1. Inspection of level crossing by AEN is ?

(a) Once in 03 months (b) Once in 04 months

(c) Once in 06 months (d) Once in 01 year.

2. Inspection of Points & Xing by AEN is ?

(a) Once in 06 months **(b) Once in 01 year**

(c) Once in 03 months (d) Once in 02 year.

3. Inspection of LWR by AEN is ?

(a) Once in 06 months (b) Once in 03 months

(c) Once in 01 year (d) Once in 04 months

4. SSE(P.way) I/C should inspect entire section by push trolley/Motor trolley?

(a) Once in week (b) Once in fortnight

(c) Once in 01month (d) Once in 03 months

5. SSE/P.Way should inspect the level crossing ?

(a) Once in week (b) Once in fortnight

(c) Once in 01month (d) Once in 06 months

6. SSE(P.way) I/C shall carry out footplate inspection to cover entire section at least ?

(a) Once in 01 month (b) Once in 06 month

(c) Once in 03month (d) Once in a year

7. SSE(P.way) I/C should inspect all LWR's ?

(a) Once in a week (b) Once in 06 month

(c) Once in 03month **(d) Twice in coldest & hottest months.**

8. SSE(P.way), JE/Sec. should inspect the entire section by Push Trolley ?

(a) Daily (b) Once in a week

(c) Once in a fortnight (d) Once in a months.

9. Keyman should inspect the entire section ?

(a) Daily (b) Once in a week

(c) Once in 03months (d) Once in 06 months.

10. Keyman should carry out oiling of SEJ ?

(a) Once in a week (b) Daily

(c) Once in fortnight (d) Once in a months.

11. Walking speed of Keyman should not more than ?

(a) 01 Kmph (b) 02 Kmph

(c) 03 Kmph (d) 04 Kmph.

12. UTS is abbreviated for ?

(a) Ultimate Tensile Strength (b) Universal Turnout standards

(c) Under tension stress (d) None of these.

13. The flange width of 52Kg. rail is ?

(a) 150mm (b) 136.5mm
(c) 136mm (d) None of these

14. For stacking of 90 UTS rails the level of ground should be ?

(a) Uneven (b) Even
(**c) Pucca Cement Concrete** (d) None of these

15. The 1st testing after initial laying of rails shall be done after passing ?

(a) 20% of its stipulated service life (b) Immediately after relaying
(c) 15% of its stipulated service life (d) 25% of its stipulated service life

16. Max. clear distance between joint sleeper of fish plated joint is …….. mm ?

(a) 450mm **(b) 200mm**
(c) 500mm (d) 250mm

17. Permissible maximum wear on a x-ing is ?

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

18. Permissible vertical wear in a 52 Kg. rail section is ?

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

19. In need based system of USFD testing of rails, rail with IMR defect should be replaced within -

(a) Seven days
(b) 10 days
(c) 3 days
(d) 1 day

20. Web thickness of 52 Kg. rail is ……

(a) 15mm
(b) 15.5mm
(c) 16mm
(d) 16.5mm

21. IMR/IMR (W) shall be marked with …… ?

(a) One red cross
(b) Two red cross
(c) Three red cross
(d) Four red cross

22. Spacing of concrete sleeper on B.G. LWR track for sleeper density of 1660 sleepers per Km is … ?

(a) 50 Cm
(b) 55 Cm
(c) 60 Cm
(d) 65 Cm

23. Track gauge on PSC sleepers is … ?

(a) 1670mm
(b) 1673
(c) 1776mm
(d) 1680mm

24. Composite sleepers index is the index of … ?

(a) Hardness and strength
(b) Strength and toughness
(c) Toughness and wear resistance
(d) Wear resistance and hardness

25. The formula of the C.S.I. is … ?

(a) (S + 10H)/20
(b) (H + 10S)/20
(c) (S + 20H)/10
(d) (H + 20H)/10

26. Length of PSC sleeper is … ?

(a) 2550 mm
(b) 2725 mm
(c) 2750 mm
(d) 3520 mm

27. The function of sleeper is … ?

(a) To hold the rails to proper gauge.
(b) To interpose an elastic medium in between the ballast and rails.
(c) To distribute the load from the rails to the ballast.
(d) To support the rails at a proper level in the straight tracks and at proper super elevation on curves.
(e) All of the above.

28. For a Broad Gauge route with M+7 sleeper density, number of sleepers per rail length is … ?

(a) 18 **(b) 20**
(c) 21 (d) 19 . \

29. What type of fastening is used in concrete sleepers ?

(a) Convential **(b) Elastic**
(c) Semi elastic (d) None of these .

30. Rail joint supported on a single sleeper is known ?

(a) Suspended rail joint (b) Bridge rail joint
(c) Supported rail joint (d) Square rail joint.

31. GFN is abbreviated for ….. ?

(a) Good formation norms **(b) Glass filled nylon**
(c) Groove fitting nylon liner (d) None of them.

32. Creep anchors are usually not provided at …… ?

(a) Bridges **(b) Level crossings**
(c) Points & crossings (d) All of the above.

33. Pandrol clips an not be used with …… ?

(a) Wooden sleepers (b) Concrete sleepers
(c) CST-9 sleepers (d) Steel through sleepers.

34. Weight of standard keying hammer is …… ?

(a) 1.5 Kg. (b) 1.6 Kg.
(c) 1.7 Kg. **(d) 1.8 Kg.**

35. The cant given in canted bearing plate is …… ?

(a) 1in 15 (b) 1in 10
(c) 1 in 20 (d) None of these .

36. The dia meter of rail screw is …… ?

(a) 20 mm **(b) 22 mm**
(c) 24 mm (d) 26 mm

37. The toe load of ERC MK III is …… ?

(a) 700 – 900 Kgs **(b) 850 – 1150 Kgs**
(c) 950 – 1150 Kgs (d) None of these.

38. The toe deflection of ERC MK III is …… ?

(a) 11.2 mm **(b) 13.5 mm**
(c) 14.5 mm (d) 15.5 mm .

39. The dia meter of ERC MK III is …… ?

(a) 20.6 mm (b) 10.00 mm
(c) 22.6 mm (d) 24.00 mm .

40. The total length of fish plate for 60 Kg. UIC rail section is …… mm ?

(a) 410 mm (b) 420 mm
(c) 600 mm **(d) 610 mm**

41. Length of pitch in 52 Kg. fish plate ?

(a) 166 mm (b) 160 mm
(c) 165 mm (d) 170 mm .

42. The removal Length of M.S. tie bar is …….. mm for B.G. ?

(a) 1870 mm (b) 2700 mm
(c) 2720 mm (d) 2730 mm .

43. The length of ordinary fish plate is …... ?

(a) 600 mm **(b) 610 mm**
(c) 1000 mm (d) 650 mm .

44. Which is the recommended width of ballast for BG(A) route ?

(a) 3650 mm **(b) 3350 mm**
(c) 2750 mm (d) 2250 mm .

45. Thickness of sub- ballast should not be less than ?

(a) 200 mm (b) 250 mm
(c) 150 mm (d) 100 mm .

46. The minimum depth of ballast cushion on LWR track is kept ?

(a) 300 mm **(b) 250 mm**
(c) 200 mm (d) 150 mm .

47. For point & crossing, standard size of ballast is ?

(a) 50 mm (b) 40 mm
(c) 30 mm **(d) 25 mm**

48. Minimum clean ballast cushion in SWR is ?

(a) 150 mm **(b) 200 mm**
(c) 250 mm (d) 300 mm

49. Maximum width of ballast shoulder on outside of turn in curve on B.G
(a) 350MM (b) 400MM
(c) 450M **(d) 500MM**.

50. Lifting of Track on other than concrete sleeper is limited upto :-

(a) 15mm **(b) 25mm**
(c) 30mm (d) 50mm.

51. In Permanent way, ballast is :-

(a) Transfers load from sleepers to the formation.
(b) Provides an elastic bed to the track.
(c) Provides a drainage of track.
(d) All the above.

52. Formation width for bank for single line B.G. railway line is :-

(a) 5.25 mtrs. (b) 5.85 mtrs
(c) 6.25 mtrs. **(d) 6.85 mtrs.**

53. Formation width for cutting for single line B.G. railway line is :-

(a) 5.25 mtrs. (b) 5.85 mtrs.
(c) 6.25 mtrs. (d) 6.85 mtrs.

54. Centre to centre spacing for formation for double railway line for B.G. is :-

(a) 4250mm (b) 4725mm
(c) 5050mm **(d) 5350mm.**

55. The bottom of side drains should be below the formation level by at least :-

(a) 45cm **(b) 30cm**
(c) 35cm (d) 36cm.

56. Cross slope of the formation to have good drainage of the ballast section :-
(a) 1 in 30 **(b) 1 in 40**
(c) I IN 20 (d) 1 in 50.

57. The side slope of formation in embankment is :-
(a) 2:1 (b) 1:1
(c) 1:5 (d) 1:3.

58. Formation width for bank for double line B.G. railway line is :-

(a) 10.555mtrs. (b) 11.555mtrs.
(c) 12.155mtrs. (d) 12.555 mtrs.

59. Formation width for cutting for double line B.G. railway line is :-

(a) 10.155 mtrs. **(b) 11.555 mtras.**
(c) 12.155mtrs. (d) 23.555 mtras.

60. The catch water drains are provided in the :-

(a) Formation in the embankment. **(b) Formation in cutting.**
(c) Zero fill formation. (d) None of the above.

61. A switch is :-

(a) A pair of tongue rail with necessary connection.
(b) A pair of stock rail and tongue rail with connections of fittings.
(c) A pair of stock rails and a pair of tongue rails with connections
(d) None of these.

62. A point is :-

(a) A pair of tongue rail with necessary connections.
(b) A pair of stock rails with connections.
(c) A pair of tongue rails with their stock rails.
(d) None of these.

63. Switch length is the distance between :-

(a) SRJ to HOS. (b) ATS to end of tongue rail
(c) ATS to HOS (d) TTS to end of stock rail.

64. Lead distance is the distance between :-

(a) ATS to TNC (b) HOS to ANC
(c) End of stock rail to TNS **(d) HOS to TNC.**

65. Minimum throw of an existing switch for B.G. is :-

(a) 89 mm **(b) 95 mm**
(c) 100 mm (d) 115 mm

66. Maximum throw of an existing switch for B.G. is :-

(a) 89 mm (b) 95 mm
(c) 100 mm **(d) 115 mm**

67. Which of these crossing is not used in Indian Railway :-

(a) Built up crossing (b) Cast steel crossing
(c) Acute crossing **(d) Square crossing**

68. CMS is abbreviated for :-

(a) Crossing of mild steel
(b) Cast manganese steel crossing
(c) Cast iron metal crossing
(d) Crossing for maximum speed.

69. Flange way clearance is the distance between nose of crossing rails and ……

(a) Check rail
(b) Wing rail
(c) Tongue rail
(d) Point.

70. Wing rails are provided :-

(a) Near tongue rails
(b) Near check rails
(c) Near stock rails
(d) In crossing.

71. In a diamond crossing the number of noses :-
(a) 2
(b) 3
(c) 4
(d) 6.

72. Check rail clearances should be in crossing for B.G. (PSC Sleeper) …….

(a) 41mm – 44mm
(b) 44mm – 48mm
(c) 48mm – 51mm
(d) 51mm-57mm.

73. Stock rail joint is at a distance of …….. from ATS in 1 in 121 in 12 straight switch is

(a) 840 mm
(b) 480 mm \
(c) 1500 mm
(d) 1000 mm.

74. Switch length for 1 in 8½ curved switch is :-

(a) 4725 mm
(b) 6400 mm
(c) 7620 mm
(d) 7730 mm

75. Switch length for 1 in 12 straight switch is

(a) 4725 mm
(b) 6400 mm
(c) 7620 mm
(d) 7730 mm

76. Length of CMS crossing for 1 in 8½ F/S switch 60 Kg. :-
(a) 3000 mm
(b) 3300 mm
(c) 4300 mm
(d) 4350 mm

77. Length of CMS crossing for 1 in 12 F/S switch 60 Kg. :-

(a) 3000 mm
(b) 3300 mm
(c) 4300 mm
(d) 4350 mm

78. Length of tongue rails for 1 in 8½ curved switch is

(a) 4725 mm
(c) 7620 mm
(b) 6400 mm
(d) None of these

79. Sleeper no. to be laid perpendicular to main line under switch for 1 in 8½ turnout is

(a) 1 to 13
(c) 14 to 41
(b) 1 to 20
(d) 1 to 15

80. Sleeper no. to be laid perpendicular to main line under switch for 1 in 12 turnout is
(a) 1 to 10
(c) 1 to 20
(b) 1 to 13
(d) 21 to 64

81. Sleeper no. to be laid at right angle to centre line of crossing for 1 in 8½ turnout is

(a) 14 to 41
(c) 42 to 54
(b) 21 to 64
(d) 65 to 83

82. Sleeper no. to be laid at right angle to centre line of crossing for 1 in 12 turnout is
(a) 14 to 41
(c) 60 to 81
(b) 21 to 60
(d) 65 to 83

83. A rail joint requires ---------% extra effort in its maintenance compared to normal track?

(a) 10%
(c) 25%
(b) 15%
(d) 50%

84. In SKV welding the mould is made of ?

(a) Green sand mould
(c) Cast iron mould
(b) Pre-tab mould
(d) Cement concrete mould.

85. In flash butt welding process, loss of length of rail per weld is :-

(a) 20mm
(c) 30 mm
(b) 25 mm
(d) 50 mm

86. Most desirable method of pre heating in AT welding will be

(a) Air + Petrol
(c) LPG + Petrol
(b) Oxygen + LPG
(d) Compressed air + Petrol

87. While doing "Through packing" of track, ballast is opened out up to the end of sleeper and in side it is …… from the rail seat for B.G. ?

(a) 250 mm
(c) 450 mm
(b) 350 mm
(d) 500 mm

88. Gauge tolerance for B.G. on straight track are :-

(a) -6 mm to + 6mm (b) -3 mm to + 3mm
(c) -6 mm to + 15mm (d) Up to +20mm

89. Gauge tolerance for B.G. on curves with radius more than 350 m is ?

(a) -6 mm to + 6mm (b) -3 mm to + 6mm
(c) -6 mm to + 15mm (d) Up to +20mm

90. Gauge tolerance for B.G. on curves for radius shorter than 350 m is ?

(a) -6 mm to + 6mm (b) -3 mm to + 6mm
(c) -6 mm to + 15mm **(d) Up to +20mm**

91. In deep screening of track, the normal speed is restored in ……. days , if track is packed manually ?

(a) 10 days (b) 15 days
(c) 21 days (d) 30 days

92. Ridge of ballast in the centre of track should be within ?

(a) 70 mm (b) 60 mm
(c) 50 mm (d) 40 mm

93. During packing, …… rail shall be treated as base rail on curves ?

(a) Inner rail (b) Outer
(c) None of these (d) Any of them

94. Duration of post monsoon attention is …… ?

(a) 3 months (b) 4 months
(c) 5 months **(d) 6 months**

95. Duration of pre monsoon attention is …… ?

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

96. Lifting shall always be done in the direction of ……. grade on single line ?

(a) Fallings **(b) Rising**
(c) Any of them (d) None of these

97. Size of fouling mark shall be :-

(a) 1200x200x100mm **(b) 1200x250x150**
(c) 1500x250x125 (d) None of these

98. In case of stop dead restriction caution indicator shall be provided at ?

(a) 800 m
(c) 1200 m
(b) 1000 m
(d) 600 m

99. In machine maintained section the depth of crib ballast to be opened out shall be ?

(a) 50-75 mm
(c) 75-100 mm
(b) 60-80 mm
(d) None of these

100. Height of indicators except termination board from rail level is ?
(a) 2.0 m
(c) 1 m
(b) 1.5 m
(d) None of these

101. The entire track must be deep screened at least once in …….. year ?

(a) 12
(c) 8
(b) 10
(d) 5

102. Deep screening shall be done in the ….. on double line ?

(a) Direction of traffic
(c) Can be done on any line
(b) Opposite to the direction of traffic
(d) None of these

103. The cause of formation of kinks in a rail is ….. ?

(a) Loose packing at joints
(c) Defect in cross level at Joints
(b) Defect in gauge and alignments
(d) Uneven wear of the rail head.

104. The work of deep screening shall be done at the speed restriction of minimum … Kmph ?

(a) 45
(c) 20
(b) 30
(d) 15

105. Lifting of track should not exceed …….. mm at a time ?

(a) 100 mm
(c) 50 mm
(b) 75 mm
(d) 30 mm

106. Frequency of Foot plate inspection by AEN is …… ?

(a) Once a fortnight
(c) Once in 3 month
(b) Once a month
(d) Once six month

107. For maintenance purposes the length of track assigned to a gang is usually

(a) 5 to 7 Km.
(c) 15 to 17 Km.
(b) 10 to 12 Km.
(d) 20 to 21 Km.

108. Lubrication of fish plated joints shall be done preferably in the month of :-

(a) Oct. & Nov. (b) Dec. & Jan.
(c) April & May (d) Aug. & Sept.

109. Creep is the :-

(a) Longitudinal movement of rail. (b) Lateral movement of rail
(c) Vertical movement of rail (d) Difference in the level of two rails.

110. Top of the creep post shall be kept …… mm above the rail level ?

(a) 30 mm **(b) 25 mm**
(c) 20 mm (d) 10 mm.

111. Overhauling of track is essential because it improves

(a) Longitudinal resistance (b) drainage
(c) Stability of track **(d) General health of the track.**

112. Maximum distance covered in a day by a patrolman should not normally exceed ?

(a) 2 Km. (b) 5 Km.
(c) 10 Km. **(d) 20 Km.**

113. The track laid over the bridge has rails with cant of

(a) 1 in 20 (b) 1 in 30
(c) 1 in 40 (d) 1 in 10.

114. From work spot, banner flag should be placed on B.G. track at

(a) 100 m (b) 500 m
(c) 600 m (d) 1200 m

115. Speed indicator should be placed from work spot at a distance of :-

(a) 20 m **(b) 30 m**
(c) 50 m (d) 100 m

116. Normal life of detonator is

(a) 2 years (b) 3 years
(c) 5 years **(d) 7 years**

117. Land boundary inspection is done by PWI once in

(a) 6 months **(b) a years**
(c) 3 months (d) None of these.

118. Small track machines are required to ……. ?

(a) Mechanise the work of sectional gangs
(b) Fill up the gap between the working of heavy track machines and manual working.
(c) Stretching & compressing both
(d) All the above.

119. Jim crow is used to ……. ?

(a) Remove the bends of rail
(b) Bend the rail
(c) Bending and debending both
(d) Lifting the rail.

120. Rail tensor is used for ……. the rail ?

(a) Streching
(b) Compressing
(c) Streching & Compressing both
(d) None of these

121. Lining of track is corrected by ……. ?

(a) Two chord system
(b) Three chord system
(c) Any of above
(d) None of them

122. Which of the following track machine is dynamic track stabilizer ?

(a) VDM-800
(b) PTV - 800
(c) Mastise R-7
(d) DGS – 627

123. During tamping No. of insertions in case of 25 mm lift in PSC sleeper is ?

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

124. Technical name of the machine used for consolidation of track ?

(a) DGS - 62 N
(b) BRM
(c) FRM – 80
(d) VDM

125. At the close of tamping work, ramp should be flatter than …… ?

(a) 1 in 100
(b) 1 in 500
(c) 1 in 1000
(d) 1 in 1200.

126. Name the latest tie tamping machine in India ?

(a) Universal machine
(b) Unomatic
(c) Duomatic
(d) CSM - 09.

127. Which machine is not a relaying machine ?

(a) T - 28
(b) TRT
(c) PQRS
(d) UTV

128. For ballast cleaning of points & crossing, machine used is ?

(a) RM - 80 **(b) RM - 76**
(c) FRM - 80 (d) None of these.

129. What are the functions of tamping machines ?

(a) Correction of alignment (b) Correction of levels
(c) Packing under sleepers **(d) All of above.**

130. Name the machine used for shoulder ballast cleaning ?

(a) RM - 80 **(b) FRM - 80**
(c) DGN – 62 (d) BCM.

131. Dynamic track stabilizer is the machine used for …….. ?

(a) Tamping (b) Ballast cleaning
(c) Consolidation of ballast (d) None of these.

132. BRM can move the ballast ?

(a) From centre towards either side (b) From one side to other side
(c) Move the ballast towards centre of track **(d) All the sides.**

133. Which machine is used for turnout renewals ?

(a) TRT (b) PQRS
(c) T – 28 (d) Rail – VAC

134. Minimum speed restriction to be imposed for track renewal is …… ?

(a) Stop dead & 10 Kmph (b) 10 Kmph
(c) 15 Kmph **(d) 20 Kmph**

135. Which of the following is not tamping machine ?

(a) Duomatic (b) CSM
(c) UNIMAT **(d) UTV**

136. MSP means ?

(a) Method of short packing **(b) Measured shovel packing**
(c) Maintenance system of packing (d) None of these.

137. DTM means ?

(a) Direct track maintenance **(b) Directed track maintenance**
(c) Day to day track Maintenance (d) None of these.

138. TRT consist of …….. cars ?

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

139. The track can be opened with ….. Kmph speed after first tamping of TRT working ?
(a) 20 b) 25
(c) 30 **(d) 40**

140. Dehogging of rail ends can be done by ?

(a) MSP (b) Track Machine
(c) DTM (d) None of these

141. BCM means ?

(a) Ballast consolidation machine **(b) Ballast cleaning machine**
(c) Ballast control machine (d) None of these

142. Jurisdiction of PWI incharge on double line on B.G. ?

(a) 20 – 30 Km. (b) 30 – 40 Km.
(c) 40 – 50 Km. (d) 70 – 80 Km.

143. Jurisdiction of PWI incharge on single line on B.G. ?

(a) 30 – 40 Km. (b) 40 – 50 Km.
(c) 70 – 80 Km. **(d) 90 – 100 Km.**

144. Rail renewal for B.G. 52 Kg. rail section becomes due, when loss of section is ….....% ?

(a) 4.2% (b) 5.0%
(c) 6.0%. **(d) 7.0%**

145. Rail renewal becomes due, when the corrosion in web and foot exceeds ….....mm ?

(a) 1.5 mm (b) 2.5 mm
(c) 4.0 mm (d) 5.0 mm

146. Rail renewal becomes due for B.G. 60 Kg. Rail section, when vertical wear exceeds ….....mm ?

(a) 4.5 mm (b) 6 mm
(c) 8 mm **(d) 13 mm**

147. Rail renewal becomes due for B.G. 52 Kg. Rail section, when vertical wear exceeds …..... ?

(a) 4.5 mm (b) 5 mm
(c) 8 mm (d) 13 mm

148. It becomes necessary to carry out through rail renewal when lateral wear exceeds …..... mm for B.G. group A & B routes for curve track ?

(a) 6 mm
(b) 8 mm
(c) 9 mm
(d) 10 mm

149. Through weld renewal should normally be planned when weld failure in a year exceed …… per 100 welds ?

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

150. A speed of …...… Kmph is allowed immediately after carrying out track renewal work ?

(a) 10 Kmph
(b) 15 Kmph
(c) 20 Kmph
(d) 45 Kmph.

151. PSC sleeper in DMT shall be loaded …….. to track ?

(a) Perpendicular to track
(b) Along the length of track
(c) Either a and b
(d) None of these.

152. Rated out put of TRT in a gross block of 4 hrs. ?

(a) 1200 Sleepers
(b) 1400 Sleepers
(c) 1600 Sleepers
(d) 1800 Sleepers

153. What is the gauge of Auxiliary track for working of PQRS ?

(a) 3400 mm
(b) 3700 mm
(c) 3000 mm
(d) 1676 mm

154. As per IRTMM, the Auxiliary track for PQRS working can be higher than the existing track by not more than ?

(a) 40 mm
(b) 50 mm
(c) 25 mm
(d) 10 mm

155. Permissible amount of corrosion in foot of rail as criteria for rail renewal is ?

(a) 3 mm
(b) 2 mm
(c) 1.5 mm
(d) 1 mm

156. Vertical wear permitted for consideration of rail renewal in 52 Kg. rail ?

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

157. Through renewal of rubber pads shall be planned after ……. years ?

(a) 7
(b) 6
(c) 5
(d) 4

158. The limiting loss of section for track renewal of 60 Kg. rail is …....% ?

(a) 4% (b) 6%
(c) 8%. (d) 10%

159. The lateral wear is to be measured at point …….. to …... mm below rail table ?

(a) 13 to 15mm (b) 12 to 14 mm
(c) 14 to 16 mm (d) None of these.

160. The average life of a concrete sleeper is …..?

(a) 40 to 50 years **(b) 50 to 60 years**
(c) 60 to 70 years (d) None of these.

161. In new Rail as well as second hand rails how much end bends of the rails in vertical are permitted when checked with one meter straight edge before welding?

a) +0.5mm, -0 mm in vertical * b) +0.2mm, -.3 mm in vertical
c) +0.3mm, -2 mm in vertical d) 0 mm, +.5 mm in vertical

162. In new Rail as well as second hand rails how much end bends of the rails in lateral direction are permitted when checked with one metre straight edge before welding?

a) ± 0.2 mm in lateral direction b) ± 0.3 mm in lateral direction
c) ± 0.5 mm in lateral direction* d) All are above right

163. What is the life of portion?

a) 2 years b**) No specific life.**
c) 6 months d) 1 year

164. Life of Portion mainly depend upon?

a) Quality of packing b) Storage condition
c) Quality of packing and storage condition. d) Ingredients of portions

165. How rejected portion are to be disposed-off?

a) By Igniting 5 Portions at a time in pit away from store?*
b) By throwing them away
c) By dispose off in a pit
d) By using it in Branch/Yard lines for welding

166. Where Portion sample tests(test piece) should be conducted?

a) At desire by RDSO b**) At Zonal CMT's organisation or the Flash Butt Welding plant**.
c) In RDSO campus d) As decided by in charge of the plant

167. The composition of thermit welding team?

a) 7 Nos. **b) 8 Nos.***
c) 6 Nos. d) 9 Nos

168.. What is the duration for Initial course for welders (TW-1)?

a) Two weeks* b) One week
c) As decided by TPP/LKO d) 3 working days

169. What is the duration for Refresher course for welders (TW-2)?

a) One week* b) Two weeks
c) As decided by TPP/LKO d) 3 working days

170. What is the duration for supervisors course (TW-3)?

a) One week * b) Two weeks
d) As decided by TPP/LKO d) 3 working days

171. Type of competency certificate issued after TW-1 course?

a) Competency for two years **b) Provisional competency.**
c) Competency for six months d) Competency to do welding independently

172. What is the validity of Provisional competency certificate?

a) Valid for executing 50 joints or six months whichever is earlier.

b) Valid for executing 100 joints or six months whichever is earlier.*

c) Valid for executing 50 joints. d) Valid for six months

173. What is the validity after Refresher course for welders (TW-2)?

a) Six monyhs b) One year
c) Two years.* d) All are wrong

174. What is the validity after supervisors course (TW-3)?

a) Normally, supervisors shall not be required to undergo the course again. However, they may be sent for course on performance basis.*

b) 2 years c) 5 Years d) 10 Years

175. How much rail ends are cleaned with Kerosene Oil and steel wire brush?

a) Minimum 100 mm both side **b) Minimum 50 mm both side.**
c) No need d) As decided by site supervisor

176. What is the heating time in OXY & LPG in SPW?

a) 2.0 - 3.5 minutes. b) 2.0 - 3.0 minutes.
c) 2.0 - 2.5 minutes.* d) 3.0 - 4.5 minutes.

177. What is the minimum distance between AT Weld and other joint exist in track?

a) 2 Mt. b) 3 Mt.
c) 4 Mt.* d) 4.5 Mt.

178. During AT welding reaction is ?

a) Exothermic b) Endothermic
c) No Reaction d) Heating

179. What is Pre Heating Temperature of rail ends in AT Welding?

a) $300 \pm 20^{o}C$ b) $400 \pm 20^{o}C$
c) $500 \pm 20^{o}C$ **d) $600 \pm 20^{o}C$ ***

180. What action to be taken if slag is not separated within 20 ± 3 seconds?

a) Tap inside. **b) Tap outside**
d) Good reaction d) Tap well in time

181. Internal diameter of thimble in conventional type of crucible is?

a) 14-16 mm b) 16-18 mm
c) 18-20 mm* d) 20-22 mm

182. Name the material which is separated from molten steel during chemical reaction of A.T welding?

a) Aluminium oxide (slag). * b) Ferrous Oxide
c) Aluminium d) Ferrous

183. Finishing tolerances are measured by?

a) On 30 cm scale **b) 1 MT straightedge or 10 CM straightedge.**
c) On 15 cm straight edge d) On 30 cm straight edge

184. To take care of differential cooling rail ends of 90 UTS rails are lifted by?

a) 1 mm b) 2 mm
c) 2 to 2.2 mm.* d) 1 to 2 mm

185. Which gauge is used to measure finishing tolerances .

a) Tilted gauge b) Filter gauge
c) Meter gauge d**) Filler gauge.***

186. Early tapping will cause defect of ?.

a) No defect
b) Inclusion of slag
c) Inclusion of aluminium
d) Inclusion of ferrous

187. Risers are broken at?

a) cold. *
b) Hot
c) After 5 mints
d) After 3 mints

188. Pressure of compressed air is kept during preheating by CAPS?

a) 1 to 2 kg/cm^2
b) .1 to .2 kg/cm^2
c) 2 to 3 kg/cm^2
d) 0.2 to 0.3 kg/cm^{2*}

189. Crucible is repaired by?

a) Magnasite Powder
b) Magnasite Powder & Sodium Silicate.
c) Sodium Silicate
d) Aluminium powder

190. Function of Calcium fluoride/flour spar in portion is?

a) To separate slag*
b) To separate aluminum
c) To separate ferrous
d) No separation

191. Finished tolerance on 1 Mt. st. edge at the centre on gauge side shall be?

a) ± 0.2 mm
b) ± 0.3 mm
c) ± 0.5 mm*
d) ± 1.0 mm

192. Finished tolerance on 1 Mt. long st. edge on surface of head shall be?

a) 0 to .1 mm
b) 1 to 1.5 mm
c) 0 mm
d) 0 to 1 mm*

193. Finished tolerance on 10 cm long st. edge at the centre on gauge side shall be?

a) ± 0.4 mm
b) ± 0.1 mm
c) ± 0.2 mm
d) ± 0.3 mm*

194. Finished tolerance on 10 cm. long st. edge on surface of head shall be?

a) 0 to 0.1 mm
b) 0 to 0.2 mm
c) 0 to 0.4 mm*
d) 0 to 0.3 mm

195. Min^m. deflection during transverse breaking load test is?

a) 5 mm
b) 10 mm
c) 15 mm*
d) 20 mm

196. Min. breaking load of 52kg weld during transverse breaking load test is?

a) 90MT*
b) 100 MT
c) 110 MT
d) 120 MT

197. Min. breaking load of 60kg weld during transverse breaking load test is?

a) 110 MT
b) 115 MT*
c) 90 MT
d) 120 MT

198. To take care of differential cooling rail ends of 72 UTS rails are lifted by?

a) 1 to 1.5 mm
b) 1 to 2 mm
c) 2 to 2.5 mm
d) 3 to 4 mm *

199. The colour of bag containing Portion for 72 UTS ?

a) Pink
b) Green
c) Red *
d) Black

200. The colour of bag containing Portion for 90 UTS ?

a) Red
b) Green *
c) Pink
d) Black

201. The colour of bag containing Portion for 110 UTS ?

a) Red
b) Green
c) Pink
d) Black *

202. Pressure of LPG during pre-heating shall be?

a) 2.0 - 2.5 kg/ sq cm
b) 2.0 - 2.5 kg/ sq cm
c) 2.0 - 2.5 kg/ sq cm*
d) 2.0 - 2.5 kg/ sq cm

203. Pressure of Oxygen during pre-heating shall be?

a) 4.0 – 5.0 kg/ sq cm
b) 5.0 – 6.0 kg/ sq cm
c) 6.0 – 7.0 kg/ sq cm
d) 7.0 – 8.0 kg/ sq cm *

204. Defect of Blow holes is due to?

a) Slag
b) Moisture
c) Lack of heating
d) Extra heating

205. Heating time with compressed air and petrol in SPW is ?

a) 4.0 to 4.5 minutes.*
b) 4.0 to 5 minutes
c) 5.0 to 5.5 minutes
d) 5.5 to 6 minutes

206. What is the Shelf life of mould ?

a) 6 months minimum. b) 8 months minimum
c) 9 months minimum* d) 12 months minimum

207. What is the Life of luting sand ?

a) No defined * b) 6 months
c) 9 months d) 12 months

208. Minimum traffic block required for execution of AT Weld ?

a) 70 minutes **b) 70-75 minute.**
c) 60 mints d) 1 hrs and 30 mints

209. What are the recognized systems for pre heating of rails ends for AT Welding?

a) Oxygen –LPG & Compressed air petrol both* b) Only Oxygen –LPG
c) Only Compressed air petrol both d) both are correct

210. Weather protection of track is required during block for execution of AT Welding?

a) Yes. b) No
c) As decided by site supervisor d) As per site condition

211. Weather traffic block is required for execution of AT Welding?

a) Yes.* b) No
c) As decided by site supervisor d) As per site condition

212. After AT Welding First train is to be passed after ?

a) 20 Minutes from pouring of weld metal. b) 35 Minutes from pouring of weld metal.
c) 30 Minutes from pouring of weld metal.* d) 25 Minutes from pouring of weld metal.

213. What is the speed restriction to be observed for train passing?

a) Necessary speed restriction shall be observed until the grinding operation is over.

b) 30KMPH c) 45 KMPH d) Not required

214. Normal Reaction time in SPW technique?

a) 17 ± 3 seconds. b) 15 ± 3 seconds
c) 23 ± 3 seconds **d) 20 ± 3 seconds***

215. Colour of rail ends becomes after preheating ?

a) Golden * b) Pink Red
c) Red d) Yellow

216. How many nos. of sleepers should be loosened either side of the proposed weld?

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

217. No of Ingredient of Portion are?

a) Five.
b) Six
c) Seven*
d) Eight

218. Height of crucible is kept from top surface of mould?

a) 30 mm
b) 40 mm
c) 50 mm*
d) 60 mm

219. Torch is kept at height from top surface of rail head?

a) 30 to 55 mm
b) 35 to 40 mm
c) 40 to 45 mm*
d) 45 to 50 mm

220. Which gauge is used to measure the height of rail at the time of aligning of rails for AT welding?

a) Height gauge.*
b) Vertical gauge
c) Horizontal gauge
d) As decided by site supervisor

221. Full form of SPW?

a) Special pre heated weld
b**) Short preheated weld.**
c) Short post heated weld
d) None of above

222. Grade of 90 UTS rail is?

a) 880*
b) 1080
c) 710
d) None of above

223. Grade of 110 UTS rail is?

a) 880
b) 1080
c) 710
d) None of above

224. Grade of 72 UTS rail is?

a) 880
b) 1080
c) 710*
d) None of above

225. Defect of cracks in weld is mainly due to?

a) Early opening of mould.*
b) Early trimming of weld
c) Early grinding of weld
d) None of above

226. Defect of short of metal is mainly due to?

a) Less gap **b) Excessive gap**
c) Less weight of position d) None of above

227. Defect of low joint is due to?

a) Excess height b) Early trimming of weld
c) Early grinding of weld **d) Nil/Less provision of height during alignment.***

228. Defect of High joint is due to ?

a) Early trimming of weld **b) Excess provision of height during alignment.**
c) Early grinding of weld d) None of above

229. Defect of lack of fusion is mainly due to?

a) Improper heating.* b) Improper Gap
c) Improper grinding d) None of above

230. Late tapping will cause defect of?

a) Lack of fusion (Heat losses)* b) Piping defect
c) Half moon defect d) None of above

231. Thickness of Lining/Charge is kept?

a) 20 mm. **b) 25 mm***
c) 30 mm d) As decided by the site supervisor

232. Head of closing pin is covered with

a) Asbestos powder b) Slag Powder
c) Asbestos powder than slag* d) None of above

233. How many grams asbestos powder is used to cover head of closing pin ?

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

234. What will happen if slag is not used above the layer of asbestos powder?

a) Auto tapping* b) High welding
c) Low welding d) Nothing will happen

235. What is mould waiting time?

a) 3 to 5 minutes. **b) 4 to 6 minutes***
c) 3.5 to 5.5 minutes d) 4.5 to 6.5 minutes

236. Late tapping will cause defect of?

a) Lack of fusion (Heat losses)* b) Piping defect
c) kidney defect d) All above are correct

237. What is the function of Zircon wash?

a) To maintain good quality of weld **b)To achieve good finish of the weld surface.***
c) Both above are correct d) Both are incorrect

238. Main advantage of 3-piece P F Mould is?

a) To overcome fin defect.* b) To prevent the flaw of molten metal
c) To make proper weld size d) None to the above

239. What is the time of removal the tensor from the newly executed A T Weld?

a) 15 minutes after pouring. **b) 20 minutes after pouring***
c) 25 minutes after pouring. d) 30 minutes after pouring.

240. Last flag man is deputed at which distance from last detonator during protection of welding site.

a) 30 mts b) 50 mts
c**) 45 mts*.** d) 60 mts

241. When was the collar painting done ?

a) After the welding * b) after one week of welding
c) After 15 days of welding d) None of the above

242. Second coat of paint is done after minim. of

a) 2 Hrs after first coat b) 4 Hrs after first coat
c) 6 Hrs after first coat **d) 8 Hrs. after first coat .***

243 Painting of weld is done up to

a) 10 CM minimum both side of weld & on welded surface .*
b) 15 CM minimum both side of weld & on welded surface
c) 20 CM minimum both side of weld & on welded surface
d) None of the above

244. Name the paint used in A.T. Welding painting?

a) Black Paint b**) Bituminous black IS:9862-1981.***
c) Any type of black paint d) None of the above

245. Rails used for A T Welding shall not normally be welded?

a) 20 years old b) 30 years old
c) 40 years old **d) 50 years old***

246. Marking on weld should be done which side?

a) Non gauge face side of A.T. weld * b) Gauge face side of A.T. weld
c) On web of non gauge face side of A.T. weld d) On web of gauge face side of A.T. weld

247. Marking on weld should be done

a) On centre of the rail head **b) 10 mm below the top surface of rail head.***
c) 10 mm above the bottom surface of rail head. d) None of the above

248. Weather date of welding is marked on weld?

a) Yes b) As decided by the site supervisor
c) No* d) None of the above

249. Banner flag is planted at a distance of

a) At the site of work b) At 1200 mtrs from welding site
c) At 30 mtrs from welding site **d) 600 Mt. from welding site .***

250. Ist detonator is planted at a distance of

a) 1200 Mt. from welding site .* b) 600 mtrs from welding site
c) 30 mtrs from welding site d) None of the above

251. Distance between the two detonators should be

a) 15 Mt. **b) 10 Mt.***
c) 20 Mt d) None of the above

252. How many detonators are planted during protection of track for welding site ?

a) One b) Two
c) Three* d) None of the above

253. New AT weld should be entered in TMS by ?

a) Sectional JE/SSE* b) Incharge SSE
c) Welder d) None of the above

254. In how many time rough riding should be done of new AT weld ?

a) Just after the welding* b) After 8 hrs of welding
c) After 24 hrs d) None of the above

255. In how many time final grinding should be done of new AT weld ?

a) Just after the welding b) After 8 hrs of welding
c) With in 24 hrs* d) None of the above

256. Till USFD testing of new AT weld what is criteria for joggling ?

a) Joggling with two far end bold
b) Joggling with two tight clamps*
c) Leave without joggling till its testing
d) None of the above

257. What is the testing frequency of new AT weld ?

a) Just after the welding
b) After 7 days of welding
c) With in the one month of welding*
d) None of the above

258. After declare good in USFD testing what is the joggling criteria ?

a) Joggle will be open from the AT weld*
b) Joggling with two far end bolting
c) joggling with four tight bold
d) None of the above

259. USFD testing of new AT weld will be done by ?

a) JE/SSE sectional
b) Incharge SSE
c) USFD machine operator*
d) None of the above

260. Testing of AT weld shall be done from ?

a) SRT
b) DRT
c) Digital weld tester
d) None of the above

261. After how much time lining of crucible should be changed ?

a) After every weld
b) After 7 welds
c) After every 10 welds*
d) None of the above

262. After Trimming of AT weld should be done by ?

a) Chisel
b) Trimmer*
c) Both
d) None of the above

263. What is the app. Weight of 52 kg portion?

a) 10 kg
b) 11 kg*
c) 12 kg
d) None of the above

264. What is the app weight of 60 kg portion ?

a) 11 kg
b) 12 kg
c) 13 kg*
d) None of the above

265. What is the dia of thimble ?

a) 14-16 mm
b) 16-18 mm*
c) 18-20 mm
d) None of the above

266. Ignition rod can be ignited from ?

a) Match box
b) Ignition match*
c) From fire
d) None of the above

267. In AT welding process what is the role of closing pin ?

a) To hold the portion before melt
b) To hold the asbestos powder & slag
c) Both above are correct*
d) None of the above

268. In AT welding process what is the role of asbestos powder & slag ?

a) To separate closing pin from portion*
b) To hold the portion
c) Both above are correct
d) None of the above

269. Steep gradients which need extra engine for hauling is known as

a) Pusher gradient*
b) Rulling Gradient
c) Reasonable gradient
d) Momentum gradient

270. Rising gradient followed by a falling gradient is known as

a) Rulling gradient
b) Momentum gradient*
c) Pusher graient
d) Aangular gradient

271. Track Structure for private siding with operating speed of 80 to 100 kmph is same as the track structure as specified for

a) Group B route
b) Group A route
c) Group D route*
d)Group C route

273. Track structure for private siding with operating speed 50 to 80 kmph is the same as track structure as specified for

a)Group A route
b) Group B route
c) Group D route
d)Group E route*

274. Indicate which of the statement is incorrect with regard to coning of Wheels

a)coning of wheels help the vehicle to negotiate a curve smoothly
b) It helps in smooth riding
c) It increases wear and Tear of wheel flanges*
d) it enables the outer wheel of vehicle to take a longer distance
e) it restricts the swaying of vehicles

275. Tilting of rails is done at a slope of

a. 1 in 30
b. 1 in 25
c. 1 in 20*
d. 1 in 15

276. Clear perpendicular distance between inner faces of two rails is

a. Gauge of track*
b. Inner gauge
c. Wheel base
d. Wheel gauge

277. The ratio of wheel diameter to gauge is about

a. 0. 40
b. 0.55
c. 0. 75*
d. 0. 90

278. The train runs faster on BG than on MG rail because its speed is directly proportional to

a) Weight of the train*
b) Gauge width
c)Policy of Railway Board
d) Length of the train

279. The ratio of maximum cant e and gauge G in India is about

a)1 / 100
b) 1 / 50

c)1 /10*
d) 1 / 25

280. "Composite sleeper index" is employed to determine

a) sleeper density requirement
b) number of fixtures required for a particular type of sleeper
c) durability of sleeper
d) mechanical strength of wooden sleepers and thereby gives its suitability as to be used as li sleepers.*

281. The maximum permissible speed recommended for Indian Railways for 1 in 8 and half crossing is

a)16 kmph*
b) 20 kmph
c)24 kmph
d) 32 kmph

282. What is the weight per meter length of 52 kg Rail?

a. 54.14 kg
b. 50.25 kg
c. 51.89 kg*
d. 53.85 kg

283. What is the full form of GMT

a. Gross Million Tonnes*
b. Gross minimum thickness
c. Gross Maximum thickness
d. None of above

284. In Indian Railway how many Gauges of Track has been adopted

a. 1
b. 3*
c. 2
d. 4

285. What is the Highest speed of train in Indian Railway

a. 140 KMPH
b. 120 kmph
c. 160 kmph*
d. 130 kmph

286. How many divisions in East Central Railway

a. 5*
b. 4
c. 6
d. 3

287. What do you mean by BG

a. Big Gauge
b. Broad Gauge*
c. Buffer gauge
d. None of above

288. What do you mean by RDSO

a. Research & Development Standard organisation*
b. Railway Development & Standard organization
c. Regional Development & Standard organization
d. None of above

289. Where is the Head Quarter of Northern Railway

a. New Delhi*
b. Lucknow
c. Mumbai
d. Calcutta

290. What is the highest post in Railway

a. General Manager
b. Chief Engineer
c. Chairman Railway Board*
d. Divisional Railway Manager

291. What is the standard distance between lines in Broad Gauge

a. 1670 mm
b. 1676 mm*
c. 1665 mm
d. 1680 mm

292. What do you mean by LWR

a. Long welded Rail*
b. Long weld able Rail
c. Linear welded rail
d. None of above.

293. On the basis of temperature how many zones are in Indian railway

a. 2
b. 6
c. 4*
d. 7

294. What is the minimum distance centre to centre of straight tracks for new works/alterations to existing works.

a. 4265 mm.
b.3660 mm.
c. 5300 mm.*
d. 4365 mm.

295. What is the full form of OMS used for track recording

a. Outer most Surface
b. Oscillation Monitoring system*
c. Only measuring system
d. Official measurement system

296. ADEN shall inspect AT welding site atleast.
(a) Once in a month
(b) Twice a month
(c) Once in 3 month
(d) Once in 6 months

297. On foot inspection by sectional PWI ...
(a) once in month
(b) once in six month
(c) once in for month
(d) once in a year

298. Curve inspection on A & B route should be done by PWI
(a) once in three months
(b) once in four months
(c) once in six months
(d) once in a year

299. Inspection of SEJ should be done by sectional PWI
(a) once in month
(b) once in two month
(c) once in fortnight
(d) once in six month

300. The ADEN should inspect all the bridges in his section
(a) Once in two month
(b) Once in six month
(c) Once in four month
(d) Once in a year

301. OMS-2000 measures the following important parameter
(a) Gauge & unevenness
(b) Speed of train
(c) Lateral & Vertical acceleration
(d) Super elevation

302. OMS peak above..... is attended urgently
(a) 0.2g
(b) 0.3g
(c) 0.35g
(d) 0.4g

303. Frequency of TRC on 'A' route....
(a) In two month
(b) In three month
(c) In every month
(d) In four month

304. TGI categories is outstanding when...
(a) >80
(b) <90
(c) >100
(d) >75

305. TMS is known as ……
(a) Track Monitoring System
(b) Track Management System
(c) Track Maintenance System
(d) Track Measurement System

306. What is the frequency of track recording of the sections having speed more than 110 kmph to 130 kmph

a. 4 Months
b. 2 Months
c. 6 Months
d. 3 Months*

307. What is the full form of PQRS used for Track renewal works.

a. Plasser quick Relaying system*
b. Please quick return services
c. Poor Quality renewal system
d. None of above

308. Minimum radius of curve on Broad gauge

a. 175 meter*
b. 215 meter
c. 146 meter
d. 200 meter

309. What is the formula of TGI for track recording

a. UI+4TI+6GI+AI/10
b. 2UI+TI+GI+6AI/10*
c. 3UI+TI+2GI+5AI/10
d. 2UI+2tI+2GI+4AI/10

310. What is the limit of Unevenness of A category of track

a. 0 to 10 mm
b. 0 to 5 mm
c. 0 to 6 mm*
d. 0 to 8 mm

311. What is the difference between rail flange of 60 kg & 52 rail section

a. 20 mm
b. 18 mm
c. 14 mm*
d. 16 mm

312. What is the value of long chord for measuring unevenness in track recording

a. 3.6 meter
b. 9.6 meter*
c. 7.2 meter
d. 4.8 meter

313. Frequency of TTM tamping on PSC sleepers track

a. 2 years or 100 GMT which ever is earlier*
b. 2 years or 150 GMT which ever is earlier
c. 1.5 years or 200 GMT which ever is earlier
d. 2 years or 175 GMT which ever is earlier

314. How many sleepers are there in Fan shaped 1 in 12 turnout

a. 85 sleepers
b. 96 sleepers*
c. 90 sleepers
d. 100 sleepers

315. Minimum wing rail clearance opposing nose of crossing on Fan shaped turnout

a. 45 mm
b. 40 mm
c. 41 mm*
d. 44 mm

316. Overall length of fan shaped 1 in 12 Turnout

a. 39975 mm*
b. 41004 mm
c. 28613 mm
d. None of above

317. What is the full form of TGI

a. Track Geometry Index*
b. Track general Index
c. Track gravity Index
d. None of above

318. Permissible speed of Turnout with 1 in 12 curved switches

a. 40 kmph*
b. 25 kmph
c. 15 kmph
d. 20 kmph

319. Permissible speed of Turnout with 1 in 8.5 curved switches

a. 40 kmph
b. 25 kmph*
c. 15 kmph
d. 20 kmph

320. The formation provides :-

(a) Elasticity and resilience to track
(b) Evenness and alignment to track
(c) Stability to track
(d) None of these.

321. How many green flags are with Patroller during Hot weather patrolling.

a. 02
b. 03
c. 01
d. None of above*

322. Lowest level of staff/supervisor competent for TTM tamping operation in LWR/CWR.

a. Gang Mate
b. PWS
c. PWI*
d. Keyman.

323. Lowest level of staff/supervisor competent for Lifting/Lowering of track in LWR/CWR.

a. Keyman.
b. Gangmate.
c. PWI.
d. PWS.*

324. Lowest level of staff/supervisor competent for packing or renewal of single isolated sleeper not requiring lifting or slewing of track in LWR/CWR.

a. PWI
b. Keyman
c. Gangmate*
d. PWS

325. Lowest level of staff/supervisor competent of Renewal of fastenings not requiring lifting in LWR/CWR.

a. PWS
b. Gangmate
c. Keyman*
d. Gangman

326. Lowest level of staff/supervisor competent for Renewal/recoupment of fastenings requiring lifting in LWR/CWR.

a. PWS
b. Gangmate*
c. Keyman
d. Gangman

327. Lowest level of staff/supervisor competent for Screening of ballast other than deep screening in LWR/CWR.

a. PWS
b. Keyman
c. Gangmate*
d. Gangman

328. Lowest level of staff/supervisor competent for Organising Hot weather patrolling during summer months in LWR/CWR.

a. Gangmate
b. PWI*
c. Keyman
d. PWS

329. Lowest level of staff/supervisor competent for passing of first train after buckling in LWR/CWR.

a. PWI*
b. PWS
c. Gangmate
d. Keyman

330. How many zones are in Indian railway

a. 8
b. 10
c. 16*
d. 12

331. In LWR What is the range of Destressing temperature in 52 kg and heavier section

a. Mean rail temp+5 0 C to Mean rail temp+10 0 C*
b. Mean rail temp+5 0 C to Mean rail temp+15 0 C
c. Mean rail temp to Mean rail temp+10 0 C
d. Mean rail temp+2 0 C to Mean rail temp+10 0 C

332. What is full form of SPURT car

a. Self propelled ultrasonic rail testing car*
b. Self pulled united rail testing car
c. Self pumped universal testing car
d. None of above

333. What do you mean by 60 kg rail

a. Weight of rail in 1 meter*
b. Area of rail of 1 meter
c. Weight of rail in 1 feet
d. Volume of rail in 1 meter

334. Points & Crossing is laid at a cant of

a. 1 in 20
b. 1 in 10
c. 1 in 15
d. NIL*

335. Minimum permissible vertical wear on nose of a 52 kg CMS crossing on Rajdhani route is

a) 6mm
b) 8mm*
c) 10mm
d) 12 mm

336. USFD test is done for

a. Rail
b. Weld
c. both (a) & (b) *
d. Non of the above

337. Maximum distance apart of trolley refuges on bridges with main spans of 100metre or more is

a. 50 mtr
b. 100 mtr
c. 200 mtr
d. a refuge over each pair*

338. Permissible creep in track is

a. 50 mm
b. 100 mm
c. 125 mm
d. 150 mm.*

339. Which of the following is a small track machine

a. Ballast regulating Machine.
b. Should Ballast cleaning machine
c. Ballast cleaning Machine.
d. Abrasive rail cutter machine

340. Curve inspection shall be carried out by Sectional PWI

a. Once in three months
b. Once in six months
c. Once in four months*
d. None of above

341. An accident has taken place at out station and main line is blocked and relief train is to be turned out without medical car. The hooter shall be:

a. 3 long
b. 4 long*
c. 4 long, 1 short
d. 3 long, and 1 short

342. Minimum speed restriction to be imposed for Track renewal is:-

(a) Stop dead & 10 Kmph
(b) 10 Kmph
(c) 15 Kmph
(d) 20 Kmph*

343. Service life in terms of total GMT carried for 52 kg. 90 UTS rail is:-

(a) 425 GMT
(b) 475 GMT
(c) 525 GMT*
(d) 545 GMT

344. Minimum rail section recommended for section having traffic more than 20 GMT is

(a) 90 UTS
(b) 52 Kg.
(c) 60 Kg.*
(d) None of the above.

345. Lubrication of ERC and inserts in corrosion prone areas and platform line is done:-

(a) Once in a month.
(b) Once in a fortnight.
(c) Once in a week.
(d) Once in a year.*

346. Vertical wear permissible for 60kg/90UTS. rails is:-

(a) 23 mm.
(b) 10 mm.
(c) 13 mm.*
(d) 15 mm.

347. Permissible wear of web & foot of rail due to corrosion is:-

(a) 15 mm**.** **(b) 1.5 mm.***
(c) 0.5 mm. (d) 2.5 mm.

348. Minimum depth of ballast cushion below the bottom of sleeper at the rail seat on BG group A route should be :-

(a) 350 mm. (b) 250 mm.
(c) 300 mm.* (d) 325 mm.

349. Sleeper density for group 'A' route with traffic density more than 20 GMT is:-

(a) 1560 sleepers/ Km**.** **(b) 1660 sleepers/ Km.***
(c) 1540 sleepers/ Km. (d) 1340 sleepers/ Km.

350. Track structure for CC+8 t+ 2 t loaded trains is:-
(a) 52 Kg 90 UTS;PSC 1540 sleepers/ Km.; 250 mm ballast.

(b) 60 Kg 90 UTS;PSC 1660 sleepers/ Km.; 300 mm ballast.*

(c) 52 Kg 72 UTS;PSC 1540 sleepers/ Km.; 300 mm ballast.

(d) 90 R;PSC 1340 sleepers/ Km.; 250 mm ballast.

351. Deep screening of entire track must be done at least:-

(a) Once in a quarter. (b) Once in a year.
(c) Once in 5 years. (**d) Once in 10 years.***

352. Service life of Glued insulated rail joint of 60 Kg rail is:-
(a) 300 GMT**.** **(b) 200 GMT.***
(c) 400 GMT. (d) 150 GMT.

353. Service life of improved SEJ of 60 Kg rail is:-

(a) 400 GMT. (b) 300 GMT.
(c) 200 GMT.* (d) 150 GMT.

354. Service life of CMS crossing (52 Kg rail) is:-

(a) 400 GMT. (b) 300 GMT.
(c) 200 GMT. **(d) 150 GMT.***

355. D&G charges for works estimates of CTR(P) is:-

(a) 2.25%. **(b) 1.8%.***
(c) 1.35%. (d) 1.62%.

356. What is speed restriction on deep screening site done by BCM and tamped by machine followed with DGS?

(a) 20 (b) 30
(c) 40* (d) 10

357. Frequency of trolley inspection by sectional PWI on concrete sleepers track maintenance by machines
(a) once a month **(b) once in fortnight**
(C) once a week (d) once in two month

358. Frequency of trolley inspection by incharge PWI on concrete sleepers track maintenance by machines
(a) once a month (b) once in fortnight
(c) once a week (d) once in two month

359. Frequency of Push trolley inspection by ADEN....
(a) once a month (b) once in fortnight
(C) once a week (d) once in two month

360. Average time taken for welding 52 kg rail in flash butt welding plant is approximately …..minutes
(a) 3 minutes **(b) 6 minutes**
(c) 9 minutes (d) 11 minutes

361. Maximum distance between trolley refuges in cuttings is…...
(a) 200m on straight (b) 150m on straight
(c) 250m on straight (d) 100m on straight

362. Lifting of track by gang in single line should be done in the direction of …….
(a) Rising gradient (b) Falling gradient
(c) Any direction **(d) None of these**

363. Point & Crossing is done by PWI on Passenger running line is ...
(a) once in one month (b) once in two months
(c) once in three months (d) once in six months

364. Point & Crossing inspection is done by PWI on Non Passenger running line is ...
(a) once in one month (b) once in three months
(c) once in six months (d) once in a year

365. In TRC Track parameters are recorded in a block of length ……..
(a) 100m (b) 50m
(c) 150m **(d) 200m**

366. Radius of 1° curve is ……
(a) 1750 m (b) 1650 m
(c) 1550 m (d) None of these.

367. Radius of 2° curve is …… …… ?
(a) 875 m (b) 775 m
(c) 675 m (d) 675 m

368. Gauge is recorded by spring loaded feelers …… mm below the rail surface ?
(a) 20 **(b) 14**
(c) 10 (d) Zero

369. Oscillograph cars are run to assess the riding quality in the form of ?
(a) Lateral accelerations (b) Vertical accelerations
(c) Both (a) and (b) (d) None of these.

370. Recording by oscillograph car below ……Kmph shall be taken as non recorded ?
(a) 60 (b) 70
(c) 80 (d) 100.

371. Frequency of track recording on routes above 130 Kmph is once in …… months ?
(a) 6 (b) 3
(c) 2 (d) 1

372. Frequency of oscillograph run on routes < 130 Kmph once in …… months ?
(a) 3 (b) 4
(c) 6 (d) 12

373. Who is responsible for the safe custody of tools used by keyman and track maintainers ?
(a) Keyman **(b) Mate**
(c) JE (P.Way) (d) None of these.

374. Muster and gang chart is usually in the possession of
(a) Keyman **(b) Mate**
(c) Gateman (d) None of these.

375. Which of the following is a small track machine ?
(a) Off track Tamper (b) Abrasive rail cutter
(c) Rail drilling machine **(d) All of these**.

376. TMS stand for ?
(a) Track monitoring system (b) Track modernization system
(c) Track management system (d) Track maintenance system.

377. Sand Hump shall be inspected by ADEN once in …. ?
(a) a year (b) 6 months
(c) 2 years (d) None of these.

378. OMS stands for ?
(a) Old maintenance system (b) Optimum mechanized system
(c) Oscillation monitoring system (d) None of these.

379. At all unmanned level crossing with metalled approach, where motor vehicles ply, a series of 3 speed breaks (bumps) spaced at ……..m apart should be provided on either side of the level crossing within railway boundary.

(a) 50 m **(b) 100 m**
(c) 150 m (d) 200 m

380. Frequency of B.G. track recording on sections where speeds are between 110 Kmph and 130 kmph is once in ….?

(a) 2 months (b) 3 months
(c) 4 months **(d) 6 months**

381. TGI less than …….. is called below average ?

(a) 20 **(b) 36**
(c) 30 (d) 50

382. For protection of level crossing gate in an emergency on B.G double line, the section gateman should place one detonator at one places and three detonator at subsequent place of a distance of ……..m and ……. respectively

(a) 400 m & 800 m (b) 500 m & 1000 m
(c) 600 m & 1200 m (d) 500 m & 1200 m

383. TGI for newly laid track is ?

(a) 100 (b) 80
(c) 120 (d) 240

384. Which of the following is a track machine ?

(a) TRT (b) DTS
(c) SQRS **(d) All of the these**.

385. On straight B.G. track permissible tolerance in squareness of joint in new track laying … mm ?

(a) ± 5 mm **(b) ± 10 mm**
(c) ± 12 mm (d) ± 15 mm.

386. Variation in sleeper spacing shall not be more than …….. mm in case of primary track renewals of B.G. ?

(a) ± 10 mm (b) ± 15 mm
(c) ± 20 mm (d) ± 25 mm.

387. Cross level variation shall not be more than …….. mm for laying of B.G. new track ?

(a) ± 10 mm **(b) ± 3 mm**
(c) ± 4 mm (d) ± 5 mm.

388. No. of staff permitted for push trolley ?

(a) 2 **(b) 4**
(c) 6 (d) 8.

389. No. of staff permitted for motor trolley ?

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

390. Short chord for unevenness in TRC is -------- meter .

(a) 9 meter (b) 3 meter

(c) 15 meter (d) 18 meter

391. Long chord for unevenness in TRC is -------- meter .

(a) 9 meter (b) 3 meter

(c) 15 meter **(d) 18 meter**

392. Short chord for alignment in TRC is -------- meter .

(a) 9 meter (b) 3 meter

(c) 15 meter (d) 18 meter

393. Long chord for alignment in TRC is -------- meter .

(a) 9 meter (b) 3 meter

(c) 15 meter (d) 18 meter

394. Short chord for twist in TRC is -------- meter .

(a) 9 meter **(b) 3 meter**

(c) 15 meter (d) 18 meter

395. Long chord for twist in TRC is -------- meter .

(a) 9 meter (b) 3 meter

(c) 15 meter (d) 18 meter

396. Frequency of track recording is -------- months for the route with speed above 130 kmph .

(a) 2 month (b) 3 month

(c) 4 months (d) 6 months

397. Frequency of track recording is -------- months for speed over 110 to 130 kmph .

(a) 2 month **(b) 3 month**

(c) 4 months (d) 6 months

398. Frequency of track recording is -------- months for the route with speed above 100 and upto 110.

(a) 2 month (b) 3 month

(c) 4 months (d) 6 months

399. Frequency of track recording is -------- months for the route with speed upto 100 kmph.

(a) 2 month (b) 3 month

(c) 4 months **(d) 6 months**

400. In a curve versine is ----------mm per degree of curvature.

(a) 20 mm (b) 25 mm

(c) 28 mm (d) 35 mm

401. Transition curve is situated at ---------- of curve.

(a) Both ends (b) At Centre

(c) Anywhere (d) After tangent point

402. Circular curve keeps the full amount of -------- and ------.

(a) Cant excess **(b) Versine and Super elevation**
(c) Cant deficiency (d) Above all

403. At all manned level crossing, where visibly is poor, about 15 to 20 ramble strips should provided spaced t ……metres from centre to centre.

(a) 0.5 m **(b) 1.0 m**
(c) 1.5 m (d) 2.0 m

404. Inner Rail is called ---------- rail in a curve.

(a) Straight Rail (b) Elevated rail
(c) Reference Rail (d) Above all

405. Super elevation is provided to ---------- the centrifugal forces due to higher speed.
(a) Increase (b) Decrease
(c) Counter balance (d) Above all.

406. Ballast profile in outer side of curve is 100mm high in --------- mm.

(a) 350 mm **(b) 500 mm**
(c) 750 mm (d) 250 mm

407. In a curve stations are painted at ----------in interval.
(a) 1.5 meter **(b) 10 meter**
(c) 20 meter (d) 3.2 meter.

408. Versine is measured on ----------meter chord in a curve.
(a) 10 m **(b) 20 m**
(c) 30 m (d) 40 m.

409. Maximum Super elevation in BG for high speed is ---------- .
(a) 165 mm (b) 140mm
(c) 150 mm (d) 190mm.

410. Maximum Super elevation in new lines can be provided with the permission of CE ---mm.
(a) 165 mm **(b) 185 mm**
(c) 190mm (d) 150 mm.

411. Maximum permissible degree of curvature in BG is --------- .
(a) 10 Degree (b) 12 Degree
(c) 8 Degree (d) 15 Degree.

412. Maximum cant excess permissible in BG is --------- mm .
(a) 100 mm **(b) 75 mm**
(c) 65 mm (d) 165 mm.

413. Maximum cant deficiency permissible in BG is --------- mm .

(a) 100 mm (b) 75 mm

(c) 65 mm (d) 165 mm.

414. Rate of change of cant permissible is ---------.

(a) 100 mm/second (b) 80 mm/second

(c) 75 mm/second **(d) 35 mm/second.**

415. Shape of transition curve in Indian Railway is ---------.

(a) Circular (b) Rectangular

(c) Cubic Parabolic (d) Elliptical.

416. To ease out the summit or sag at the junction of two gradients ---------- is provided.

(a) Vertical curve (b) Super elevation

(c) Cant excess (d) Cant efficiency.

417. Degree of curvature is equal to the versine measured on a chord of ---------- meter.

(a) 20 m (b) 10 m

(c) 30.5m (d) 1.5 m.

418. Guage on curves upto 350 meter radius and more should be ------to ---------mm.

(a) -5 to +3 mm (b) -3 to +10 mm

(c) -5 to +6 mm (d) -10 to +10 mm .

419. Guage on curve of radius less than 350 meter should be upto ---------- mm.

(a) +5 mm **(b) +10 mm**

(c) +15 mm (d) +3 mm

420. Super elevation is ---------- when outer rail is raised above inner rail.

(a) Positive (b) Negative

(c) Assertive (d) Above all.

421. Gap of --------mm is provided between rails for mobile flash butt welding.

(a) 2 mm **(b) 3 mm**

(c) 4 mm (d) 25 mm

422. Due to flashing and butting rails are shortened by --------mm after flash butt welding.

(a) 25 to 30 mm **(b) 32 to 35 mm**

(c) 35 to 40 mm (d) None

423. During tamping gap between top edge of tamping blade and bottom edge of PRC sleeper should be --------mm.

(a) 8 mm **(b) 10 to 12 mm**

(c) 15 mm (d) None

423. General lift of ---------- mm is kept during tamping.

(a) 10 mm (b) 20 mm
(c) 25 mm **(d) 30 mm**

424. In tamping double insertion is required when lift is more than -------- mm.

(a) 10 mm (b) 20 mm
(c) 25 mm **(d) 30 mm**

425. Super elevation is --------when inner rail is raised above outer rail.

(a) Positive **(b) Negative**
(c) Assertive (d) Above all.

426. The speed at which centrifugal forces developed are exactly balanced by cant provided is ---------.

(a) Equilibrium Speed (b)Maximum permissible speed
(c) Maximum sanctioned speed (d) Above all.

427. When the train moves at a higher speed than equilibrium speed -------- occurs.

(a) Cant excess **(b) Cant deficiency**
(c) Equilibrium cant (d) Above all.

428. When the train moves at a slower speed than equilibrium speed -------- occurs.

(a) Cant excess (b) Cant deficiency
(c) Equilibrium cant (d) Above all.

429. Cant gradient should not be steeper than ---------- in ----------.

(a) 1 in 360 (b) 1 in 720
(c) 1 in 1000 (d) Above all.

430. The main circular arc is moved in ward by an amount called -----.

(a) Transition **(b) Shift**
(c) Tangent (d) Above all.

431. The Shift is calculated from the formula S = -----.

(a) 4.2 x L^2 /R (b) L^2 /R
(c) 3.2 x L^2 /R (d) Above all.

432. A straight of --------- is kept between two transitions of reverse curve.

(a) 20 m (b) 30 m
(c) 40 m **(d) 50 m.**

433. In Curve speed upto 110 kmph and above station to station variation of versine permissible is -.

(a) 05 mm **(b) 10 mm**
(c) 15 mm (d) 20 mm.

434. From 5o kmph to 110 kmph variation in station to station versine should be ---------.

(a) 05 mm (b) 10 mm
(c) 15 mm **(d) 20 mm.**

435. For below 50 kmph speed variation in station to station versine should be ---------.

(a) 20 mm (b) 30 mm
(c) 40 mm (d) 50 mm.-

436. There should not be change in super elevation on curve -------meter ahead of ATS and behind back leg of crossing.

(a) 20 m (b) 30 m
(c) 40 m (d) 50 m.

437. Speed restriction of ----------kmph is provided if a diamond crossing is on curve.

(a) 50 kmph **(b) 65 kmph**
(c) 75kmph (d) 90 kmph.

438. Minimum radius for vertical curve in 'A' route is ---------- .

(a) 1000 m (b) 2000 m
(c) 3000 m **(d) 4000 m.**

439. Minimum radius for vertical curve in 'B' route is ---------- .

(a) 1000 m (b) 2000 m
(c) 3000 m (d) 4000 m.

440. Minimum radius for vertical curve in 'C, D & E' route is ---------- .
(a) 1000 m **(b) 2500 m**
(c) 3000 m (d) 4000 m.

441. In points and crossing opening of switch should be -------.

(a) 110 mm **(b) 115 mm**
(c) 95 mm (d) 120 mm.

442. Heel divergence in 1 in 8.5 switch is -------mm.

(a) 110 mm
(c) 183 mm
(b) 175 mm
(d) 190 mm.

443. Heel divergence in 1 in 12 switch is -------mm.

(a) 110 mm
(c) 183 mm
(b) 175 mm
(d) 190 mm.

444. The gap between bottom of stock rail and leading stretcher bar should be -------mm.

(a) 5 to 7 mm
(c) 1.5 to 3 mm
(b) 7 to 10 mm
(d) None.

445. Gap at joints with CMS crossing or tongue rail should be ----mm.

(a) 5 to 7 mm
(c) Gapless
(b) 7 to 10 mm
(d) None.

446. Tongue rail is chipped if total cracks in 1000 mm from ATS is aggregating to ---- ----mm.

(a) 100 mm
(c) 300 mm
(b) 200 mm
(d) 400 mm.

447. Tongue rail is declared knife edge if thickness of top edge becomes less than ---- ----mm.

(a) .5 mm
(c) 2 mm
(b) 1 mm
(d) 3 mm.

448. Vertical wear permissible of 60 Kg tongue rail is ---- ----mm.

(a) 6 mm
(c) 10 mm
(b) 8 mm
(d) 12 mm.

449. Vertical wear permissible of 52 Kg tongue rail is ---- ----mm.

(a) 5 mm
(c) 10 mm
(b) 8 mm
(d) 12 mm.

450. Lateral wear permissible of 60 kg tongue rail is ---- ----mm.

(a) 5 mm
(c) 10 mm
(b) 8 mm
(d) 12 mm.

451. Lateral wear permissible of 52 kg tongue rail is ---- ----mm.

(a) 6 mm (b) 8 mm
(c) 10 mm (d) 12 mm.

452. Maximum vertical wear on wings rails of CMS crossing permissible is --------mm.

(a) 6 mm (b) 8 mm
(c) 10 mm (d) 12 mm.

453. In lead rail in points & crossings stations are marked at -------- interval.

(a) 2 meter **(b) 3 meter**
(c) 5 meter (d) 6 meter.

454. In lead rail in points & crossings versine is measured at -------- meter chord.

(a) 2 meter (b) 3 meter
(c) 5 meter **(d) 6 meter**.

455. Variation in versine on two successive station in lead curve of points & crossings should not be more than ……mm .

(a) 2 mm (b) 3 mm
(c) 4 mm (d) 6 mm.

456. In lead rail versine at each station should not be more than ------- mm than design value.

(a) ± 2 mm **(b) ± 3 mm**
(c) 4 mm (d) 6 mm.

457. Points and crossings are inspected by SSE/JE at every -------- months by rotation.

(a) 2 months **(b) 3 months**
(b) (c) 4 months (d) 6 months

458. Points and crossings in yard lines are inspected by SSE/JE at every -----months by rotation.

(a)2 months (b) 3 months
(c) 4 months **(d) 6 months**

459. Gauge in points and crossings in straight route is -------- mm permissible.

(a) -3 to +3 mm **(b) -6 to +6 mm**
(c) -6 to +15 mm (d) none

460. Permissible gauge in turnout side upto 440 meter radius in oints and crossings is ----- mm.

(a) -3 to +3 mm
(b) -6 to +6 mm
(c) -6 to +15 mm
(d) none

461. Permissible gauge in turnout side below 440 meter radius in points and crossings is--- mm.

(a) -3 to +3 mm
(b) -6 to +6 mm
(c) -6 to +15 mm
(d) upto 20 mm

462. Gauge in crossing portion should be ------- mm.

(a) 0 to 4 mm
(b) -6 to +6 mm
(c) -6 to +15 mm
(d) upto 20 mm

461. In symmetrical split versine in points and crossing is taken in ……..

(a) Main line
(b) Branch line
(c) cord line
(d) Any one

463. Wear of CMS crossing is measured ---------mm from actual nose of crossing.

(a) 75 mm
(b) 100 mm
(c) 150 mm
(d) Any one

464. Actual wear for 52 Kg CMS crossing is ---------mm less than measured value.

(a) 1 mm
(b) 2 mm
(c) 2.5 mm
(d) 3 mm

465. Actual wear for 60 Kg CMS crossing is ---------mm less than measured value.

(a) 1 mm
(b) 2 mm
(c) 2.5 mm
(d) 3 mm

466. Gauge and cross level at crossing nose is measured at ---------mm from ANC.

(a) 100 mm
(**b) 150 mm**

467. In points & crossings Check rail clearance should be between ------- to ------ mm.

(a) 41 to 44 mm
(b) 44 to 47 mm
(c) 51 to 57 mm
(d) 60 to 66 mm

468. Vertical wear is measured where width of tongue rail is------mm.

(a) 09 mm
(b) 11 mm
(c) 13 mm
(d) 15 mm

469. Vertical wear is measured -------mm below top of stock rail .

(a) 09 mm (b) 11 mm
(c) 13 mm **(d) 15 mm**

470. In 52 kg 6400 mm switch length, 13 meter head width is at ------mm from ATS .

(a) 300 mm (b) 425 mm
(c) 476.5 mm (d) 1682 mm

471. In 52 kg 10125 mm switch length, 13 meter head width is at -----mm from ATS .

(a) 300 mm (b) 425 mm
(c) 476.5 mm **(d) 1682 mm**

472. Track centre for BG for new line construction should be -----.

(a) 5 meter **(b) 5.3 meter**
(c) 5.5 meter (d) 6 months

473. Sleeper density for BG group 'A' route is -----sleepers per km.
(a) 1400 (b) 1540
(c) 1660 (d) 1750

474. Tilting of rails is done at a slope of -------.

(a) 1 in 20 (b) 1 in 10
(c) 1 in 30 (d) none

475. The dia of fish bolt holes is ---------.

(a) 26 (b) 32
(c) 27 (d) none

476. Free rails while stacking shall be supported at least at ---------.

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

477. In fan shaped lay out of PRC special types of sleeper for BG 1 in 8.5 turn out are ---------.

(a) 45 (b) 83
(c) 54 (d) None

478. In fan shaped lay out of PRC special types of sleeper for BG 1 in 12 turn out are ---------.

(a) 45 **(b) 83**
(c) 54 (d) None

479. Spacing of concrete sleeper on BG track with 1660 sleeper per kilometer is ------.

(a) 50 **(b) 60**
(c) 54 (d) None

480. Spacing of concrete sleeper on BG track with 1540 sleeper per kilometer is ------.

(a) 50 (b) 60
(c) 65 (d) None

481. Sanction speed of Gr. 'A' route is --------kmph.

(a) 100 (b) 120
(c) 130 **(d) 160**

482. Grade compensation on curves on BG is --------%.
(a) .05 **(b) .04**
(c) .03 (d) .02

483. In Turn in curve minimum sleeper density is --------.

(a) M +2 (b) M +4
(c) M+7 (d) M+6

484. 1540 sleepers per kilometer indicates the spacing of sleeper ….--cm.

(a) 60 **(b) 65**
(c) 70 (d) None

485. 1660 sleepers per kilometer indicates the spacing of sleeper -----cm.

(a) 60 (b) 65
(c) 70 (d) None

486. Fouling mark should be placed where track centre is------mm.

(a) 4265 (b) 4725
(c) 5300 (d) None

487 . Maximum gradient in station yard for new lines is ------.

(a) 1 in 1200 (b) 1 in 1000
(c) 1 in 600 (d) None

488. In 'A' route distance of platform from centre line of track is ----- mm.

(a) 1670 to1680 (b) 1675 to 1695
(c) 1680 o 1900 (d) None

489. In 'B' route distance of platform from centre line of track is------- mm.

(a) 1670 to1680 (b) 1675 to 1695
(c) 1680 o 1900 **(d) 1675 to 1905**

490. In Goods siding height of platform is -------mm.
(a) 760 to 840 (b) 455
(c) 1065 (d) None

491. Clear spacing of bridge sleepers is -------mm.

(a) 400 **(b) 450**
(c) 510 (d) None

492. In bridges clearance of Guard Rail is -------mm.

(a) 250 ± 50 (b) 300 ± 50
(c) 300 (d) None

493. Difference in height of running rail and guard rail should not exceed --------mm.

(a) 15 (b) 20
(c) 25 (d) None

494. 1 in 12 turn out over all length is ------- meter.

(a) 39.975 (b) 29.975
(c) 17.874 (d) 18

495. In 1 in 12 turn out length of check rail is ------- meter.

(a) 5.234 (b) 4.456
(c) 4.331 (d) 4.335

496. 1 in 12 CMS crossing is ------- meter long.

(a) 5.234 **(b) 4.350**
(c) 4.331 (d) 4.335

497. In 1 in 12 crossing, crossing angle is --------.

(a) 4^0 45' 49" (b) 4^0 42' 49"
(c) 4^0 40' 49" (d) None

498. In 1 in 12 Fan Shape Sleepers one to ------- sleepers are perpendicular on main line.

(a) 10 **(b) 20**
(c) 30 (d) 40

499. In 1 in 12 Fan Shape Sleepers no-----to ---are perpendicular on bisector of crossing angle.

(a) 70 to 80 **(b) 65 to 83**
(c) 70 to 83 (d) None

500. In Sand hump ------meter is kept in level from fouling mark.

(a) 20 (b) 25
(c) 30 (d) None

501. In Sand hump after 30 meters gradient of ----- in ---- is made.

(a) 1 in 50 (b) 1 in 30
(c) 1 in 40 (d) None

502. Toe load on PRC is measured after -------- years or 200 GMT whichever is earlier.

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

503. TFR is to be proposed if 20 % or more sample size records less than -------- of toe load.

(a) 200 kg (b) 300 kg
(c) 400 kg (d) 500 k

504. During packing …… rail shall be treated as base rail on curves.

(a) **Inner** (b) Outer
(c) None of these (d) Any of them

505. On curves …… rail shall be taken as sighting rail

(a) Inner **(b) Outer**
(b) (c) None of these (d) Any of them

506. The work of deep screening shall be done at the speed restriction of minimum …… Kmph.

(a) 45 (b) 30
(c) 20 (d) 15

507. Lifting of track by gang should not exceed …… mm at a time

(a) 100 mm **(b) 75 mm**
(c) 50 mm (d) 15

508. Lubrication of fish plate joints shall be done preferably in the month of .

(a) **Oct & Nov** (b) Dec to Jan
(c) April & May (d) Aug & Sep

509. Which of the following will reduce creeping of rails.

(a) **Anchors** (b) Spikes
(c) Chairs (d) Bearing plates

510. Usually adjustment of rail is needed whenever creep exceeds.

(a) 1 mm (b) 10 mm
(b) (c) 50 mm **(d) 150 mm**

511. The bending of rails is done by.

(a) **Jim crow** (b) Beater
(c) Pickaxe (d) Sledge hammer

512. On B.G track, shallow screening should be done for LWR/CWR when Rail/temperature is below.

(a) td + 5°C **(b) td + 10°C**
(c) td + 15°C (d) td + 15°C

513. In annual programme of regular track maintenance past monsoon attention is for a period of about ……. months after the end of monsoon.

(a) 2 months (b) 3 months
(b) (c) 4 months **(d) 6 months**

514. Oiling and greasing of fish plate is done once in …… months every year.

(a) 3 months (b) 6 months
(c) 9 months **(d) 12 months**

515. Glued insulated joint of G3 (L) type is ……. Long fish plate

(a) 0.5 m (b) 0.75 m
(c) 1.0 m (d) 1.25 m

516. Size of fouling mark shall be ……

(a) 1200x200x100 mm **(b) 1500x250x125 mm**
(c) 1200x250x125 mm (d) 1200x200x150 mm

517. Works which are completed by sunset of the day of commencement are called the work of …… duration.

(a) Short (b) Long
(c) Immediate (d) None of these

518. In case of stop dead restriction caution indicator shall be provided at ……

(a) 800 m (b) 1000 m
(c) 1200 m (d) 900 m

519. Lowering of track by gang should be restricted to a maximum of

(a) 50 mm
(b) 75 mm
(c) 100 mm
(d) 200 mm

520. The phenomenon of misalignment of rails due to temperature changes is known as

(a) Hogging
(b) Creeping
(c) Bulging
(d) Buckling

521. Creep is the

(a) **Longitudinal movement of rail**
(b) Lateral movement of rail
(c) Vertical movement of rail
(d) Difference in level of two rails.

522. Lowering of track is done in

(a) **Direction of falling grad**
(b) Opposite to direction of falling grade
(c) Direction of rising grade
(d) None of these

523. Scabbing of rail is due to

(a) Falling off of patches or chunks of metal from the rail table
(b) Slipping of the drilling wheel of locomotives on the rail surface
(c) Poor maintenance of rail joints
(d) Heavy bearing pressure on a small area of contact providing heavy internal shear stress.

524. Maximum distance covered in a day by a patrolmen should not normally exceed.

(a) 2 km
(b) 5 Km
(c) 10 Km
(d) 20 Km

525. Caution indicator should be placed at least at a distance of far BG track from work spot.

(a) 800 m
(b) 1000 m
(c) 1200 m
(d) 1500 m

526. SWR is

(a) Short welded rail
(b) Small welded rail
(c) Small weld railing
(d) None of these

527. From work spot, banner flag should be placed on B.G track at

(a) 100 m
(b) 500 m
(c) 600 m
(d) 400 m

528. Long welded rails 'LWR' have welded length greater than …….on BG

(a) 125 m
(b) 200 m
(c) 250 m
(d) 500 m

529. During repair of buckled track minimum length of closure required is …..

(a) 4 m
(b) 5 m
(c) 5.5 m
(d) 6.5 m

530. Point & Crossing shall be isolated from LWR by providing …… normal rail lengths duly anchored.

(a) 2 Rails
(b) 3 Rails
(c) 4 Rails
(d) 6 Rails

531. Cold weather patrol will be introduced when rail temperature falls below.

(a) td -10°C
(b td -15°C
(c) td -25°C
(d) td -30°C

532. During hot weather patrol, Patrolmen will carry.

(a) One green and two red H.S Flags
(b Two B/F and one green H.S Flag
(c) Two red H.S Flags
(d) Two H.S tricolor lamps

533. How many rounds of machine packing with DTS are required after deep screening in LWR/CWR

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

534. LWR/CWR can not be laid on curves having radius sharper than.

(a) 200 m
(b) 340 m
(c) 440 m
(d) 500 m

535. Oiling in SEJ is must once.

(a) Daily
(b) Weekly
(c) Fortnightly
(d) Monthly

536. Minimum clean ballast cushion in LWR is

(a) 150 mm
(b) 200 mm
(c) 250 mm
(d) 300 mm

537. Minimum shoulder ballast in inside track of LWR.

(a) 300 mm **(b) 350 mm**
(c) 500 mm (d) 600 mm

538. Minimum shoulder ballast on outside of curve in LWR track

(a) 300 mm (b) 350 mm
(c) 500 mm (d) 600 mm

539. Breathing length must not fall on.

(a) **Level crossing** (b) Straight track
(c) Curve 3500m Rad (d) All above

540. Hot weather Patrolmen has a beat of.

(a) **2Km. on single line track** (b 1 Km.on single line track
(c) 2Km. on a double line track (d) 1Km. on double line track

541. The length at each end of long welded Rail which is subjected to extension or contraction on account of temperature variation is called as

(a) Anchor length (b Switch length
(c) Buffer length **(d) Breathing length**

542. The welded rail passes through yards including points & crossing is known as.

(a)SWR (b) LWR
(c) CWR (d) None of above

543. The length of LWR/CWR (BG) that expand and contract on either ends by variation in temperature is about.

(a)50 m (b) 75 m
(c) 125 m (d)2 50 m

544. During hot weather patrol, Patrolman will watch far

(a) **Sun Kinks** (b) Gauge
(c) Ceneveness (d) None of above

545. Destressing in LWR/CWR is required to avoid.

(a) Buckling (b Fracture
(c) Buckling & Fracture both (d) None of above

546. Red zone in rail thermometer indicates.

(a) Work can be done
(b Work can not be done
(c) Introduce hot weather patrolling
(d) All above

547. Temperature below green zone indicates.

(a) **Cold weather patrolling**
(b Allow work
(b) Hot weather patrolling
(d) No work permitted

548. Mate can replace one sleeper out of

(a) 10
(b 20
(c) 30
(d) 50

549. Destressing temp. td for 52 Kg rails in Zone 3 will be within temperature range.

(a) **Tm to Tm+5°C**
(b Tm+5°C to Tm +10°C
(c) Tm+5°C to Tm +20°C
(d) None of them

550. The sleeper density for LWR track with PRC sleeper for zone III & IV is

(a) 1310
(b 1540
(c) 1660
(d) None of them

551. The sleeper density for LWR track with PRC sleeper for zone I & II is

(a) **1310**
(b 1540
(c) 1660
(d) None of them

552. CWR is

(a)Complete weld rail
(b) Continuous welded rail
(c) Current welded rail
(d) None of these

553. How many number of buffer rails with 4 fish plated joints to be used between the end of two LWRs.

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

554. Gradient on which LWR can be laid should not be sleeper than

(a) 1 in 250
(b) 1 in 200
(c) 1 in 150
(d) 1 in 100

555. Cold weather patrolling will be introduced when rail temp. is less than …

(a) Td-10°C
(b) Td-20°C
(c) Td-30°C
(d) Td-40°C

556. The minimum depth of ballast cushion for SWR track is

(a) 100 mm
(b) 150 mm
(c) 200 mm
(d) 300 mm

557. The gap survey is conducted once in ……..

(a) 03 months
(b) 06 months
(c) 12 months
(d) 09 months

558. Competency certificate for LWR maintenance is issued by

(a) AEN
(b) DEN
(c) PWI
(d) CTE

559. The normal length of SWR in B.G is

(a) 2x13 m
(b) 3x13 m
(c) 5x12 m
(d) 5x13 m

560. A fish plated joint shall be avoided on the level crossing and …. M from end of level crossing in SWR track.

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

561. Maximum distance between trolley refuges on bridges with main spans less than ……...

(a) 100 m
(b) 150 m
(c) 250 m
(d) 200 m

562. LWR/CWR can not be laid on reverse curve having radius sharper than

(a) 500 m
(b) 600 m
(c) 750 m
(d) 875 m

563. Gap survey of SWR is carried out at the end of

(a) January
(b) February
(c) April
(d) June

564. SR of ------- kmph can be allowed after BCM working if DTS has been used behind tamping machine.

(a) 20 kmph
(b) 30 kmph
(c) 40 kmph
(d) 60 kmph

565. Patrolman will fix 03 detonators at--------- m from danger. .

(a) 400 m
(b) 900 m
(c) 1200m
(d) 600 m

566. Axle load of front axle of DTS is ---------- .

(a) 14 tonne
(b) 14.5 tonne
(c) 15 tonne
(d) 16 tonne

567. Axle load of rear axle of DTS is ---------- .

(a) 14 tonne
(b) 14.5 tonne
(c) 15 tonne
(d) 16 tonne

568. Maximum speed of DTS when self propelled is ---------- .

(a) 40 kmph
(b) 50 kmph
(c) 60 kmph
(d) 80 kmph

569. Maximum speed of DTS when in train formation is ------kmph .

(a) 40 kmph
(b) 50 kmph
(c) 60 kmph
(d) 80 kmph

570. Length of BCM from buffer to buffer is ---------meter .

(a) 25 meter
(b) 30 meter

571. Speed of BCM when self propelled is ---------kmph .

(a) 25 kmph
(b) 30 kmph
(c) 40 kmph
(d) 50 kmph

572. The upper screen of BCM is of --------- mm size .

(a) 36 mm
(b) 50 mm
(c) 80 mm
(d) None

573. The middle screen of BCM is of --------- mm size .

(a) 36 mm
(b) 50 mm
(c) 80 mm
(d) None

574. The lower screen of BCM is of --------- mm size .

(a) 36 mm (b) 50 mm
(c) 80 mm (d) None

575. Cutter bar can be extended by -------- mm at a time in RM – 76.

(a) 200 mm (b) 300 mm
(c) 400 mm **(d) 500mm**

576. Total excavation width in RM – 76 BCM is ---------meter.

(a) 4 meter (b) 5 meter
(c) 6 meter **(d) 7.72meter**

577. RM – 76 BCM takes --------- minutes to deep screen one 1 x12 turn out.

(a) 60 minute (b) 70 minute
(c) 80 minute **(d) 90 minute**

578. Capacity of lifting of one PQRS portal crane is ---------tonne.

(a) 5 tonne (b) 7 tonne
(c) 9 tonne (d) 11 tonne

579. Portal cranes are loaded/unloaded from BFR by -------.

(a) Hydra **(b) Turn table**
(c) Portal Crane (d) None

580. Length of beam car of TRT is -------- meter.

(a) 12 meter (b) 20 meter
(c) 22.34 meter (d) None

581. Just after relaying by TRT , train can pass at --------kmph.

(a) 10 kmph (b) 20 kmph
(c) 40 kmph (d) None

582. Sanction speed of Gr. 'A' route is --------kmph.

(a) 100 (b) 120
(c) 130 **(d) 160**

583. Grade compensation on curves on BG is --------%.
(a) .05 **(b) .04**
(c) .03 (d) .02

584. Turn in curve minimum sleeper density is --------.
(a) M +2 (b) M +4 **(c) M+7** (d) M+6

585. 1540 sleepers per kilometer indicates the spacing of sleeper --------cm.
(a) 60 **(b) 65** (c) 70 (d) None

586. 1660 sleepers per kilometer indicates the spacing of sleeper --------cm.
(a) 60 (b) 65 (c) 70 (d) None

587. Fouling mark should be placed where track centre is------mm.
(a) 4265 (b) 4725 (c) 5300 (d) None

588. Maximum gradient in station yard for new lines is ------.
(a) 1 in 1200 (b) 1 in 1000 (c) 1 in 600 (d) None

589. Width of formation for single line in construction of new line is ---------meter.

(a) 6.25 **(b) 6.85** (c) 6.95 (d) None

590. Width of formation for single line in cutting is ------meter.

(a) 6.25 (b) 6.85 (c) 6.95 (d) None

591. Width of formation for double line is ------meter.

(a) 6.25 (b) 6.85 **(c) 12.15** (d) None

592. Width of formation for double line in cutting is ------meter.

(a) 11.55 (b) 6.85 (c) 12.15 (d) None

593. In 'A' route distance of platform from centre line of track is ----- mm.

(a) 1670 to1680 (b) 1675 to 1695 (c) 1680 o 1900 (d) None

594. In 'B' route distance of plateform from centre line of track is ----- mm.

(a) 1670 to1680 (b) 1675 to 1695 (c) 1680 o 1900 **(d) 1675 to 1905**

595. Height of Platform from rail level for high level platform is------ mm.

(a) 760 to 840 (b) 455 (c) 1065 (d) None

596. In medium level Platform height of platform is -------mm

(a) 760 to 840 **(b) 455** (c) 1065 (d) None

597. In Goods siding height of platform is -------mm.

(a) 760 to 840 (b) 455 **(c) 1065** (d) None

598. Clear spacing of bridge sleepers is -------mm.

(a) 400 **(b) 450** (c) 510 (d) None

599. Clearance of Guard Rail is -------mm.

(a) 250 ± 50 (b) 300 ± 50 (c) 300 (d) None

600. Difference in height of running rail and guard rail should not exceed -----mm.

(a) 15 (b) 20 **(c) 25** (d) None

601. On LC gates width of speed breaker is --------meter.

(a) 1 **(b) 2** (c) 3 (d) None

602. On Level Crossing speed breaker is --------mm high at centre.

(a) 125mm (b) 100 mm (c)150 mm (d) None

603. On Level Crossing shape of speed breaker is --------.

(a) Circular (b) Angular (c) Rectangular (d) None

604. To paint the speed breakers shape of ----- cm x ----- cm is made.

(a) 50 x 50 **(b) 50 x 30** (c) 50 x 60 (d) None

605. ROB is recommended when TVU of LC gate is more than -----.

(a) 50,000 (b) 75,000 **(c) 1,00,000** (d) None

606. Permitted locations for LWR ---------.

(a) Stable formation (b) Rail Section 52 kg/60 kg.
(c) Sleeper density 1540 per KM **(d) All the above**

607. SEJ cannot be provided at --------.
(a) Circular curve **(b) Transition curve**
(c) Reverse curve (d) All the above

608. Land boundary post should be erected at ------- meter.

(a) 20 **(b) 50** (c) 70 (d) None

609. Name of railway is written in ------ side on land boundary post.

(a) Railway side **(b) Non Railway Side** (c) Anywhere (d) None

610. Number of pillars at land boundary post is written from ------ side

(a) Railway side (b) Non Railway Side (c) Anywhere (d) None

611. Number of pillars at land boundary post is written in------- In UP side.

(a) Odd number (b) even number (c) both (d) None

612. Number of pillars at land boundary post is written in------- In DN side.

(a) Odd number **(b) even number** (c) both (d) None

613. Land boundary pillars are painted -------mm red from top.

(a) 200 (b) 300 **(c) 600** (d) None

614. Land boundary pillars are painted in -------colour from bottom.

(a) Red **(b) White** (c) Black (d) None

615. ---------- is not a hard encroachment if prepared within Railway boundary.

(a) Concrete houses **(b) Hutments**
(c) Any construction of concrete (d) None

616. SEJ should be provided at --------meter from bridge abutment.

(a) 25 meter **(b) 36 meter** (c) 40 meter (d) None

617. On 60 kg LWR with 1540 PRC sleepers per kilometers breathing length is ….meter

(a) 60 (b) 64 **(c) 77** (d) 74

618. On 60 kg LWR with 1660 PRC sleepers per kilometers breathing length is --m

(a) 60 (b) 64 (c) 77 **(d) 74**

619. On 52 kg LWR with 1660 PRC sleepers per kilometers breathing length is --- meter
(a) 60 **(b) 64** (c) 77 (d) 74

620. On 52 kg LWR with 1540 PRC sleepers per kilometers breathing length is -meter.
(a) 66 (b) 64 (c) 77 (d) 74

621. PCS 14 (ordinary PRC 60 Kg.) sleepers are -------mm long.

(a) 2400 (b) 2700 **(c) 2750** (d) 2800

622. Bottom width of PCS 14 (ordinary PRC 60 Kg.) sleeper is -------mm.

(a) 240 **(b) 270** (c) 275 (d) 280

623. Top width of PCS 14 (ordinary PRC 60 Kg.) sleeper is -------mm.

(a) 130 (b) 170 (c) 175 (d) 180

624. 1 in 12 turn out over all length is ------- meter.

(a) 39.975 (b) 29.975 (c) 17.874 (d) 18

625. Heavy slewing or lifting by machine should be done in steps of not more than --------- mm .

(a) 50 mm (b) 60 mm
(c) 70 mm (d) None

627. Squeezing pressure for PRC sleeper is ---------kg per cm2.

(a) 135 to 140 (b) 125 to 130
(c) 145 to 150 (d) None

628. A trench of -------- cm depth from bottom of sleeper is cut for lowering cutter bar of BCM.

(a) 10 cm (b) 20 cm
(c) 30 cm (d) 40 cm

629. Only one machine is allowed to run in block section if gradient is steeper than -------.

(a) 1 in 100 (b) 1 in 200
(c) 1 in 150 (d) None

630. Competency certificate of machine operators are valid for ------- years.

(a) 1 year (b) 2 year
(c) 3 year (d) None

631. On PRC sleepers tamping will be done in -------- years or passage of ---------- GMT whichever is earlier.

(a) 1 year and 50 GMT **(b) 2 year and 100 GMT**
(c) 3 year and 100 GMT (d) None

632. Full form of CSM is --------- .

(a) Continuous Squeezing Machine . (b) Continuous Sharing Machine.
(c) Children Sharing Market. (d) None.

633. Full form of PRC is --------- .

(a) Point Rail Concrete .
(b) Preventive Route Concrete.
(c) Pre-stressed Reinforced Concrete.
(d) None.

634. Relation between degree of curvature and radius of curve is ---.

(a) 1000/R
(b) 1750 x R
(c) 1750/R
(d) None

635. Minimum cushion for working of track tamper is ----------.

(a) 100 mm
(b) 150 mm
(c) 200 mm
(d) 250 mm

636. Ramp after completion of work is --------.

(a) 1 in 1000
(b) 1 in 200
(c) 1 in 400
(d) None

637. Tamping tool should be changed if wear on tool blade is more than -------- %.

(a) 10
(b) 20
(c) 25
(d) 30

638. Tamping tools are required to be inserted --------- if lift is more than 30 mm.

(a) once
(b) twice
(c) Thrice
(d) None

639. For renewal of points & crossing --------- machine is utilized.

(a) TRT
(b) T/ 28
(c) T/38
(d) None

640. Gauge of auxilliary track is --------- meter.

(a) 3 meter
(b) 3.2 meter
(c) 3.4 meter
(d) None

641. Full form of SQRS is ----------.

(a) Straight Quarry relaying System
(b) Simplex quick relaying system
(c) Signal quick relaying system
(d) None

642. Running rail are cut at --------- meter interval for PQRS.

(a) 12 meter
(b) 12.5 meter
(c) 13 meter
(d) None

643. Ballast cleaning machine for plain track is --------.

(a) NR 80
(b) RM 80
(c) MR 80
(d) None

644. Ballast cleaning machine for points & Crossing is --------.

(a) RM 76
(b) RM 80
(c) MR 80
(d) None

645. Ballast cleaning machine for shoulder ballast cleaning is --------.
(a) FRM 80 (b) RM 80
(c) MR 80 (d) None

646. The amount of lift which is given to track while tamping to cover all undulation is called --------.
(a) common lift (b) excess lift
(c) General lift (d) None

647. The General lift should be -------- than largest dips.
(a) More (b) less
(c) equal (d) None

648. The range of keeping optical instrument for design mode working is ----------.
(a) 50 to 75 meter (b) 100 to 150 meter
(c) 200 to 250 meter (d) None

649. Vibration frequency of tamping tool is ----------Hz .
(a) 20 Hz (b) 25 Hz
(c) 35 Hz (d) None

650. Amplitude of oscillation of tamping tool is --------- mm.
(a) 5 **(b) 10**
(c) 15 (d) None

651. Main work of tamping machine is to improve --------.
(a) Alignment (b) Longitudinal level
(c) Packing of sleepers **(d) Above all**

652. Main benefits of DTS Machine is ----------.
(a) compaction (b) create resistance to lateral movement
(c) Relax speed quickly **(d) Above all**

653. For Special class gates, TVU is more than --------.
(a) 20,000 (b) 30,000
(c) 50,000 (d) 1,00,000

654. For 'A' class gates, TVU is more than --------.
(a) 20,000 **(b) 30,000**
(c) 50,000 (d) 1,00,000

655. For 'B' class gates, TVU should be between --------.

(a) 20,000 to 30,000 (b) more than 30,000
(c) more than 50,000 (d) above 1,00,000

656. Angle of skew level crossing should not be less than --------.

(a) 45 degree (b) 60 degree
(c) 70 degree (d) 80 degree

657. Height gauge should be ---------- meter away from gate post.

(a) 3 meter
(b) 5 meter
(c) 8 meter
(d) 12 meter

658. Gateman must be fit in class ----------by medical department.
(a) A
(b) A2
(c) A3
(d) B2

659. Upto the age of 45 years Gateman's medical test is done after ----------years.
(a) 1 year
(b) 2 year
(c) 4 year
(d) None

660. From 45 years to 55 years age gateman are medically tested after ----------years.
(a) 1 year
(b) 2 year
(c) 3 year
(d) None

661. After 55 years of age gateman are medically tested after ----------years.
(a) 1 year
(b) 2 year
(c) 3 year
(d) None

662. W/L Board is fixed at---------- meter from gate.
(a) 600
(b) 900
(c) 1200
(d) None

663. Size of W/L Board is ----------.
(a) 600 x 600 mm
(b) 800 x 800 mm
(c) 400 x 400 mm
(d) 1 x 1 meter

664. Speed restriction of ----------kmph is imposed if check rail is to be removed from gate.

(a) 15 kmph
(b) 30 kmph
(c) 45 kmph
(d) 60 kmph

665. Height of W/L board from rail level is ----------meter.
(a) 1 meter
(b) 2.1 meter
(c) 2 meter
(d) None

666. The post for W/L board is painted in black and white of each ---------- mm band.
(a) 200 mm
(b) 250 mm
(c) 300 mm
(d) 500 mm

667. Speed breaker is provided at ---------- mm from gate post.
(a) 08 meter
(b) 10 meter
(c) 15 meter
(d) 20 meter

668. Census for TVU is taken after ---------- years.
(a) 3 years
(b) 4 years
(c) 5 years
(d) 6 Years

669. Minimum distance of gate post from centre line of track should be ---------- .
(a) 3 meter (b) 4 meter
(c) 5 meter (d) 6 meter

670. Minimum distance of gate lodge from centre of nearest track is ---------- meter.
(a) 3 meter (b) 4 meter
(c) 5 meter **(d) 6 meter**

671. Minimum distance of gate lodge from edge of road metal should be ---------- meter.
(a) 3 meter (b) 4 meter
(c) 5 meter **(d) 6 meter**

672. Minimum number of gateman is to be provided on special class gate is ----------.
(a) 2 **(b) 3**
(c) 4 (d) Nil

673. Minimum number of gateman is to be provided on "A" class gate is ----------.
(a) 2 (b) 3
(c) 4 (d) Nil

674. Fencing upto ---------- meter is provided on both sides of gate parallel to track.
(a) 8 meter **(b) 15 meter**
(c) 20 meter (d) 30 meter

675. For special class gate road should be leveled upto ---------- meter after gate.
(a) 8 meter **(b) 15 meter**
(c) 20 meter (d) 30 meter

676. For 'A' class gate road should be leveled upto ---------- meter after gate.
(a) 8 meter (b) 15 meter
(c) 20 meter (d) 30 meter

677. Minimum length of straight road outside gate is ---------- meter for special class gate.
(a) 8 meter **(b) 15 meter**
(c) 20 meter (d) 30 meter

678. Minimum length of straight road outside gate is ---------- meter for 'A' class gate.
(a) 9 meter (b) 15 meter
(c) 20 meter (d) 30 meter

679. Minimum length of straight road outside gate is ---------- meter for 'B' class gate.
(a) 4.5 meter (b) 15 meter
(c) 20 meter (d) 30 meter

680. Frequency of overhauling at level crossing gate with PRC sleepers is ----------.
(a) 1 year **(b) 2 year**
(c) 3 year (d) 4 year

681. ---------- is not a member of inspecting team for TVU census.
(a) SSE/P.Way **(b) SSE/C&W**
(c) SSE/S&T (d) TI.

682. Ballast is opened upto ---------- mm from rail seat in inside/outside while through packing.
(a) 250 mm (b) 350 mm
(c) 450 mm (d) 500mm.

683. While through packing ballast is opened ---------- mm below bottom of sleeper .
(a) 25 mm **(b) 50 mm**
(c) 75 mm (d) 100mm.

684. Speed restriction of ----------kmph is imposed if manual deep screening is done.
(a) 20 kmph (b) 30 kmph
(c) 10 kmph (d) 40 kmph

685. Speed restriction of ----------kmph is imposed if deep screening is done by BCM without DTS.
(a) 20 kmph **(b) 30 kmph**
(c) 10 kmph (d) 40 kmph

686. Speed restriction of ----------kmph is imposed if deep deep screening is done by BCM with DTS.
(a) 20 kmph (b) 30 kmph
(c) 10 kmph **(d) 40 kmph**

687. In primary renewal rails and sleepers are changed by --------.
(a) Old P.way materials (b) Second hand P.way materials
(c) New P.way materials (d) None

688. In secondary renewal rails and sleepers are changed by --------.
(a) Old P.way materials **(b) Second hand P.way materials**
(c) New P.way materials (d) None

689. TVU is abbreviated for :-
(a) Track vulnerable unit **(b) Train vehicle Unit**
(c) Total vehicle unit (d) None to them.

690. Indication post for detonators should be provided at a distance of ……m and ……m for B.G. level crossing.
(a) 400m to 800m (b) 50m to 1200m
(c) 600m to 1200m (d) 600m to 1000m .

691. Indication post for detonators should be provided at a distance of ……m and ……m for M.G. level crossing.
(a) **400m to 800m** (b) 50m to 1200m
(c) 600m to 1200m (d) 600m to 1000m

692. At all manned level crossing, where visibly is poor, about 15 to 20 rumble strips should be provided at 15 to 20mm height and …..mm width
(a) 100mm to 200mm **(b) 200m to 300m**
(c) 250mm to 350mm (d) 300mm to 400mm

693. Periodical census of traffic for un manned level crossing should be done :

(a) Once in six years (b) Once in One year

(c) Once in five years **(d) One in 3 years.**

694. Level crossing beyond the outer most stop signals is called ….gate :

(a) Engineering Gate (b) Operating Gate

(c) Both A & B (d) None of these..

695. In an Un-manned level crossing, stop board should be provided at a distance of ……. m from the centre of the nearest Track :-

(a) 5 m (b) 7.5m

(c) 20m (d) 10m.

696. Speed breaker has to be provided on the road approaches of level crossing at the maximum feasible distance within Rly Boundary but not exceeding :

(a) 10m (b) 15m

(c) 20m (d) 25m.

697. The quality of welding by flash butt welding technique can be checked by

(a) Proper pre-straighting of rails (b) Controlling the butting time

(c) Welding recorder (d) None of them

698. Replacement of swing gates by lifting barrier at existing manned level crossings shall be carried out where TVU is more than :

(a) 30000 (b) 40000

(c) 50000 (d) 60000

699. The AEN should inspect the equipment at every manned level crossing on the Sub-division once in :

(a) 6 months (b) 3 months

(c) One month (d) One year.

700. Banner Flag at level crossing shall be provided at ……distance from the ends of Check rail :

(a)73m (b) 6m

(c) 5m d) 3m.

701. Fish Plate Joint shall be avoided in check rail and on the running rails within ……. From the end of level crossing :

(a) 12m (b) 9m

(c) 6m **(d) 3m.**

702. Minimum length of Check rail for square level crossing shall be ……M more than the width of gate :

(a) 1m **(b) 2m**

(c) 3m (d) 5m.

703. The Minimum and maximum clearance of Check Rails at level crossing shall be ……. And …….mm

(a) 44, 48 **(b) 51, 57**
(c) 51, 55 (d) None of these.

704. There should not be any combination joint on a level crossing proper and its approaches up to ….. metres. :

(a) 15m (b)30m
(c) 40m **(d) 50m**.

705. The height gauges for a level crossing should be located at least ……. Metres from the gate post

(a) 4m (b) 6m
(c) 8m (d) 10m.

706. The level crossings having sleepers other than concrete sleepers must be overhauled at lease :

(a)6 months **(b) Once a year**
(c) Once in 3 years (d) Once in 5 years.

707. No. of detonators provided at level crossing :

(a)10 (b) 12
(c) 15 (d) 20.

708. In 1 in 12 turn out, length of check rail is ------- meter.

(a) 5.234 (b) 4.456 **(c) 4.331** (d) 4.335

709. 1 in 12 CMS crossing is ------- meter long.

(a) 5.234 **(b) 4.350** (c) 4.331 (d) 4.335

710. In 1 in 12 crossing, crossing angle is --------.

(a) 4^0 45' 49" (b) 4^0 42' 49" (c) 4^0 40' 49" (d) None

711. In 1 in 12 Fan Shape Sleepers one to ------- sleepers are perpendicular on main line.

(a) 10 **(b) 20** (c) 30 (d) 40

712. In 1 in 12 Fan Shape Sleepers no------ to ------ are perpendicular on bisector of crossing angle.

(a) 70 to 80 **(b) 65 to 83** (c) 70 to 83 (d) None

713. In Sand hump ------meter is kept in level from fouling mark.

(a) 20 (b) 25 **(c) 30** (d) None

714. In Sand hump after 30 meters gradient of ----- in ---- is made.

(a) 1 in 50 (b) 1 in 30 (c) 1 in 40 (d) None

715. Toe load on PRC is measured after -------- years or 200 GMT whichever is earlier.
(a) 2 (b) 3 **(c) 4** (d) 5

716. TFR is to be proposed if 20 % or more sample size records less than -------- of toe load.

(a) 200 kg (b) 300 kg **(c) 400 kg** (d) 500 k

717. During monsoon Patrolling, ADEN should inspect the work of patrolman at night once in a .

(a)1 month (b) Fortnight (c) 2 month (d) Week

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(a)1 month (b) Fortnight (c) 2 month (d) Week

718. When check rails of level crossing cannot be refined and train have to be passed speed restriction should be imposed ?

(a)15 Kmph (**b) 30 Kmph** (c) 45 Kmph (d) 60 Kmph

719. In open line organization, ADEN is responsible for ……. ballast.

(a) 100% check on quality and quantity
(b) 50% check on quality and quantity
(c) 75% check on quality and quantity
(d) 20% check on quality and quantity

720. Banner flag at level crossing shall be provided at …….. distance from the ends of check rail.
(a) 7 m (b) 6 m **(c) 5 m** (d) 3 m

721. Stop boards on either side of road approaches of all unmanned level crossing shall be provided at …… from centre line of nearest track.
(a) 4 m **(b) 5 m** (c) 6 m (d) 10 m

722. Hot weather patrolling is introduced when temperature exceeds.
(a) td+25°C **(b) td+15°C** (c) td+20°C (d) td+30°C

723. Which of the following are tamping machines ?

(a) Unomatic (b) Tamping Express
(c) CSM **(d) All the above**

724. Which of the following is a shoulder ballast cleaning machine ?
(a) RM - 76 (b) RM-80
(c) KSC - 600 (d) None of these