Objective questions on MCT-01

1. Corrugated sheets are utilised for the trough floor to form part of the tubular construction as well as to absorb a large portion of the buffing forces
(a) TRUE
(b) False

2. Anti-telescopic structure has been provided in the end-walls to avoid telescoping of the adjacent coaches and to absorb the major part of collision energy in case the ends collide during heavy collisions.
(a) TRUE
(b) False

3. The roof of ICF Coach is made of
(a) 2mm thick corten steel sheet
(b) 1.6 mm thick corten steel sheet
(c) 2mm thick Stainless steel sheet
(d) 1.6 mm Stainless steel sheet

4. The corrugated trough floor with its corrugations running longitudinally from one head stock to the other takes up the buffing loads.
(a) False
(b) True

5. In ICF coaches, below lavatory the tubular constructions are provided in place of trough floor to avoid corrosion due to seepage of water
(a) False
(b) True

6. The head stock of BG integral coaches consists of outer and inner head stocks connected by two rigid center buffer stiffeners, which transmits all the buffing forces to the under frame structure.
(a) TRUE
(b) False

7. Under frame of LHB coach is made of
(a)IRSM-41 corten steel
(b) Stainless Steel
(c) Mild Steel
(d) Cast iron

8. Roof structure of LHB coach is made of
(A) Austenitic Stainless Steel
(B) Ferritic Stainless Steel
(C) IRSM-41 Corten Steel
(D) High Speed Steel

9. Side walls and End walls of LHB coach is made of
(A) Austenitic Stainless Steel
(B) Ferritic Stainless Steel
(C) IRSM-41 Corten Steel
(D) High Speed Steel

10. Corrosion is indicated by
(A) Flaking of paint
(B) Flaking of metal
(C) Pitting and scale formation.
(D) All of the above

11. A component will require repair/ replacement, if it has lost more than 20% of its thickness.
(A) False
(B) True

12. Nos of Emergency operable Window in LHB AC coach are
(A) 2
(B) 4
(C) 6
(D) 12

13. Composite Board used for flooring in LHB coaches is
(A) 12
(B) 16
(C) 14
(D) 18

14. Heat insulation of the floor side wall is done with
(A) Cork
(B) Resonaflex
(C) Glass Wool
(D) None of these

15. Heat insulation of the Roof side wall is done with
(a) Cork
(b) Resonaflex
(c) Glass Wool
(d) None of these

16. The noise level inside the coach is limited to
(a) 40 DB
(b) 60 DB
(c) 50 DB
(d) 55 DB

17. The side walls are manufactured by
(a) Gas welding
(b) TIG welding
(c) Manual Arc Welding
(d) Thermit Welding

18. Components like sole bar and trough floor which are not visible from both sides should be examined by tapping with a spiked hammer
(a) TRUE
(b) False

19. Which part of the wheel guide it to travel on rail
(a) Hub
(b) Disc
(c) Flange
(d) None of these

20. Wheel gauge is the distance between inside faces of the flange on the right and left side wheels of an axle
(a) False
(b) True

21. There should be no variation in the values of wheel gauge -measured at four points 90 degrees apart on a wheel set
(a) False
(b) True

22. The wheel gauge tolerances of 1600+/- 2 mm as laid down in IRCA rule book is required to be checked under "No-load" conditions.
(a) False
(b) True

23. The outer periphery of a wheel which comes in contact with the rail is known as tyre profile
(a) False
(b) True

24. The following aspects should be checked on the suspected wheels:
a) Condemning limit & flat places on tyre/skidding
b) flanges - sharp/deep/thin & Cracks on wheel
c) Radius too small at the root of the flange & gauge- slack/tight.
d) All of the above

25. When the flange thickness reduces to less than 16mm for B.G., the flange is called a thin flange.
(a) False
(b) True

26. Flange thickness should be measured at the distance of ..... below the flange tip
(a) 12 mm
(b) 13 mm
(c) 14 mm
(d) 15 mm

27. Sharp flange occurs when the flange wears in such a way that radius at the tip of the flange becomes less than ..... mm.
(a) 2 mm
(b) 3 mm
(c) 4mm
(d) 5 mm

28. When radius at the root of the flange becomes less than 13 mm, it is called worn out flange.
(a) False
(b) True

29. The maximum permissible value of flatness on B.G. wheel tyres for Goods Stock
(a) 40 mm
(b) 50 mm
(c) 60 mm
(d) 70 mm

30. The maximum permissible value of flatness on B.G. wheel tyres for Coaching Stock
(a) 40 mm
(b) 50 mm
(c) 60 mm
(d) 70 mm

31. Permissible limit of sharp flange of wheel is ----------mm.
(a) 10 mm
(b) 15 mm
(c) 20 mm
(d) None of these

32. Axle is checked by ----------.
(a) DPT
(b) UST
(c) Wheel gauge
(d) None of these

33. Wheel diameter is measured on the tread at a distance of 63.5 mm from the inside face of the wheel in case of B.G.
(a) True
(b) False

34. Permissible limit of Deep flange in wheel is----------mm.
(a) 35
(b) 50
(c) 28
(d) 22

35. ---------- is checked with tyre defect gauge.
(a) Wheel defect
(b) Buckle defect
(c) CBC defect
(d) door defect

36. Shelling can be identified by pieces of metal breaking out of the tread surface in several places more or less continuously around the rim
(a) True
(b) False

37. A shelled wheel requires re-profiling to ensure that unsafe situations do not arise
(a) True
(b) False

38. Wheels having shelled tread should be withdrawn from service and sent to workshops for reprofiling.
(a) True
(b) False

39. Maximum Limit of Depth of shelling marks is
(a) 1.4 mm
(b) 1.5 mm
(c) 1.6 mm
(d) 1.7 mm

40. Maximum Limit of Length of shelling marks is
(a) 40 mm
(b) 50 mm
(c) 60 mm
(d) 70 mm

41. In Air Brake system compressed air is used for operating the brake system
(a) True
(b) False

42. Limit of flat tyre in wagon is ----------mm.
(a) 20
(b) 50
(c) 75
(d) 60

43. The locomotive compressor charges the feed pipe and the brake pipes throughout the length of the train
(a) True
(b) False

44. One of the following is not a Air-Brake component
(a)Brake Container (Brake Equipment Panel)
(b)Distributor valve
(c)Check Valve
(d)Head-Stock

45. Wheel Slide Control System, consisting of
(a) Microprocessor Control Unit
(b) Speed Sensor/Pulse Generator
(c) Anti Skid Valve / Dump Valve
(d) All of the above

46. Capacity of air reservoir (AR) of the coach is
(a) 150 Lit.
(b) 200 Lit
(c) 250 Lit.
(d) 300 Lit.

47. 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

48 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

49 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

50 During full service application, Brake pipe pressure is dropped to –
(a) 2.0 Kg/cm2
(b) 1.0 Kg/cm2
(c) 3.0 Kg/cm2
(d) 1.5 Kg/cm2

51 At originating station the brake power percentage for mail/express train should be
(a) 85%
(b) 90%
(c) 100%
(d) 75%

52 Cut off angle cock can be fitted to-
(a) FP
(b) BP
(c) BP&FP both
(d) None of the above

53 What is the piston stroke of air brake coaching train fitted with modified horizontal lever?
(a) 60±10 mm
(b) 80±10 mm
(c) 85±15 mm
(d) 85±5 mm

54 What is the diameter of bogie mounted brake cylinder?
(a) 220 mm
(b) 210 mm
(c) 203 mm
(d) 200 mm

55 The rate of air leakage in single car testing should not be more then –
(a) 0.02 Kg/cm2 /min
(b) 1.0 Kg/cm2 /min
(c) 0.2 Kg/cm2 /min
(d) 0.1 Kg/cm2 /min

56 In emergency application the brake cylinder pressure rises from 0-3.6 kg/cm2 in –
(a) 15-20 sec
(b) 5-10 sec
(c) 3-5 sec
(d) 8-10 sec

57 Check valve with choke allows air from –
(a) BP to FP
(b) FP to CR
(c) FP to AR
(d) AR to BC

58 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

59 What is the pressure of control reservoir in coaching trains?
(a) 6.0 Kg/cm2
(b) 5.0 Kg/cm2
(c) 6.0 to 6.2 Kg/cm2
(d) 4.8 Kg/cm2

60 In coaching trains, auxiliary reservoir is charged to –
(a) 5.0 Kg/cm2
(b) 6.0 Kg/cm2
(c) 4.8 Kg/cm2
(d) 5.5 Kg/cm2

61 Reduction in BP pressure for minimum application is –
(a) 1.0 to1.5 Kg/cm2
(b) 0.8 to 1.0 Kg/cm2
(c) 0.5 to 0.8 Kg/cm2
(d) 0.1 to 05 Kg/cm2

62 Reduction in BP pressure for service application is –
(a) 1.0 to 05 Kg/cm2
(b) 1.0 to 1.5 Kg/cm2
(c) 0.5 to 0.8 Kg/cm2
(d) 0.8 to 1.0 Kg/cm2

63 Reduction in BP pressure for full service application is –
(a) 1.0 to 1.5 Kg/cm2
(b) 0.8 to 1.0 Kg/cm2
(c) 0.5 to 0.8 Kg/cm2
(d) 0.1 to 05 Kg/cm2

64 Reduction in BP pressure for emergency application is –
(a) 1.0 to 1.5 Kg/cm2
(b) 1.5 to 3.8 Kg/cm2
(c) 0.5 to 0.8 Kg/cm2
(d) 3.8 to 5..0 Kg/cm2

65 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

66 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

67 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

68 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

69 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

70 The three-branch pipe attached to common pipe bracket, where the middle pipe leads to
(a) CR (b) DV (c) BC (d) AR

71 During brake release, air from BC goes to
(a) AR (b) CR (c) DV (d) Atmosphere

72 The type of dirt collector, used in bogie mounted passenger coach is –
(a) 2- way (b) 4-way (c) 3-way (d) single way

73 When DV is working condition the position of DV handle is –
(a) Horizontal (b) Inclined (c) Vertical (d) Parallel

74 The en-route brake power percentages of passenger BG coaching train is –
(a)85% (b) 90% (c) 100% (d) Not specified

75 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

76 What should be the effective maximum pressure in brake cylinder during full service application is
(a)3.6 ± 0.1 Kg/cm2 (b) 3.7 ± 0.1 Kg/cm2 (c) 3.8 ± 0.1 Kg/cm2 (d) 4.1 ± 0.1 Kg/cm2

77 DV is directly mounted on –
(a)AR (b) Brake pipe (c) Brake cylinder (d) Common pipe bracket

78 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

79 Control reservoirs 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

80. Auxiliary reservoir is assisting in –
(a)Charging of DV (b) Charging of BP (c) Sending air to BC (d) Charging of CR

81. Dirt Collector should be cleaned 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

82. In air brake system, brake should apply when the rate of drop of air pressure in BP is
(a) 0.6 Kg/cm2 /min in six sec
(b) 0.3 Kg/cm2 in one sec
(c) 0.4 Kg/cm2 in one sec
(d) 0.1 Kg/cm2 in one sec

83 In air brake system, brake should not apply when the rate of drop of air pressure in BP is
(a) 0.3 Kg/cm2 in 60 sec
(b) 0.4 Kg/cm2 in 4 sec
(c) 0.5 Kg/cm2 in 30 sec
(d) 0.8 Kg/cm2 in 8 sec

84 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

85 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
86 The vent hole is 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) To arrest air pressure from air hose
(d) None of the

87. The fittings which are provided inside the coach for Luxurious & Comfortable & also for non-strenuous journey are called as "Amenity Fittings ".
(a) True
(b) False

88. The fittings which are fitted in the coach for safety of passengers & their luggage are called as “Safety Fittings “.
(a) True
(b) False

89. Maximum diameter of Axle mounted Disc brake in LHB coach is…….mm
(a) 890
(b) 640
(c) 540
(d) None of these.

90. No. of brake cylinders in one LHB coach are ……..
(a) 08
(b) 04
(c) 18
(d) 16

91. No. of dump valve in one LHB coach are……
(a) 08
(b) 02
(c) 06
(d) 04

92. Cylinder Piston stroke of LHB coach is……mm
(a) 32
(b) 10
(c) 15
(d) None of these.

93. Capacity of auxiliary reservoir of LHB coach is……litre
(a) 100
(b) 125
(c) 200
(d)150

94. Choke dia of PEAV of LHB coach is……mm
(a) 08
(b) 19
(c) 7.5
(d) None of these.

95. In coach, the load transmission takes place through –
(a) Center pivot
(b) Bogie
(c) Side bearer
(d) Wheel

96. Primary suspension used in fiat bogie is…….
(a) Double-nest coil spring
(b) single-nest coil spring
(c) shock absorber
(d) None of these.

97. Lateral & longitudinal guidance of fiat bogie is made by…….
(a) Dashpot
(b) Articulated control arms
(c) side bearer.
(d) None of these.

98. New Wheel dia of fiat bogie is…….mm
(a) 940
(b) 825
(c) 1000
(d) 915

99. Condemning wheel dia in FIAT bogie is……..mm
(a) 845
(b) 813
(c) 915
(d) None of these

100. …….type of bearing is used in FIAT Bogie:
(a) Spherical Roller Bearing
(b) CTRB
(c) Ball Bearing
(d) None of these

101. Type of coach body shell used in hybrid coach is:
(a) ICF
(b) LHB
(c) BEML
(d) None of these

102. Type of bogie used in hybrid coach is:
(a) ICF
(b) FIAT
(c) Modified ICF
(d) None of these

103. FIAT bogie is capable to negotiate the curve of 100 at the speed up to:
(a) 100 Kmph
(b) 60 Kmph
(c) 40 Kmph
(d) 30 Kmph

104. Air Spring working pressure in Hybrid coach is _____ Kg/cm2 :
(a) 6
(b) 5
(c) 4.8
(d) 3.5

105. Capacity of main reservoir of air spring system is_____ Liter.
(a) 180
(b) 170
(c) 150
(d) None of these

106. Capacity of Auxiliary Reservoir used in air spring is_____ Liter .
(a) 100
(b) 60
(c) 80
(d) 40

107. Nos. of levelling valves fitted in one air spring bogie are:
(a) 02
(b) 06
(c) 04
(d) 08

108. More than 1.5 Kg/cm2 pressure drop in air spring fitted train the restricted speed is permissible up to _____ Kmph:
(a) 50
(b) 40
(c) 60
(d) 25

109.No. of Duplex check valve fitted in Air Spring bogie are:
(a) 01
(b) 04
(c) 05
(d) None of these

110. During Proper pressure in air spring the position of leveling valve becomes
(a) Vertical
(b) Horizontal
(c) Inclined
(d) None of these

111. In Air Spring Bogie gap maintained between lower plank and upper plank is……mm
(a) 280
(b) 240
(c) 355
(d) 255

112. In coach, the load transmission takes place through –
(a) Center pivot
(b) Bogie
(c) Side bearer
(d) Wheel

113. The color code of helical spring of ICF bogie is
(a) Yellow, blue, green
(b) Yellow, red, green
(c) White, blue, green
(d) White, red, green

114. What type of axle guidance arrangement used in ICF/RCF bogie?
(a) Oil clamping
(b) Telescopic axle guide with oil damping
(c) Vertical oil damping
(d) pneumatic axle guide

115. Piston stroke (coach) of bogie mounted brake cylinder is
(a) 28 mm (b) 32 mm (c) 36 mm (d) 38 mm

116. Bogie wheelbase of ICF/ RCF all coil bogies are
(a) 2896 mm (b) 2986 mm (c) 2886 mm (d) 2997 mm

117. The FIAT Bogie is two-axle type, with a primary and a secondary suspension
(a) True
(b)False

118. The Fiat bogie frame rests on the primary suspension spring units and supports the vehicle body by means of Bolster beam
(a) True
(b)False

119. The traction Centre transmits traction and braking forces between bogie frame and body by a traction lever on the bolster beam pin and two rods.
(a) True
(b)False

120. Air spring is a rubber bellow containing pressurized compressed air with an emergency rubber spring providing various suspensions characteristic to maintain a constant buffer height irrespective of the loaded condition
(a) True
(b)False

121. Unlike steel spring, air springs retain their height under changing loads
(a) True
(b)False

122. Fiat Bogie is fitted with 130 mm Cartridge type roller bearings.
(a) True
(b)False

123. There are ..... variants of the bogie
(a) 4
(b) 5
(c) 6
(d) 7

124. The LHB frame is made up of .....longitudinal components
(a) 2
(b)6
(c) 8
(d) 10

124. The 02 longitudinal components of LHB bogie frame is connected by
(a) Cross Bar
(b)Cross-Beam
(c) By Channel
(d) None of the above

125. The secondary suspension enables lateral and vertical displacements and bogie rotation with respect to body when running through curves.
(a) True
(b)False

126. The maximum standard buffer height above rail level to center of buffer is –

(a) 1085 mm (b) 1100 mm (c) 1105 mm (d) 1030 mm

127. The minimum permissible buffer height above rail level to center of buffer is –

(a) 1105 mm (b) 1145 mm (c) 1115 mm (d) 1030 mm

128. Standard buffer projection from Headstock is –

(a) 650 mm (b) 635 mm (c) 620 mm (d) 660 mm

129. Minimum Permissible buffer projection from Headstock is –

(a) 635 mm (b) 605 mm (c) 590 mm (d) 584 mm

130. What is the distance between two buffers at one end?

(a) 1952 mm (b) 1976 mm (c) 1956 mm (d) 1992 mm

131. What is the maximum buffer plunger stroke in mm?

(a) 127.0 mm (b) 129.0 mm (c) 131.0 mm (d) 133.0 mm

132. What should be the minimum buffer height after POH?

(a) 1050 mm (b) 1060 mm (c) 1080 mm (d) 1090 mm

133. The ICF buffer plunger is made of –

(a) Mild steel (b) Cost iron (c) Cast steel (d) Aluminium Alloy

134. In loaded condition, the minimum permissible height of buffer in ICF coach is

(a) 1090 mm (b) 1105 mm (c) 1030 mm (d) None of the above

135. Name the distance between axle box top and axle box crown bolt is –

(a) Clearance 'A' (b) clearance 'B' (c) clearance 'C' (d) None of the above

136. Hauling capacity of HT type CBC is -

(a) 7000 ton (b) 8000 ton (c) 9000 ton (d) 10000 ton

137. In production unit, in tare condition the minimum permissible buffer height above rail line to center of buffer is -

(a) 11030 mm (b) 1045 mm (c) 1060 mm (d) 1095 mm

138. In workshop, in tare condition the minimum permissible buffer height above rail line to center of buffer is -

(a) 1090 mm (b) 1075 mm (c) 1060 mm (d) 1030 mm

139. Enhanced proof load of draw gear and screw coupling is -

(a) 75 t (b) 80 t (c) 90 t (d) 85 t

140. Enhanced breaking load of draw gear and screw coupling is -

(a) 108 t (b) 120 t (c) 130 t (d) 60 t

141. What is wear limit of draw hook of root of near point of contact with bent link?

(a) 8.0 mm (b) 10.0 mm (c) 12.0 mm (d) 13.0 mm

142. Wear limit of draw hook pinhole is –

(a) 1.0 mm (b) 3.0 mm (c) 5.0 mm (d) 7.0 mm

143. Wear limit of draw hook bottom side of shank is -

(a) 10.0 mm (b) 15.0 mm (c) 20.0 mm (d) 25.0 mm

144. The projection of the shoulder on the draw hook from the Headstock is within -

(a) 80 to 100mm (b) 90 to 110mm (c) 92 to 120mm (d) 100 to 120mm

145. Maximum nominal thickness of plunger faceplate in ICF type buffer is -

(a) 19.0 mm (b) 22.0 mm (c) 24.0 mm (d) 26.0 mm

146. Wear limit of plunger faceplate in ICF type buffer is -

(a) 9.0 mm (b) 11.0 mm (c) 12.0 mm (d) 13.0 mm

147. Maximum distance apart for centers of buffer is –

(a) 1200 mm (b) 1700 mm (c) 1940 mm (d) 1955 mm

148. What is the weakest link of the 'H' type tight lock center buffer coupler?

(a) Draft gear (b) Knuckle (c) Lock (d) Yoke pin

149. Minimum tensile proof load of 'H' type tight lock center buffer coupler is –

(a) 2000 KN (b) 1000KN (c) 500 KN (d) 1500 KN

150 Minimum compressive proof load of 'H' type tight lock center buffer coupler is

(a) 2000 KN (b) 1000 KN (c) 500 KN (d) 1500 KN

151 How many auxiliaries Headstock in ICF shell?

(a) 02 (b) 03 (c) 04 (d) 08

152 Thickness of the auxiliaries Headstock is –

(a) 8/10 mm (b) 12/15 mm (c) 15/18 mm (d) None

153 Destruction tube is provided inside the –

(a) Buffer (b) Head stock (c) Under sole bar (d) None

154. How many make CTBUs are used on LHB Coaches?

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

155. How many types of shock absorbers/dampers are used in LHB Coaches?
a) 6 b) 5
c) 4 d) 3

156.How many shock absorbers/dampers are used in LHB Coaches?
a) 10 nos. b) 8nos.
c) 18nos. d) 12 nos.

157. What is the name of shock absorber connected between bogie and car body?
a) Primary b) Secondary
c) Yaw. d) None of these.

158. Most important condition for coupling of two coaches is -
a) Both couplers should be in alignment.
b) Both couplers should be within gathering range.
c) Both a & b
d) None of above

159. 125 Ltr AR tank used for -
a) Toilet purpose b) Braking purpose
c) Standby d) None of these.

160. When brake indicator shows 'Red', the brake will be -
a) Released b) Applied
c) Indicator defective d) none
161. When brake indicator shows 'Green' the brake will be -
a) Released b) Applied
c) Indicator defective d) none

162. Brake accelerator is a -
a) Brake actuating device
b) Emergency brake application device.
c) Both a & b
d) None of these

163. Principle application of brake accelerator is -
a) Emergency braking in each coach of rake
b) Partial braking in each coach of rake.
c) Similar braking in each coach of rake
d) None of these.

164. Brake accelerator actuates during -
a) Every service application
b) Emergency brake application
c) Both a & b
d) None of these.

165. What is the purpose of Dump Valve?
a) To maintain approximate same speed of all axles.
b) To protect wheels against skidding
c) A & b both.
d) None of these

166. The applications of Dump valve is -
a) Only braking. b) Only De-braking
c) Both braking and de-braking. d) None of these

167. What is the purpose of speed sensor?
a) To compute the revolutions of each axle
b) To maintain same speed of each axle
c) Either a or b
d) None of these

168. What is the limit of air gap between sensor and phonic wheel?
a) 1.0 - 5.0 mm b) 1.0 - 10.0 mm
c) 0.9 – 1.4 mm d) 1.0 – 2.5 mm

169. What is the purpose of pressure switch?
a) To actuate antiskid system
b) To provide electric supply to brake accelerator
c) To provide electric supply to dump valve.
d) None of these

170. How many brake cylinders are used in LHB coaches?
a) 6 b) 4
c) 8 d) 16

171. 'PEASD' stands for -
a) Passenger emergency alarm signalling device.
b) Passenger emergency alert safety device.
c) Passenger emergency alarm short device.
d) None of these

172. "PEASD' provided in LHB can be reset -
a) From under gear of coach only
b) From anywhere of inside coach
c) From the point where chain pulled.
d) Both a & b

173. How can identified the actual position of chain pulled.
a) Pull box will in up position & hissing sound heard.
b) Pull box will in down position & hissing sound not heard.
c) Pull box will in down position and hissing sound can hear.
d) None of these

174. Location of isolating cock provided in 'PEASD' in LHB coaches.
a) On under gear
b) Near emergency brake valve
c) No isolating cock provided
d) None of these

175. When emergency pull box pulled from inside the coach.
a) The air pressure slightly dropped.
b) The air pressure dropped.
c) No pressure dropped

176. What is the capacity of pressure tank provided for parking brake?
a) 9 Ltr
b) 5 Ltr.
c) 6 Ltr.
d) 8 Ltr.

177. Thickness of new brake pad is -
a) 28 mm b) 30 mm
c) 35 mm d) 32 mm

178. Condemning limit of brake pad is -
a) 10 mm b) 7 mm
c) 8 mm d) 9 mm

179. Maximum brake cylinder pressure in kg/cm^2 is -
a) $3.0 \pm 0.1\ kg/cm^2$
b) $3.8 \pm 0.1\ kg/cm^2$
c) $2.8\ kg/cm^2$
d) $4.0 \pm 0.1\ kg/cm^2$

180. Maximum gap between brake disc and brake pad is -
a) 3mm b) 1mm
c) 2mm d) 1.5 mm

181. Fins provided between the brake discs -
a) For strengthening to the disc
b) For cooling of disc
c) None of these.
d) Both a & b

182. Brake caliper unit should be checked for -
a) Corroded part b) Worn out pins
c) Free leverage d) all above

183.……. Oil is used in dashpot guide?
(a) Servo RR-3
(b) Servoline 68
(c) Lithium base grease
(d) None of these.

184. 'T' type schedule indicates -
a) Weekly schedule b) Trip schedule
c) Monthly schedule d) six monthly

185. Length of bogie is -
a) 3535 mm b) 3534 mm
c) 3600 mm d) 3530 mm

186. Weight of bogie is -
a) 6t b) 6.92t
c) 7.0 t d) 8.0 t

187. Width of FIAT Bogie is -
a) 3030 mm b) 3240 mm
c) 3040 mm d) 3010 mm

188. Distance between centre of two bogies is -
a) 15000 mm b) 14900 mm
c) 19500 mm d) 15090 mm

189. If both side lateral dampers removed from bogies -
a) The coach may derail
b) The centre pivots may displace
c) Bolster top plank may twist
d) Lateral socks may increase

190. In case of grease oozing, can be seen from -
a) At front sealing ring of bearing
b) At bottom plug of bearing housing
c) At backing ring of bearing
d) All of above.

191. How much grease is required for Timken make bearing?
a) 300 gm b) 350 gm
c) 500 gm d) 400 gm

192.What is the purpose of speed sensor?
a) To compute the revolutions of each axle
b) To maintain same speed of each axle
c) Either a or b
d) None of these

193.'ASD' stands for -
a) Anti Sleep device b) Anti slip device
c) Both a & b d) None of these

194. What is the advantage of dampers?
a) Suspension may be increased.
b) Ridding index may be improved.
c) Comfort may be increased.
d) All of above

195. The CBC fitted on LHB coaches has -
a) Only pulling action
b) Only buffing action
c) Both pull & Buffing action
d) Either a or b

196 What kind of maintenance is used for rolling stock is -
a) Break down maintenance
b) Preventive maintenance
c) Both a & b
d) Either a or b

197. Primary maintenance is a type of
a) Break down maintenance
b) Preventive maintenance
c) Safe to run examination
d) None of these

198. POH and IOH schedule of Rajdhani coaches is a type of -
a) Break down maintenance
b) Preventive maintenance
c) Both a & b
d) Either a or b

199. The maintenance done on pit line is -
a) Secondary maintenance only
b) Primary maintenance only
c) Safe to run only
d) a & b of above only

200. The capacity of axle of LHB coach is -
a) 13 t b) 16 t
c) 16.25 t d) 22 t

201. “Yellow point” is provided on axel boxes indicated for
a) The location where Roller bearing may crack
b) The location where actual temperature of bearing can be measure
c) The No of axel boxes
d) None of these.

202. The main function of anti roll bar is -
a) To allow rolling action of the coach
b) To prevent Rolling action of the coach
c) To provided strength for bogie
d) To negotiate the track curve

203. Free movement of Anti Roll bar is depends upon -
a) Condition of Grease in bracket
b) Condition of bearing at both ends
c) Condition of can of bearing
d) All of above

204. The anti toll bar must be checked for -
a) Any wear ness b) Any cracks
c) Free movement d) All the above

205. Condition of grease of anti roll bar should be checked during every -
a) D1 schedule b) D2 schedule
c) D3 schedule d) All the Above

206. Grease of anti roll bar should be replace during every
a) Trip schedule b) D1 schedule
c) D2 schedule d) D3 schedule

207. Wheel tapping is done to detect
a) Any hair crack b) Any material flow
c) Any wheel shelling d) All the above

208. Shelling on a wheel set the reason may be
a) WSP system hot function properly
b) Brake calliper may jammed
c) One or both brake cylinder may defective
d) All above

209. How much shelling on a wheel can be allowed -
a) 50 mm b) 30 mm
c) 20 mm multiple d) No shelling allowed

210. During Air brake testing if pressure rise in BP & FP gauge it means -
a) BP and FP gauge are defective
b) Non return value defective
c) D.V defective
d) None of these

211. The NRV is provided in
a) BC line b) BP line
c) FP line d) all above

212. What is the purpose to provide primary dampers -
a) To minimize primary damping
b) To support primary springs
c) To improve primary suspension
d) All of above

213. What is the purpose to provided yaw dampers?
a) To minimize rolling motion
b) To minimize scattering action of coach
c) To improve riding index
d) All the above

214. Why only one lateral damper is provided on each bogie -
a) To reduce the total cost of coach
b) To reduce total weight of coach
c) To improve lateral damping of one side
d) It can control both side lateral movements

215. If the primary spring of an axle box is weak it can be identified by -
a) Measuring the distance between control arm top and bogie frame
b) Measuring the distance between control arm bottom and bogie frame
c) Measuring the deflection of primary damper
d) Measuring the distance between control arm lug and safety pin

216. If the dump valve continuous venting the reason may be –
a) Dump valve is defective
b) Dump valve electrical supply disturbed
c) Dump valve stuck up in actuating position
d) WSP is defective

217. What is the corrective action if dump valve is venting continuously -
a) Reset the WSP system
b) Rearrange the WSP system
c) Pull out dump valve connector and reconnect
d) Replace the dump valve

218. The dump valve works only during -
a) Emergency braking
b) Service application
c) Deference in speed of wheel
d) Deference in diameter of wheel

219. If the speed of all axles is same and emergency braking is applied the dump valve will -
a) Does not respond
b) Definitely respond
c) Only one will respond
d) May be respond

220. If the speed of all axles is Different and emergency braking is applied the dump valve will -
a) Does not respond
b) Definitely respond
c) Only one will respond
d) May be respond

221. If the speed of all axles is Different in a coach during the emergency braking the dump valve will respond
a) Whole the rake
b) All dump valve of the coach
c) Particular dump valve of the coach
d) None of these

222. The correct action of axle box feeling by manually is
a) Hold the bare hand on the axle box for 5 minutes
b) Hold the bare hand on the axle box for some times
c) Instant touching of axle box by bare hand
d) All of above

223. If only one wheel set is required to change the correct action will be -
a) Roll out the both trolley
b) Roll out the affected trolley
c) Lift the coach with trolley
d) Dismantle the wheel connections and Lift the coach with trolley
224. What can you do to avoid jamming of brake caliper?
a) Clean and lubricate the middle pin
b) Clean and lubricate the brake shoe
c) Periodic checks by rotate slack adjuster nut
d) All of above

225. The brake pads should be of same thickness on
a) Both caliper of one wheel set
b) All caliper of a trolley
c) Each caliper
d) All caliper of both trolley

226. If difference in thickness of brake pads is appear, the reason could be -
a) The brake pads fitted with different thickness purposely
b) The calliper is running in jam condition
c) The slack adjustment of brake cylinder is not proper
d) Any of the above

227. If the brake pads are wearing out in taper condition, the reason could be
a) The brake pads fitted with taper thickness purposely
b) The calliper is running in jam condition
c) The mounting bush of calliper unit is perished or cracked
d) Any of the above

228. If heavy scratch marks are appears on brake disc, the reason could be -
a) The brake pads are worn out beyond condemning limit
b) The brake pads are missing
c) The foreign particle present between brake pads
d) All of above

229. If the brake pads are wearing out in taper condition, the correct action will be -
a) Allow the brake pads in same condition
b) Replace the brake pads immediately
c) Replace the brake caliper unit immediately
d) None of these

230. How many Maintenance Schedule are generally done in primary Maintenance Depot.
a) One b) Two
c) Three d) None

231. Frequency of D1 Schedule is -
a) On Every Trip b) 7 days
c) 15 days d) 30 days

232. Frequency of D2 Schedule is -
a) 7 days± 1 day b) 10 days± 1 day
c) 15 days± 1 day d) 30 days± 3 day
233. Frequency of D3 Schedule is -
a) 1 month± 1 day b) 3 month ± 3 day
c) 6 month ± 15 day d) 9 month ± 3 day

234. Intensive cleaning of coaches should be done in -
a) D1 Schedule b) D2 Schedule
c) D3 Schedule d) D1, D2 & D3

235. Inspection of vestibule and its rubber fitting for damage is done in -
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

236. Thoroughly cleaning and removing dust, rust accumulated at pillars is done in -
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

237. Examination of sole bar for corrosion is done in -
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

238. Touching up damaged paint inside and outside in -
a) D1 Schedule b) D2 Schedule
c) D2 & D3 Schedule d) D3 Schedule

239. checking of bogie bolster assembly and bracket etc in -
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

240. Washing of bogie frame thoroughly with water jet in -
a) D1 Schedule b) D2 Schedule
c) D2 & D3 Schedule d) D3 Schedule

241. Checking of functionality of brake equipment and hand brake equipment in
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

242. Carrying out of functional test on pneumatic brake system in -
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

243. Checking of air hoses is done in -
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

244. verifying the clearance between each pad and disc surface in -
a) D1 Schedule b) D2 Schedule
c) D3 Schedule d) D2 & D3

245. Inspection of earthing equipment for wear of carbon bars -
a) D1 Schedule b) D2 Schedule
c) D3 Schedule d) D2 & D3

246. Checking of crack, damage of spring is done in -
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

247. Checking of dampers its rubber elements is done in -
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

248. Checking of bearing for hot and grease leakage is done in-
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

249. Checking of wheel profile gauge is done in
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

250. Inspection of Rotation Limiter is done in -
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

251. Checking of tread diameter and wear of wheel profile is done in -
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

252. Inspection of grease oozing out of anti roll bar bearing is done in -
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

253. Lubrication of all pins and bushes is done in -
a) D1 Schedule b) D2 & D3 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

254. Inspection of coupler head, knuckle for damage is checked in -
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

255. In case of brake binding on one trolley what you do first -
a) Isolate both trolleys
b) Isolate the DV
c) Pull the quick release valve wire
d) Isolate the affected trolley

256. Checking of tell tale recess for ensuring proper coupling is done in -
a) D1 Schedule b) D2 Schedule
c) D1, D2 & D3 Schedule d) D3 Schedule

257. Vande Bharat Express, also known as T-18
(a)True
(b)False

258. Maximum Axle Load of T-18 is
a) 15 T b) 15 T
c) 17 T d) 18 T

259. The Configuration of T-18 is 16 Coach Chair Car Type
(a)True
(b)False

260. T-18 is semi-high speed, self-propelled train-set
(a)True
(b)False

261. In Train 18, 50% coaches are powered coaches i.e. motor coaches.
(a)True
(b)False

262. The advantages of Train-set is following
(a) Lighter axle loads
(b) Allowing operation on lighter tracks
(c) Reduced track wear
(d) All of the above

263. Train sets generally have rigid couplers instead of the flexible ones
(a)True
(b)False

264. TheTrain-18 is semi-high-speed (160 Kamp) Multiple Unit Train-set with quicker acceleration and contemporary passenger amenities
(a)True
(b)False

265. Wheel diameter of T-18 is
(a) 952 mm
(b) 953 mm
(c) 954 mm
(d) 955 mm

266. Wheel diameter of full worn wheel in T-18 is
(a) 877 mm
(b) 878 mm
(c) 879 mm
(d) 880 mm

267. No of Traction Motors per Motor Coach of T-18 is
(a) 4
(b) 5
(c) 6
(d) 7

268. T-18 has reversal requirement at terminals
(a) True
(b) False

269. T-18 has Sluggish acceleration and deceleration.
(a)True
(b) False

270. Maximum Test speed of T-18 is
(a) 160 kmph
(b) 176 kmph
(c) 180 kmph
(d) 200 kmph

271. Write full form of followings
(a) DTC.....
(b) MC.....

272. Write full form of followings
(a) TC.....
(b) NDTC.....

273. Train-18 is being provided with IGBT based Energy Efficient 3 Phase Propulsion system and Regenerative braking
(a) True
(b) False

274. Train Control & Management System (TCMS) controls the automatic doors, sliding footsteps and brake functioning.
(a)True
(b) False

275. In Train-18, Dellner Semi-permanent Couplers are being used.
(a) True
(b) False

276. In Train-18, The Executive Class has rotating seats which can be aligned in the direction of travel.
(a) True
(b) False