Outage means: a. Loco outage = Engine Hours for traffic use/ 24 hrs. b. Loco outage = Engine KMs for traffic use/24 hrs. c. Both a & b d. None of the above Ans: a
39	Basic duty of TLC/Power controller a. To arrange motive power b. To guide running staff c. Planning of locos to home shed for maintenance d. All the above Ans: d
40	Norms for Manpower for Locos fitted with Hitachi Motors: a. 5.5 staff per Loco b. 6.0 staff per loco c. 7.0 staff per loco d. 4.5 staff per loco Ans: a

41	The flow rate of a pump (Q) is measured in a. m 3/sec b. m3/hr c. litre/min d. all the above Ans: d
42	Advantage of centrifugal pump a. high efficiency b. simple construction c. uniform and continuous flow d. all the above Ans: d

(24) Railway Servants Conduct Rule, 1966

01	As per Rule 3(1), Every railway servant shall at all times- a) Maintain absolute integrity b) Maintain devotion to duty c) Do nothing which is unbecoming of a railway servant d) All the above Ans:d
02	Rule 3(1) of ix describes a) Maintain political neutrality b) Maintain accountability and transparency c) Maintain high ethical standards and honesty d) Maintain courtesy and good behaviour with the public Ans: b
03	Rule No. 3A describes, No Railway servant shall- a) In the performance of his official duties, act in a discourteous manner b) Indulge in any act of sexual harassment of any woman at any work place c) Both a & b d) None Ans: a
04	The rule under which 'No railway servant shall give or take or abet the giving or taking of dowry- a) Rule No. 13 A b) Rule No. 14 c) Rule No.12 d) Rule No.1 Ans: a
05	The rule under which ' No railway servant shall speculate in any stock, share or other investment' a) Rule No.13A b) Rule No. 14 c) Rule No.12 d) Rule No.16 Ans: d
06	According to Rule No. 3.1 of RS (Conduct) Rules, 1966, every Railway Servant shall at all times; a. Maintain absolute integrity b. Maintain devotion to duty c. Both a & b d. None of the above Ans: c
07	Rule No. 3B describes a) Promptness and courtesy b) Observance of Government's polices c) Prohibition of sexual harassment of working women d) None of the above. Ans: b
08	'Restrictions regarding Marriage' describes under a) Rule No.13 b) Rule No.19 c) Rule No.21

	d) Rule No.14 Ans: c
09	Consumption of Intoxicating Drinks and Drugs prohibited under Rule __ a) Rule No.13 b) Rule No.19 c) Rule No.22 d) Rule No.14 Ans: c
10	Rule No.20 describes a) Canvassing of Non-Official or other influence b) Investment, lending and borrowing c) Vindication of Acts and Character of Railway servants d) None Ans: a
11	As per Note 2 under Rule 13; the limit on money value as Gift for the occasions of wedding, religious functions etc., for Group C Railway servant a) 7500/- b) 750/- c) 25000/- d) 15000/- Ans: a
12	As per Note 2 under Rule 13, The limit on money value as Gift for the occasions of wedding, religious functions etc., for Group B- Railway servant a) 7500/- b) 750/- c) 25000/- d) 15000/- Ans: d
13	As per Note 2 under Rule 13, The limit on money value as Gift for the occasions of wedding, religious functions etc., for Group A- Railway servant a) 7500/- b) 750/- c) 25000/- d) 15000/- Ans: c
14	As per Note 3 under Rule 13; Railway servant shall not accept any gift without the sanction of the Government if the value exceeds- for Group A or B railway servant a) 1500/- b) 500/- c) 1000/- d) None Ans:a
15	As per Note 3 under Rule 13; Railway servant shall not accept any gift without the sanction of the Government if the value exceeds- for Group C railway servant a) 1500/- b) 500/- c) 1000/- d) None Ans:b
16	Rule No. 13 describes a) Dowry b) Gifts c) General d) Criticism on Government Ans: b
17	Rule No. 3 describes a) Dowry

	b) Gifts c) General d) Criticism on Government Ans: c
18	Rule No. 9 describes a) Dowry b) Gifts c) General d) Criticism on Government Ans: d
19	Rule No. 16 describes a) Investment, Lending and borrowing b) Gifts c) Demonstration d) Criticism on Government Ans: a
20	Rule No. 7 describes a) Investment, Lending and borrowing b) Gifts c) Demonstration d) Criticism on Government Ans: b

24) RS (D&A) Rules, 1968

01	Punishment norms dealt as per a. Rule No.5 b. Rule No. 6 c. Rule No. 11 d. None of the above Ans: b
02	Procedure for imposing Major penalties in which Rule of RS (D&A) Rules, 1968 a. 9 b. 11 c. 5 d. None of the above Ans: a
03	During suspension which type of allowance is eligible for running staff a. Subsistence allowance b. Average running allowance c. Both a & b d. None of the above Ans: c
04	Standard Form No. 5 relates to a. Issue of major penalty b. Issue of suspension c. Issue of minor penalty d. Nomination of Inquiry Officer Ans: a
05	Revision (D&AR) under which rule is to be made? a. Rule No. 21 b. Rule No.25 c. Rule No. 9 d. None of the above Ans: b
06	Compulsory retirement of a Railway Servant in accordance with the provision relating to his superannuation or retirement shall constitute a a) Minor Penalty b) Not a penalty c) Major penalty d) None Ans: b
07	Appointing authority in relation to a Railway Servant means: a) an authority who actually appointed him b) equal or higher authority empowered to make appointments to the post c) any other authority d) a&b only **Ans: d**
08	RS (D&A) Rules are not applicable to: a) any member of All India Services b) RPF personnel c) any person in casual employment d) all of the above Ans: d
09	While holding enquiry, who have to fix the date, time & venue and inform the Charged employee:

	a) Inquiry officer b) Disciplinary authority c) presenting officer d) Confidential section of the dept Ans: a
10	Inquiry Officer can delegate his functions to: a) Disciplinary authority b) Defence helper c) Presenting officer d) He cannot delegate Ans: d
11	'Censure' is penalty under a) Minor b) Major c) Both a&b d) None Ans: a
12	Master circular No.66 narrates about a) Establishment rules b) Penalties & Disciplinary authorities etc., c) Leave rules d) None Ans: b
13	The Railway Servants (Disciplinary & Appeal) Rules, 1968 divided into a) 3 parts b) 6 parts c) 7 parts d) 5 parts Ans: c
14	Part II of RS (D&A) Rules, 1968 deals a) Suspension b) Penalties c) Revision & Review d) None Ans: a
15	If Sr. DEE/DEE is an Disciplinary authority, the Appeal lies to (in case of Accident cases) a) ADRM b) DRM c) PCOM d) PCEE Ans: b
16	If appeal was disposed by Sr. DEE/DEE (if there is no Sr. Divisional Officer), then Revision petition lies to a) DRM b) ADRM c) PCEE d) PCOM

	Ans; a
17	In terms of Rule 9 (7) of RS (D&A) Rules, 1968 _____ days ' of time is to be allowed to the Charged Official for submitting his written statement of defence. a) 15 days b) 7 days c) 10 days d) 3 days Ans: c
18	Presenting Officer is appointed by a) Disciplinary Authority b) Appellate Authority c) Charged Official d) Inquiry Officer Ans: a
19	Inquiry Officer is appointed by a) Disciplinary Authority b) Appellate Authority c) Charged Official d) Inquiry Officer Ans: a
20	Rule No.13 of RS(D&A) Rules, 1968 deals a) Appeals b) Common proceedings c) Procedure of imposing penalties d) Communication of Orders Ans. b

24)	**Factory Act, 1948**
1	Creche is to be provided if ---- or more lady employee are engaged. a. 25 b. 32 c. 30 d. 40 Ans: c
2	Section 2 K of Factories act 1948 says about a. Manufacturing process b. Factory c. Worker d. ISI certification Ans: a
3	If the factory employs more than 1000 workers, they should appoint qualified --- to carry out the prescribed duties a. Safety officer b. Welfare officer c. Security officer d. Judicial officer Ans: a
4	For contravention of provisions of Factories Act or Rules, the occupier shall liable for punishment upto a. 2 years or fine up to 1 lakh or both b. 6 months or fine upto 10,000/- or both c. 3 years or fine 10,000/- or both d. None Ans: a
5	if any employee found violating the section 20 of Factories Act, 1948 shall be fine up to a. Rs. 10 b. Rs. 5 c. Rs. 15 d. Rs. 20 Ans: b
6	Section 41-G of the Factories Act 1949 says about a. Fencing of machines b. Fencing of factory c. Fencing near machinery in motion d. Workers participation in safety management Ans: d
7	The occupies of a Factory has to submit the document on or before --- of every year to renewal of a license for a factory a. 31 st October of every year b. 30 th of june of every year c. 31 st march of every year d. 31 st December of every year Ans: a
8	Where --- or more workers are employed in a factory, then there shall be a Safety committee in the factory. a. 100 or more b. 150 or more c. 200 or more d. 250 or more Ans: d

9	Which of the following provisions do not come under the 'Welfare chapter' in the Factories Act, 1948 a. Washing facilities b. Drinking water c. Facilities for sitting d. First-aid appliances Ans: a
10	What is the penalty payble by parents/guardian for permitting double employment of a child? a. Rs. 2500/- b. Rs. 5000/- c. Rs. 500/- d. Rs. 1000/- Ans: d
11	What is maximum number of hours that a child can be employed for , as per Factories Act, 1948 a. 3.5 hrs. b. 4.5 hrs c. 5.5 hrs d. 6.5 hrs Ans: b
12	Who is liable to pay the fee for a certificate of fitness? a. The person himself b. Trade union c. Occupier of Factory d. Government Ans: c
13	What is the maximum number of hours in a week that an adult worker is allowed to work for a. 35 hrs. b. 40 hrs. c. 45 hrs d. 48 hrs Ans: d
14	Who is the chairman of the site appraisal committee a. Chief inspector of state b. Chief factory officer of state c. Chief labour officer of state d. Chief welfare officer of state Ans: a
15	As per section 6 of factories act, 1948, who has the power to make rules on approval, licensing and registration of factories. a. Central Govt. b. State Govt. c. Supreme court d. Labour commissioner Ans: b
16	which section of Factories act, 1948 defines 'occupier' a. 2 n b. 2 m c. 2 h d. 2 k Ans: a

17	which section of Factories act, 1948 exempt the occupier or manager from liability in certain cases a. 71 b. 101 c. 110 d. 95 Ans: d
18	As per section 101 of Factories Act, 1948, what are the conditions that exempt the occupies or manager from liability in certain defences which are punishable under this act. a. He has used diligence to enforce the execution of this act b. The offence in question was committed without his knowledge, consent or connivance c. Both a and b d. None Ans: c
19	As per section 3 of factories act, 1948, who has the power to make rules for references to time for a day in any area where Indian Standard Time is not ordinarily observed. a. State labour commissioner b. Chief inspector of state c. Central Govt. d. State Govt. Ans: d
20	as per section 5 of Factories act, 1948, who has the power to exempt any factory or class or description of factories from all or ay of the provisions of this act, for such period and subject to such conditions as it may think fit. a. Central Govt. b. State Govt. c. State labour commissioner d. Chief inspector of state Ans: b
21	The Factories act, 1948 extends to a. Whole of India including Jammu & Kashmir b. Whole of India excluding Jammu & Kashmir c. Whole of India including North Easern Tribal Area d. Whole India excluding North Eastern Tribal Area Ans: a
22	Which section of Factories Act, 1948 defines 'Adult' a. 2b b. 2d c. 2a d. 2f Ans: c
23	As per section 2 d of the Factories Act, 1948, ' young person' means a person who is a. A child b. An adolescent c. Either a child or an adolescent d. A adult Ans: c

24	which of the following are not covered by the definition of factory i. Railway running sheds ii. Mines iii. Mobile units of armed forces iv. Hotels eating places of restaurants. choose the correction options. a. i , ii b. i , ii, iii c. ii , iii, iv d. i , ii, iii, iv Ans: d

विभागीय परीक्षाओं के लिए राजभाषा प्रश्न बैंक

Rajbhasha Question Bank For Departmental Examinations

1.	What is the Official Language of Union of India? (A) a)Hindi in Devnagari Script b) Hindi in Sanskrit Script c)Sanskrit d) None of the above
2.	On which date Part XVII of the Constitution was passed in Parliament? (B) a) 19.09.1947 b) 14.09.1949 c) 14.07.1949 d) 19.07.1947
3.	When was Official Language Act 1963 passed? (A) a)10.05.1963 b) 10.05.1967 c) 15.05.1963 d) 15.05.1967
4.	When was Official Language Act 1963 amended ? (A) a)1967 b)1963 c) 1947 d)1965
5.	When is "Hindi Day" celebrated every year? (D) a) September 04 b) September 24 c) November 14 th d)) September 14
6.	According to Official Language Rules, under which region Andaman & Nicobar Islands come (A) a)Region A b) Region C c) Region B d) None of above
7.	According to Official Language Rules ,Which state comes under Region "A" ? (C) a) Maharashtra b)Punjab c) Harayana d) Arunachala Pradesh
8.	What is the Official Language of Arunachal Pradesh? (C) a)Bodo b) Hindi c) English d) Sindhi
9.	The official Languages act 1963, section 3 with effects from ? (B) a) 26 January, 1963 b) 26 January, 1965 c) 25 January, 1963 d) 25 January 1965
10.	In which part of the Constitution are the Articles 343-351 that give information about Official Language available ? (A) a)Part XVII b) Part XVIII c) Part XIV d) Part XVI
11.	Maximum how many Artists can participate in Hindi Drama Competitions? (D) a)5 Artists b) 10 Artists c) 20 Artists d) 15 Artists
12.	How many inspections in a month are mandatory for Rajbhasha Adhikari of Railways? (A) a)One b) Three c) Two d) Five

13.	According to Official Language Rules which state comes under 'B' region? (A) a) Maharashtra b) Jammu & Kashmir c) Jharkhand d) Nagaland
14.	At present how many languages are enlisted in the Eighth Schedule of the constitution? (C) a)18 b) 20 c) 22 d) 21
15	In which article is the provision regarding OL policy available in Part V of the constitution? (B) a)Article -210 b) Article-120 c) Article -344 d) Article – 343
16	In which order Name, Designation and Sign Boards are to be exhibited? (D) a)Trilingual (Hindi, Regional & English) b)Trilingual (English, Regional & Hindi) c)Trilingual (Regional, English & Hindi) d)Trilingual (Regional, Hindi & English)
17.	When was the Official Language Rules passed? (B) a)1967 b)1976 c) 1963 d)1965
18.	How many articles are there in Part XVII of the Constitution? (D) a)7 b)6 c)8 d)9
19.	In compliance of article 344 when was the Official Language Commission formed? (B) a)1950 b) 1955 c) 1956 d)1949
20.	Who was the First Chairman of the Official Language Commission? (B) a) G.V. Pant b) B.G. Kher c) Sri Lalith Narayan Mishra d)Nanda Kumar
21.	Who was the First Chairman of the committee which was formed on the recommendation of the Official Language commission? (A) a) G.V. Pant b) B.G. Kher c) Sri Lalith Narayan Mishra d)Nanda Kumar
22	As per the Constitution, who is translating the statutory rules, regulations and orders? (D) a)Home Ministry b) Finance Ministry c) Prime Ministry d) Law Ministry
23.	Which Official Language Rule mentions about the Proficiency of Hindi of the Officer/Employee (A) a)Rule-09 of Official Language Rule 1976 b)Rule-06 of Official Language Rule 1976 c)Rule-10 of Official Language Rule 1976 d)Rule-08 of Official Language Rule 1976
24.	Which Article comes under Part VI ? (A) a)Article -210 b) Article-120 c) Article -344 d) Article –

	343
25.	Who chaired the first Railway Hindi Salahkar Samiti constituted in 1973 (C) a) G.B. Pant b) B.G. Kher c) Sri Lalith Narayan Mishra d)Nanda Kumar
26.	Communication from central govt office to a state or Union territory in region C or to any office Or person in such state shall be in (A) a)English b)Hindi c)Hindi and English d)Hindi or English
27.	In which year the Hindi translation of Railway Budget was prepared by the Railway Minister (C) a)1950 b) 1955 c) 1956 d)1949
28.	In which year Hindi (Parliament) section was established in Railway Board? (D) a)1950 b) 1955 c) 1956 d)1960
29.	What are the States/Union territories that comes under Region "A" ? (D) a) Bihar b)Punjab c) Chhattisgarh d) a&c
30.	What are the States/Union territories that come under Region "C" ? (A) a) Sikkim, b) Daman & diu c) Andaman & Nicobar d) Union Territory of Chandigarh
31	Article 120 related (A) a)Language to be used in Parliament b)Language to be used in the Legislature c)Official Language of the union d)Official languages of the state
32	Article 210 related (B) a)Language to be used in Parliament b)Language to be used in the Legislature c)Official Language of the union d) Languages to be used in supreme court and in the high courts and for acts bills etc
33.	What is the expansion for OLIC used by Dept. of Official Language? (B) a)Official Language Improvement Committee b)Official Language Implementation Committee c)Official Language Implement Committee d)Official Language Implementation Commission
34.	How many Hindi courses are prescribed for Central Govt. Employees? (C) a)2 b)3 c)4 d)5
35.	Which is the elementary Hindi course prescribed for Central Govt. Employee (B) a)Praveen b)Prabodh c)Parangat d) Pragya
36.	Who is the Chairman of Central Hindi Committee ? (C) a)Home minister b) Finance Minister c) Prime Minister d)

	Diffence minister
37.	When was the present Parliamentary Committee on Official Language constituted ? (B) a)1967 b)1976 c) 1968 d)1949
38.	What are the Languages available in the 8th Schedule ? (A) a). Assameese Bengali Gujarati Hindi Kannada Kashimiri Konkani Malayalam Manipuri Marathi Nepali Oriya Punjabi Sanskrit Sindhi Telugu Urdu Bodo Santali Mythili Dogri Tamil b) Assameese Bengali Gujarati Hindi Kannada Kashimiri Konkani Malayalam Manipuri Marathi Nepali Oriya Punjabi Sanskrit Sindhi Telugu Urdu Bodo Santali Dogri Tamil c) Assameese Bengali Gujarati Hindi Kannada Kashimiri Konkani Malayalam Manipuri Marathi Nepali Oriya Punjabi Sanskrit Sindhi Telugu Urdu Bodo Mythili Dogri Tamil d)None of the above
39.	At present, how many Sub-Committees are there in the Parliamentary Committee on Official Language? (C) a)6 b)5 c)3 d)2
40	Article 344 related to (D) a)Directives for development of Hindi language b)Languages to used in Parliament c)Languages to be used in supreme court and in the high courts and for acts bills etc d)Commission and Committee of parliament on official Languages
41.	Who is the Chairman of the Town Official Language Implementation Committee constituted in major cities? (C) a)DRM b)ADRM c) Senior most Central Govt. Officer of the city. d) Division Raja bhasha adhikari
42.	What is the periodicity of the meeting of Town Official Language Implementation Committee? (A) a) Once in 6 months b) Once in 12 months c) Twice in 6 months d) 3 times in 12 months
43.	Who prepares the Annual Programme on Official Language? (D) a)Ministry of Finance Affairs. b)Ministry of Human Resource c) Ministry of Urban devlopment d)None of the above .
44.	What are the Hindi courses prescribed for Central Govt. Employees? (B) a)Prabodh, Praveen& Pragya b)Prabodh, Praveen& Pragya & Parangat c)Prabodh, Pragya & Parangat

	d)Prabodh, Praveen, & Parangat
45.	Which is the final Hindi course prescribed for Clerical cadre employees of Central Govt.? (C) a)Praveen b)Prabodh c)Parangat d) Pragya
46.	What are the training facilities available to a Central Govt. employee to get trained in the Hindi courses? (C) a) Intensive, Correspondence and Private b) Regular, Intensive and Private c) Regular, Intensive, Correspondence and Private d) Regular, Intensive, Correspondence
47.	How many times the Regular Hindi exams are conducted in a year ? (A) a)2 b)3 c)4 d)1
48.	In which months Regular Hindi examinations are conducted? (A) a) May and November b)June and December c)June and august d)July and November
49	When was first time 'World Hindi Day' is observed? (D) a)10 November 2006 b)10 January, 2016 c) 10 January, 2005 d) 10 January, 2006
50.	Name the newly introduced course in Hindi by Hindi Teaching Scheme (C) a)Praveen b)Prabodh c)Parangat d)None of the above
51.	Who are all the employees classified under Category 'A' ? (C) a)Those employees whose mother tongue is Urdu or Hindustani or its dialect b)Those employees whose mother tongue is english or Hindustani or its dialect c)Those employees whose mother tongue is Hindi or Hindustani or its dialect d) Those employees whose mother tongue is Urdu, Punjabi, Kashmiri, Pusto, Sindhi or other allied languages
52	States / Union Territories Falling in the region A (C) a)Bihar, , Haryana, Himachal Pradesh, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh, Uttarakhand and Andaman & Nicobar Islands, National Capital Territory of Delhi Union Territories b)Bihar, Chhatisgarh, Haryana, Himachal Pradesh, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh, Andaman & Nicobar Islands, National Capital Territory of Delhi Union Territories c)Bihar, Chhatisgarh, Haryana, Himachal Pradesh, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh, Uttarakhand and Andaman & Nicobar Islands, National Capital Territory of Delhi Union Territories d)Bihar, Chhatisgarh, Haryana, Himachal Pradesh, Jharkhand, Madhya Pradesh, Uttar Pradesh, Uttarakhand and Andaman & Nicobar Islands, National Capital Territory of Delhi Union Territories

53	Which of the following is the correct English word for मंडल रेल प्रबंधक (B) a)GM b) DRM c)ADRM d) AGM
54.	Which Official Language Rule mentions about the Working knowledge of the Officer/Employee ? (B) a) Rule-09 of Official Language Rule 1976 b) Rule-10 of Official Language Rule 1976 c) Rule-11 of Official Language Rule 1976 d) Rule-12 of Official Language Rule 1976
55.	From which course a category 'C' employee required to be trained (A) a)Praveen b)Prabodh c)Parangat d)None of the above
56.	From which course a category 'D' employee required to be trained? (B) a)Praveen b)Prabodh c)Parangat d) Pragya
57.	What is the Lumpsum Award for passing Pragya? (C) a)2500 b)2600 c)2400 d)None of the above
58.	Which of the following is the correct English word for महाप्रबंधक (A) a)GM b)DRM c)AGM d) ADRM
59.	In which order the forms used by Public are to be prepared? (D) a)Trilingual Form (1.Regional Language 2.English 3.Hindi) b)Trilingual Form (1.English 2.Regional Language 2.Hindi) c)Trilingual Form (1.Hindi 2.English 3. Regional Language) d)Trilingual Form (1.Regional Language 2.Hindi 3.English)
60.	In which order Rubber Stamps are to be prepared? (B) a) Bilingual from-one line English and one line Hindi b) Bilingual from-one line Hindi and one line English c) Regional language d) Regional Language, Hindi, English
61.	Which Foreign Language included in the Eighth Schedule? (C) a) Urdu b)Punjabi c)Nepali d) None of these
62.	Who is the Chairman of the Divisional Official Language Implementation Committee? (A) A)DRM b)ADRM c)Nominated officer by DRM d) Division Raja bhasha adhakari
63.	Which Ministry/Office is conducting the exams for the Central Government employees? (C) a)Hindi Teaching Scheme under Ministry of Finance Affairs. b)Hindi Teaching Scheme under Ministry of Human resource c)Hindi Teaching Scheme under Ministry of Home Affairs d)Hindi Teaching Scheme under Ministry of Culture .

64.	Who is the Chairman of Town Official Language Implementation Committee (Central Govt. Ooffices)/Vijayawada? (A) a)DRM b)ADRM c)Nominated officer by DRM d) None of the above
65.	In which order the Station announcements made? (D) a)Trilingual (Hindi, Regional & English) b)Trilingual (English, Regional & Hindi) c)Trilingual (Regional, English & Hindi) d)Trilingual (Regional, Hindi & English)
66.	How the Panel Board of a train has to be displayed? (D) a)Trilingual (Hindi, Regional & English) b)Trilingual (English, Regional & Hindi) c)Trilingual (Regional, Hindi) d) None of the above
67.	Who are eligible to undergo training in Hindi Conversation course ? (A) a) All the open line staff (including Class–IV) who come in contact with public directly. b) All the open line staff c) Running staff d) Office staff
68.	Why training in Hindi is imparted to Central Government Officers/Employees ? (B) a) By which they can speak with officers b) By which they can do their day-to-day work in Hindi. b) By which they can speak with colleague d)None of the above
69.	What is the duration for Hindi Conversation course in Hrs ? (D) a)20 b)10 c)40 d)30
70.	Mention the name of Rajbhasha Padak awarded to Sr.Administrative Grade or Higher Officials? (A) a)Rail Mantri Rajbhasha Rajat Padak b)Lal Bahadur Shastri Award c)Maithili Sharan Gupta Rajat Padak d) Premchand Award
71.	According to Official Language Rules ,Which State comes under Region "B" ? (D) a) Haryana b)Rajasthan c) Jharkhand d) None of the above
72.	Mention the name of the Award to be given for writing story/novel writing in Hindi by Railway Board. (D) a)Rail Mantri Rajbhasha Rajat Padak b)Lal Bahadur Shastri Award c)Maithili Sharan Gupta Award d) Premchand Award
73.	Mention the name of the Award to be given for writing the book of Hindi poems, by the Railway Board. (C) a)Rail Mantri Rajbhasha Rajat Padak b)Lal Bahadur Shastri Award c)Maithili Sharan Gupta Award

	d) Premchand Award
74.	¨ What is the Cash Award given under Kamalapati Tripathi Rajbhasha Swarna Padak ? (A) a) ₹10,000 b) ₹1000 c) ₹100000 d) None of the above

75.	What is the main duty of the Committee of Parliament on Official Language? (A) a)To review the progressive use of Hindi b)To review the progressive use of Hindi and English c)To review the progressive use of Hindi and state official languages d)To review the progressive use of English
76.	World “Hindi Day" celebrated every year on ? (B) a) 11 th January b) 10 th January c) 12 th January d) 14 th September
77.	What are the four languages that were added to the list of 18 languages of the Eighth Schedule? (D) a)Bodo, Dogri, Maithili & Nepali, added. b)Bodo, Sindhi , Maithili & Santhali were added. c) Kashmiri, Dogri, Maithili & Santhali were added. d) Bodo, Dogri, Maithili & Santhali were added
78	Nepali Language is the State Language of which state? (A) a) Sikkim b) Bihar c) Chhatisgarh d) Himachal Pradesh
79	The Official Language Rules 1976, is applicable on entire countries except one State? Which is that State? (B) a)Kerala b)Tamilnadu c)Tripura d)Andhara Pradesh
80	The Committee on Official Language consist of ---------- members from Lok Sabha (D) a) 30 b) 25 c) 10 d) None of these
81	The report of committee on official language is submitted to the (B) a) Speaker of Lok Sabha b) President c) Vice President d) Chief Justice of India
82	What are the four languages that were added to the list of 18 languages of the Eighth Schedule? (D) a)Bodo, Dogri, Maithili & Nepali, added. b)Bodo, Sindhi , Maithili & Santhali were added. c) Kashmiri, Dogri, Maithili & Santhali were added. d) None of the above
83	Nepali Language is the State Language of which state? (D) a) Sikkim & Rajasthan b) Bihar c) Chhatisgarh d) None of the above
84	The Official Language Rules 1976, is applicable on entire countries except one State? Which is that State? (D) a)Kerala b)Arunachala pradesh c)Tripura d)None of the above

85	The Committee on Official Language consist of ---------- members from Rajya Sabha (C) a) 15 b) 20 c) 10 d) 30
86	States / Union Territories Falling in the region 'C' (D) a)Andhra Pradesh, Arunachal Pradesh, Assam, Goa, Jammu & Kashmir, Karnataka, Kerala, Orissa, Tamil Nadu, West Bengal, Mizoram, Manipur, Sikkim, Meghalaya, Dadra Nagar Haveli, Daman & Diu, Nagaland, Lakshadweep, Puducherry, Tripura b)Andhra Pradesh, Arunachal Pradesh, Assam, Goa, Jammu & Kashmir, Karnataka, Kerala, Orissa, Tamil Nadu, West Bengal, Mizoram, Manipur, Sikkim, Meghalaya, Nagaland, Puducherry, Tripura,Telangana c) Andhra Pradesh, Arunachal Pradesh, Assam, Goa, Jammu & Kashmir, Karnataka, Kerala, Orissa, Tamil Nadu, West Bengal, Mizoram, Manipur, Meghalaya, Nagaland, Puducherry, Tripura,Telangana,Lakshadweep d) Andhra Pradesh, Arunachal Pradesh, Assam, Goa, Jammu & Kashmir, Karnataka, Kerala, Orissa, Tamil Nadu, West Bengal, Mizoram, Manipur, Sikkim, Meghalaya, Nagaland, Puducherry, Tripura,Telangana,Lakshadweep
87	The Committee on Official Language consist of ---------- members from Lok sabha &Rajya Sabha (D) a) 15 b) 20 c) 10 d) 30
88	What is the Lump sum Award for passing prabodh ? (D) a)2600 b)2200 c)2400 d)None of the above
89	Article 351 related to (A) a)Directives for development of Hindi language b)Languages to used in Parliament c)Languages to be used in supreme court and in the high courts and for acts bills etc d)Commission and Committee of parliament on official Languages
90	Article 348 related to (C) a)Directives for development of Hindi language b)Languages to used in Parliament c)Languages to be used in supreme court and in the high courts and for acts bills etc d)Commission and Committee of parliament on official Languages
91	According to Official Language Rules ,Which States comes under Region "C" ? (C) a) Andhra Pradesh & Gujarat b) Manipur &Punjab c) West Bengal &Meghalaya d) None of the above
92	Which is the only Union Territory classified under Region 'B' ? (D)

	a) Pondicherry b) Lakshadweep c) Andaman & Nicobar d) Chandigarh
93	According to Official Language Rules Which States comes under Region "A" ? (D) a) Haryana & Mizoram b) Bihar & Meghalaya c)Rajasthan & Maharashtra d) Madhya Pradesh &Himachal Pradesh
94	Which of the following is/are true? 1) The legislature of a state may adopt any one or more of the languages in use in the state or Hindi as the official language of that state. 2) The proceedings of the Supreme Court are to be carried out in English or Hindi only. **a. Only 1** b. Only 2 c. Both 1 and 2 d. None of the above Ans: a
95	Which amendment act inserted provision regarding authoritative text of the constitution in the Hindi language? **a. 58th Amendment Act, 1987** b. 56th Amendment Act, 1985 c. 51st Amendment Act, 1982 d. None of the above Ans: a
96	Which part of the Constitution contains provisions regarding Official Language? **a.** Part XVI **b. Part XVII** **c.** Part XV **d.** None on the above **Ans: b**
97	In which year Maithili, Bodo, Dogri and Santhali were added to the Eighth Schedule later? **a. 2003** **b.** 2002 **c.** 2004 **d.** 2001 **Ans: a**
98	When was Resolution on Official Language passed by Parliament? **a. 18.01.1968** **b.** 10.05.1963 **c.** 26.01.1965 **d. None of the above** **Ans: a**
99	In which year, the Hindi Translation of Railway Budget was prepared? a. 1968

	b. 1965 **c. 1956** d. None of the above Ans: c
100	Who is the Chairman of Central Hindi Samiti (Committee)? a. Home minister **b. Prime minister** c. HRD minister d. None of the above Ans: b
101	What is the periodicity of the meetings of Town Official Language Implementation Committee? **a. Once in 6 months** b. Once in 3 months c. Twice in a two years d. None of the above Ans: a
102	When 'World Hindi Day' is observed? **a.** On 18 January **b.** On 10 May **c.** On 26 January **d. On 10 January.** **Ans: d**
103	Which article of the constitution contains provision regarding the official language of States? **a. Article-345** b. Article – 343 c. Article- 344(1) d. None of the above Ans: a

24) HOER

01	The HOER rules amended in compliance to the instruction in the a) Railway Act, 1989 (24 of 1989) b) Railway Act, 1998 (24 of 1989) c) Railway Act, 2005 (24 of 1989) d) None of the above Ans: a
02	Ordinary rate of pay includes a) Running allowance b) Dearness allowance c) Additional Dearness allowance d) All the above Ans: d
03	Road side station means a) An important junction station b) A station with marshalling yard c) Both a & b d) None Ans: c
04	Short Off' means in case of Intensive workers a) Less than 12 hr in a roster of 6 hrs duty b) Less than 14 hr in a mixed roster of 6 hrs and 8 hrs duty c) Not defined d) Both a & b Ans: a
05	Short Off' means in case of Continuous workers a) Less than 12 hr in a roster of 6 hrs duty b) Less than 14 hr in a mixed roster of 6 hrs and 8 hrs duty c) Less than 10 hrs d) Both a & b Ans: c
06	Short Off' means in case of EI workers a) Less than 12 hr in a roster of 6 hrs duty b) Less than 14 hr in a mixed roster of 6 hrs and 8 hrs duty c) Less than 8 hrs d) Both a & b Ans: c
07	Time limit to appeal to the RLC on the classification of under HOER a) 90 days b) 180 days c) 120 days d) 200 days Ans: a
08	Matrons' comes under classification of a) Excluded staff

	b) Continuous c) El workers d) Intensive Ans: a
09	Projectionists' comes under classification of a) Excluded staff b) Continuous c) El workers d) Intensive Ans: a
10	Rostered hours of work consists of a) Standard hours of duty b) Time required to do preparatory or Complementary work or both c) Both a & b d) None Ans: c
11	Supervisory staff are classified by a) Zonal railway b) Railway boad c) Ministry of Labour d) None Ans: c
12	Sustained attention' as used in Sub-section(b), Section 130 implies a) Mental effort b) Inactness period of 30 minutes c) Inactness period of 5 minutes d) None Ans: a
13	The running staff shall grant Periodical Rest Signing On to Signing Off a) 5 periods of not less than 22 hrs. b) 4 periods of not less than 30 hrs. c) Either a or b d) None Ans: c
14	The Part III of RS (Hours of work and period of Rest) Rules, 2005 deals a) Residuary powers b) Repeal and Saving c) Both a & b d) None Ans: a
15	The Part IV of RS (Hours of work and period of Rest) Rules, 2005 deals a) Residuary powers b) Repeal and Saving c) Both a & b d) None Ans: b
16	Standard hours of duty for Intensive workers a) 42 hrs per week b) 48 hrs per week c) 40 hrs per week

	d) 52 hrs per week Ans: a
17	Standard hours of duty for Continuous' workers a) 42 hrs per week b) 48 hrs per week c) 40 hrs per week d) 52 hrs per week Ans: b
18	Standard hours of duty for EI workers a) 42 hrs per week b) 48 hrs per week c) 40 hrs per week d) 52 hrs per week Ans: b
19	Caretakers of Rest Houses' comes under classification of a) Excluded staff b) Continuous c) EI workers d) Intensive Ans: c
20	For continuous workers whose place of residence is beyond 1.6 Kilometeres from the place of duty, Seven hours of split duty shall be treated as equivalent of a) 8 hrs of normal duty b) 6 hrs of normal duty c) 10 hrs of normal duty d) None Ans: a

24)	**Leave & Pass rules:**
01	The Railway Servants (Pass) rules, 1986 shall not apply to a) A person in the casual employment b) A person employed on wages c) Both a & b d) None Ans: c
02	PTO full form a) Pass ticket order b) Privilege Ticket order c) Privilege Train order d) None Ans: b
03	Non-gazetted cadre in pay level in pay matrix 6 and above are eligible for duty pass travel in a. First class b. First class A c. Both a & b d. None of the above Ans: a
04	In NPS system the contribution by the central government shall be a. 14 % basic pay plus DA b. 10% basic pay plus DA c. 14% basic pay d. 10% basic pay Ans: a
05	Persons with disability may be granted SCL for period of ------ per calendar year a. 10 days b. 11 days c. 4 days d. 3 days Ans: c
06	CCL may not be granted less than ---- days at a time a. 5 days b. 2 days c. 3 days Ans: a
07	in these rules, Year means a) Calendar year b) Financial year c) Either a or b d) None Ans: a
08	Circumstances & conditions to issue duty pass are mentioned in a) Schedule-I b) Schedule-II c) Schedule-III d) All the above Ans: a
09	Special passes are issued to a) Railway servants b) Family c) Dependent relatives

	d) All the above Ans: d
10	Instructions give in ---------- are to be followed while dealing Loss/Misuse/fraudulent of Passes and PTOs a) Annexure-A b) Annexure-B c) Annexure-C d) None Ans: b
11	Schedule VI of RS (Pass) rules deals a) Residential card pass b) Widow pass c) Post retirement Complimentary pass d) None Ans: a
12	Schedule VII of RS(Pass) rules deals a) Special passes b) Widow pass c) Residential card pass d) None Ans: a
13	A railway servant who is summoned to attend departmental enquiry shall be issued a) Duty pass b) Cheque pass c) PTO d) None Ans: a
14	Railway employees & their family members participating in cultural activities are eligible for a) Special passes b) Duty passes c) PTOs d) None Ans: d
15	Bazar' passes are issued by a) GM b) Head of department c) a or b d) not defined Ans: c
16	Penalty levied on post retirement complimentary IInd class a) Rs.10/- b) Rs. 25/- c) Rs. 100/- d) Nil Ans: a
17	Penalty levied on Duty card pass – IInd class a) Rs.10/- b) Rs. 25/- c) Rs. 10.50/- d) Rs. 12.50/- Ans: d

18	Full form of LAP a) Leave on average pay b) Leave on annual pay c) Either a or b] d) None Ans: a
19	LAP credited ---- days for each completed calendar month of service a) 2 ½ b) 4 ½ c) 3 d) 2 Ans: a
20	The period spent on study leave shall count credit of a) LAP b) LHAP c) Both a & b d) None Ans: c
21	Leave not due shall be debited against ------ earn subsequently a) LHAP b) LAP c) Either a or b d) None Ans: a
22	The following leave combined with any kind of leave a) Maternity leave b) Paternity leave c) LHAP d) All the above Ans: d
23	Hospital leave eligible for employees a) Group A b) Group B c) Group C d) All the above Ans: c
24	Limit of study leave for one time a) 12 months b) 24 months c) No limit in the entire service d) None Ans: a
25	unutilized joining leave credited to account of a) LHAP b) LAP (subject to maximum ceiling limit) c) Either a or b d) Not credited to any kind of leave Ans: b

24)	**Railway Act, 1989**
1	As per Railway Act, 1989, the 'Consignor' means a) The person, named in a Railway receipt b) The person, named in a ledger book c) The person, named in a station book d) None Ans: a
2	As per Railway Act, 1989, 'demurrage means a) Charge levied for the detention of rolling stock after expiry of free time b) Charge levied for the detention of rolling stock for satisfaction of customer c) Charge levied for the detention of rolling stock without considering free time d) None Ans: a
3	Railway receipt means the receipt issued under section a) 61 b) 64 c) 65 d) 56 Ans: c
4	As per Railway Act, 1989, 'rate' includes a) Fare b) Freight c) Any other charge for the carriage of passenger or goods d) All the above Ans: d
5	As per Railway Act, 1989, Railway means, it does not include a) A tramway wholly within a municipal area b) All ferries, ships, boats etc., owned, hired or worked by railway administration c) Lines of rails built in any exhibition ground. d) Both a & c Ans: d
6	RLDA full form a) Rail Land Development Authority b) Rail Law Delegation Authority c) Rail Land Delegation Authority d) Rail Land Distribution Accounts Ans: a
7	Rail Land Development Authority detailed under chapter--- of Railway Act, 1989 a) Chapter-II b) Chapter-IIA c) Chapter-III d) Chapter-V Ans: b
8	Commissioners of Railway Safety detailed under chapter ---- of Railway Act, 1989 a) Chapter-II b) Chapter-IIA c) Chapter-III d) Chapter-V

	Ans: c
9	Sanction of the Central Government to the opening of railway' detailed under ---- section of Railway Act, 1989 a) 21 b) 22 c) 23 d) 24 Ans: a
10	Formalities to be complied with before giving sanction to the opening of a railway' detailed under ---- section of Railway Act, 1989 a) 21 b) 22 c) 23 d) 24 Ans: b
11	Use of rolling stock' detailed under ---- section of Railway Act, 1989 a) 27 b) 26 c) 28 d) 25 Ans: a
12	Exhibition of certain timings and tables of fares at stations' detailed under ---- section of Railway Act, 1989 a) 51 b) 50 c) 48 d) 49 Ans: d
13	Power to refuse to carry persons suffering from infectious or contagious diseases' detailed under ---- section of Railway Act, 1989 a) 51 b) 50 c) 56 d) 57 Ans: c
14	Power to measure, weigh, etc.' detailed under ---- section of Railway Act, 1989 a) 78 b) 77 c) 75 d) 79 Ans: a
15	Right of railway administration to check contents of certain consignment or luggage' detailed under ---- section of Railway Act, 1989 a) 101 b) 104 c) 105 d) 100 Ans: c

16	as per Railway Act, 1989, Chapter-XII deals a) Accidents b) Fixation of Rates c) Railway Rates Tribunal d) None Ans: a
17	Notice of railway accident' detailed under ---- section of Railway Act, 1989 a) 113 b) 114 c) 116 d) 115 Ans: a
18	Limitation of hours of work' detailed under ---- section of Railway Act, 1989 a) 132 b) 133 c) 134 d) 131 Ans: a
19	Grant of periodical rest' detailed under ---- section of Railway Act, 1989 a) 132 b) 133 c) 134 d) 131 Ans: b
20	Fraudulently travelling or attempting to travel without proper pass or ticket rest' detailed under ---- section of Railway Act, 1989 a) 136 b) 133 c) 134 d) 137 Ans: d
21	Drunkenness or nuisance' detailed under ---- section of Railway Act, 1989 a) 144 b) 145 c) 146 d) 141 Ans: b
22	. Railway servants not to engage in trade' detailed under ---- section of Railway Act, 1989 a) 189 b) 188 c) 187 d) 181 Ans: a

23	Damage to or destruction of certain railway properties' detailed under ---- section of Railway Act, 1989 a) 151 b) 152 c) 154 d) 153 Ans: a
24	Repeal and saving' detailed under ---- section of Railway Act, 1989 a) 200 b) 199 c) 144 d) 198 Ans: a
25	Appointment of General Manager' detailed under ---- section of Railway Act, 1989 a) 4 b) 10 c) 1 d) None Ans: a

24)	**Payment of wages & minimum wages act:**
1	Payment of wages Act, 1936 came into force a. 23.04.1936 b. 01.04.1936 c. 30.04.1936 d. None of the above Ans: a
2	According to ---------- the wage period not to exceed one month in payment of wages act, 1936. a. Sec. 4 b. Sec. 3 c. Sec. 2 d. Sec.1 Ans: a
3	The Payment of Wages (Amendment) Bill, 2017 was introduced in Lok Sabha on a. February 3, 2017 b. February 2, 2017 c. February 24, 2017 d. None of the above Ans: a
4	Workmen Compensation Act, 1923 came in to force? a. 01.07.1923 b. 01.07.1924 c. 01.01.1924 d. None of the above Ans: b
5	Commissioner for workmen's compensation appointed under section? a. Section 12 b. Section 20 c. Section 1 d. None of the above Ans: b
6	Amount of compensation mentioned in which section in Workmen compensation act, 1923. a. Sec. 4 b. Sec. 3 c. Sec. 2 d. Sec.1 Ans: a
7	as per Payment of wages Act, 1936, the employed person' means a) Legal representative of a deceased employed person b) Legal representative of a deceased employer c) Either a or b d) None Ans: a
8	As per payment wages Act, 1936, Railway administration has meaning assigned to it in clause a) 32 of section 2 of Indian Railway Act, 1989 b) Section 10 of Indian Railway Act, 1989 c) Section 44 of Indian railway act, 1989 d) None of the above Ans: a
9	Wages means remuneration

	a) Salary b) Allowances c) Both a or b d) None Ans: c
10	In a factory ------- is responsible for payment of wages a) Manager b) Supervisor c) Administrative in-charge d) Recognized unions Ans: a
11	deductions from wages of the following kinds a) Fines b) HRA c) Damage or loss is directly attributable d) All the above Ans: d
12	The section under which an appointment of authority shall have powers of a Civil Court a) 15 b) 10 c) 12 d) 14 Ans: a
13	The person responsible for display by notice of abstracts of the Payment wages Act, 1936. a) Administration b) Person responsible for payment of wages c) Labour commissioner d) None Ans: b
14	section ---- of Payment wages Act, 1936 deals with deductions for recovery of loans a) 13 b) 12A c) 13A d) 14A Ans: b
15	Section---- of payment wages Act, 1936 deals with protection of action taken in good faith a) 22A b) 14A c) 16 d) 26 Ans: a
16	Adult means (minimum wages act, 1948) a) 18 years completed b) 21 years completed c) 16 -18 years d) None Ans: a
17	VDA full form a) Variable Dearness Allowance b) Value Deduct Allowance c) Variable Daily Allowance d) Variable Debit Allowance

	Ans: a
18	The rate of VDA per day for unskilled in area 'A' for industrial workers employed in Loading & unloading in Goods sheds, parcel officer of Railways construction work. a) Rs.106 b) Rs. 70 c) Rs.74 d) Rs. 88 Ans: a
19	The minimum rates of wages per day basic rates+ VDA w.e.f 01.04.20 for industrial 'unskilled' workers in A' area, employed in Construction work. a) Rs.525 b) Rs.629 c) Rs.764 d) Rs.420 Ans: b
20	The minimum rates of wages per day basic rates+ VDA w.e.f 01.04.20 for industrial 'unskilled' workers in B' area, employed in Construction work a) Rs.525 b) Rs.629 c) Rs.764 d) Rs.420 Ans: a
21	The minimum rates of wages in area 'A' showing basic rates and VDA for industrial workers employed in Sweeping & Cleaning excluding prohibited under the Employment of Manual Scavengers and Construction of Dry Latrines(Prohibition) Act, 1993. a) Rs.629 b) Rs.525 c) Rs.420 d) Rs.1000 Ans: a
22	The minimum rates of wages in area 'B' showing basic rates and VDA for industrial workers employed in Sweeping & Cleaning excluding prohibited under the Employment of Manual Scavengers and Construction of Dry Latrines(Prohibition) Act, 1993. a) Rs.629 b) Rs.525 c) Rs.420 d) Rs.1000 Ans: b
23	The minimum rates of wages in area 'C' showing basic rates and VDA for industrial workers employed in Sweeping & Cleaning excluding prohibited under the Employment of Manual Scavengers and Construction of Dry Latrines(Prohibition) Act, 1993. a) Rs.629 e) Rs.525 f) Rs.420 g) Rs.1000 Ans: c
24	Warangal' comes under which classification of area under minimum wages act, 1948 a) AREA-A b) AREA-B c) AREA-C d) None

	Ans: b
25	The minimum rates of wages in area 'A' showing basic rates and VDA for industrial workers employed in Watch and Ward (without arms) a) Rs.764 b) Rs.695 c) Rs.593 d) Rs.724 Ans: a

26	Buffer height of Loco (conventional) to be checked during a. IA schedule b. IB schedule c. IC schedule d. All the above Ans: d
27	Detailed instructions for IT, IA, IB, IC, AOH, IOH & POH will be issued by a. PCEE b. RDSO c. both a & b d. none of the above Ans: c
28	WAG-7 loco with gear ratio of 16:65 is capable to start & haul ----- load in 1 in 200 gradient (as per RDSO TC No. 17) a. 4638T b. 4538T c. 4738T d. None of the above Ans: c
29	Full form of SMI a. Special Maintenance Instructions b. Schedule Maintenance Instructions c. Standard Moving information d. None of the above Ans: a
30	Average energy cost in Rs/KWH in SCR for the year 2015-2016 a. 6.74 b. 5.12 c. 4.74 d. 3.12 Ans: a
31	What is meant by Territorial outage? a. Number Locos holding at 00:00 hrs over a railway b. Number of ineffective locos at 00:00 hrs over a railway c. Both a & b d. None of the above Ans: d
32	Class A fires can extinguished with a. Water b. Foam c. Both a & b d. None of the above Ans: a
33	Energy conservation measures a. AC loco simulators b. Shunt capacitor banks at TSS c. Switching OFF electrical lights, fans etc when not required. d. All the above. Ans: d
34	Loco performance statics “statement -18” describes a. Engine hours b. Train & engine kms c. Fuel statistics d. None of the above Ans: a

35	Leave Reserve' for Loco inspector is provided in the category of a. LP goods b. LP Pass c. LP Mail & Exp. d. None of the above Ans: b
36	Crew links are to be prepared based on a. Sanctioned strength b. WTT c. Loco link d. Rake link Ans: b
37	Running staff review should be carried out for every a. Year b. Six months c. Two years d. None of the above Ans: b
38	Loco Outage means: a. Loco outage = Engine Hours for traffic use/ 24 hrs. b. Loco outage = Engine KMs for traffic use/24 hrs. c. Both a & b d. None of the above Ans: a
39	Basic duty of TLC/Power controller a. To arrange motive power b. To guide running staff c. Planning of locos to home shed for maintenance d. All the above Ans: d
40	Norms for Manpower for Locos fitted with Hitachi Motors: a. 5.5 staff per Loco b. 6.0 staff per loco c. 7.0 staff per loco d. 4.5 staff per loco Ans: a

41	The flow rate of a pump (Q) is measured in a. m 3/sec b. m3/hr c. litre/min d. all the above Ans: d
42	Advantage of centrifugal pump a. high efficiency b. simple construction c. uniform and continuous flow d. all the above Ans: d

TCAS - subject

1. **What are the main Functions of Automatic Train Protection(ATP)**
   a) Continuous Train Control
   b) Protection for Permanent and temporary speed restriction
   c) Detection & Prevention of SPAD
   d) Display of signal aspect, movement authority, target distance and speed
   e) All of the above ANS: Option E
2. **What are the salient features of TCAS ?**
   a) Display of approaching signal with aspect in CAB
   b) Automatic whistle at LC
   c) Both A&B
   d) Only option A ANS: Option C
3. **What are the different Operational Modes in Locos TCAS ?**
   a) Staff Responsible (SR)
   b) Limited Supervision (LS)
   c) Shunt(SH)
   d) Only Option C
   e) All of the above ANS: Option E
4. **Identify the Sub-Systems of TCAS ?**
   a) Track side equipment & On-board equipment.
   b) RFIDtag
   c) DriverMachineInterface(DMI)
   d) Brake Inter face Unit(BIU) ANS: Option A
5. **Which of the following Abbreviations are InCorrect ?**
   a) CCTV – Closed Circuit Television
   b) ABS – Automatic Brake System
   c) SMOCIP – Station Master Operation cum Indication Panel
   d) LXPR – Level Crossing Key Lock relay ANS: Option B
6. **Which of the following Abbreviations are Correct ?**
   a) CUG – Cell Phone User Group

b) MEMU – Main Line Electric Multiple Unit
c) RTC – Real Train Check
d) SMPS – Station Master Power Supply ANS: Option B

7. **Which of the following are the Protective Functions of TCAS ?**
   a) UnusualStoppageinBlock Section
   b) Manual SoS generation/Cancellation
   c) Train Trip
   d) Only Option B
   e) All of the above ANS: Option E
8. **Which of the following Communication Techniques are used in TCAS ?**
   a) RadioCommunication
   b) GSM/GPRSCommunication
   c) GPS/GNSSCommunication
   d) All of the above ANS: Option D
9. **Which of the following are Salient Features of Network Monitoring System ?**
   a) RealtimedisplayoftrainmovementonNMSmonitors.
   b) Generation of Exception Reports- Loco TCAS Unit-wise, StationaryTCAS Unit-wise,RFIDTagSetwise
   c) SMSAlertforSPAD
   d) Only Option A & B
   e) All of the above ANS: Option E
10. **Which of the following Abbreviations are Correct ?**
   a) dBi – Decibel relative to isotrope
   b) dBm – Decibel Milli watts
   c) DECR - GreenLampCheckingRelay
   d) Only C
   e) All of the above ANS: Option E
11. **Which of the following definitions are In-Correct ?**
   a) Static Speed Profile - fixed speed restrictions at a resolution of 10Kmph for a part of track sent from track side to train
   b) SPAD - train passes a signal in the 'on'(Red)position without

authority

c) Dynamic Speed Profile - train shall follow withoutviolating the static train speedprofile till the end of movement authority
d) Service Brake - non-emergency brake application–which is reversible. It involves only the shutting off the power and the gradual application of brakes ANS: Option A

12. Which of the following definitions are Correct ?

a) End of Authority(EOA) – train is permitted to proceed and where target speed is 5 kmph
b) Movement Authority – train is permitted to travel without danger
c) Emergencybrake - It involves shutting off power and partial application of brakes without anylossoftime which is ir-reversible
d) Service Brake - It involves only the shutting off the power and the full application of brakes which is reversible

ANS: Option B

13. **Which of the following Operational Modes in Loco TCAS are Correct ?**

a) Override Mode – The Override mode enables the train to pass the signal at danger
b) On sight Mode – On Sight mode enables the train to enter into a track section that could be already occupied by another train
c) Staff Responsible Mode – it allows the loco pilot to move the train under his own responsibility in TCAS territory
d) Only Option A & C
e) All of the above ANS: Option E

14. The On-board subsystem shall be comprised of

a) LocoTCASVitalComputer
b) RFIDreader
c) LocoTCASRadioUnit
d) Driver Machine Interface(DMI)

e) All of the above ANS: Option E

15. Station Master Operation cum Indication Panel (SMOCIP) consists of following?

a) LEDIndications

b) LCD Panel

c) 6 digits counter which are updated on pressing of manual SOS switch

d) Only Option C

e) All of the above ANS: Option E

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