

1. Rail drilling machine is used to drill holes in the \_\_\_\_\_ of rails. [ d ]  
 a) Rail flange    b) Rail head    c) Rail end    d) Rail web
2. Normally time taken for drilling of one hole in the rail is \_\_\_\_\_ minutes. [ b ]  
 a) 1-2    b) 3-4    c) 5-6    d) 7-8
3. Fixing time of rail drilling machine is \_\_\_\_\_ minutes. [ a ]  
 a) 2    b) 4    c) 6    d) 8
4. Fuel tank capacity of Rail drilling machine is \_\_\_\_\_ litres approximately. [ b ]  
 a) 1    b) 2    c) 5    d) 10
5. Fuel consumption for drilling ten holes in 60kg/90outs rail is \_\_\_\_\_ litres. [ a ]  
 a) 1    b) 1.5    c) 2    d) 2.5
6. No. of holes that can be drilled by a rail drilling machine in a day is \_\_\_\_\_ approximately. [ c ]  
 a) 30    b) 45    c) 60    d) 90
7. Normal hole diameter in rail ends is \_\_\_\_\_ mm. [ c ]  
 a) 20    b) 25    c) 32    d) none of the above
8. The dia of holes in fish plate is \_\_\_\_\_ mm. [ b ]  
 a) 25    b) 27    c) 30    d) 32
9. The dia of normal fish bolt is \_\_\_\_\_ mm. [ b ]  
 a) 20    b) 25    c) 27    d) 30
10. Drill bit size (diameter) used for normal rail joint hole is \_\_\_\_\_. [ d ]  
 a) 20mm    b) 25mm    c) 26.5mm    d) 31.75mm
11. Drill bit size (diameter) used to get gapless joint at CMS Crossing is \_\_\_\_\_. [ b ]  
 a) 20mm    b) 25mm    c) 26.5mm    d) 31.75mm
12. Gap to be provided at combination joint is \_\_\_\_\_ mm. [ d ]  
 a) 2    b) 4    c) 6    d) zero
13. What is the drill spindle rotation in terms of RPM \_\_\_\_\_. [ a ]

- a) 60-90    b) 90-120    c) 120-150    d) none of the above

[ a ]

14. Fuel used to start the drilling machine is \_\_\_\_\_.

- a) Petrol    b) diesel    c) kerosene    d) engine oil

[ b ]

15. Fuel used to run the drilling machine is \_\_\_\_\_.

- a) Petrol,    b) petrol/kerosene    c) diesel    d) hydraulic oil

[ c ]

16. Normal fish plate length is \_\_\_\_\_ mm.

- a) 460    b) 500    c) 610    d) 1000

[ b ]

17. One metre long fish plates have \_\_\_\_\_ no of holes.

- a) 4    b) 6    c) 5    d) 8

[ d ]

18. Fish plate which is used to fixed at AT weld joint is \_\_\_\_\_

- a) Normal fish plate    b) one metre long fish plate  
c) Combination fishplate    d) Joggled fish plate

[ c ]

19. Fish plate which is used to join two different rail section is \_\_\_\_\_

- a) Normal fish plate    b) one metre long fish plate  
c) combination fishplate    d) Joggled fish plate

[ b ]

20. In case of a rail breakage which one is best to use \_\_\_\_\_

- a) Normal fish plate    b) one metre long fish plate  
c) Combination fishplate    d) Joggled fish plate

21. Standard gap of \_\_\_\_\_ mm is made in the design of fish plates, bolts and holes in the web of the rails, when the centres of fish plates, rail holes and bolts are concentric. [ b ]

- a) 4    b) 6    c) 8    d) 10

22. Maximum gap available due to play in dia. of bolt and holes in the rail and fishplates is \_\_\_\_\_ mm. [ c ]

- a) 6    b) 10    c) 15    d) 20

23. Minimum requirement of manpower for handling rail drilling machine is \_\_\_\_\_ [ a ]

- a) 2-1 skilled, 1 unskilled)    b) 2- 2 skilled  
c) 3 -2skilled, 1unskilled    d) 3- 1skilled, 2unskilled

24. A standard drill bit shall last for \_\_\_\_\_ no of holes in 60kg/90UTS rail. [ c ]

- a) 50    b) 75    c) 100    d) 150



25. Overall weight of a rail drilling machine is \_\_\_\_\_ kg. Approximately [ c ]  
a) 35 kg    b) 50 kg    c) 65 kg    d) 85kg
26. HP of prime mover/engine of rail drilling machine is \_\_\_\_\_ [ c ]  
a) 1 HP    b) 2 HP    c) 3HP    d) 5 HP
27. Drill bit for drilling of rail holes shall be \_\_\_\_\_ standard. [ a ]  
a) IS: 5103-1969    b) IS: 5103-1989    c) IS: 5108-1969    d) IS: 5303-1996
28. Following care should be taken while handling drilling machine. [ d ]  
a) Keep vertical during shifting    b) shall not be moved on uneven surface  
c) Evenly placed during drilling operation    d) all the above
29. Gap provided in TOC and HOC at CMS crossing is \_\_\_\_\_. [ d ]  
a) 3mm    b) 5 mm    c) 6mm    d) zero
30. To ensure gapless joint hole to be drilled with \_\_\_\_\_ mm dia. drill bit. [ c ]  
a) 20mm    b) 25mm    c) 26.5 mm    d) 28mm
31. To ensure gapless joint centre of 1<sup>st</sup> and 2<sup>nd</sup> hole from rail end should be kept as \_\_\_\_\_ and \_\_\_\_\_. [ c ]  
a) 80 mm, 246 mm    b) 81mm, 247mm    c) 83mm, 249mm    d) 85mm, 251mm
32. Distance between holes centres (pitch) in rails should be \_\_\_\_\_ mm. [ c ]  
a) 160 mm    b) 163 mm    c) 166mm    d) 83mm
33. Machine joint is \_\_\_\_\_. [ c ]  
a) Drilled with machine    b) joint in machine    c) gapless joint    d) none of the above
34. Purpose of providing gapless joint is \_\_\_\_\_. [ a ]  
a) To prevent battering of rail ends    b) To provide track circuiting  
c) To ensure bolts tight    d) none of the above
35. Chamfering of bolt holes \_\_\_\_\_ the periphery of holes. [ a ]  
a) Work hardens    b) work softens    c) make smooth    d) make perfect round

36. By chamfering of bolt holes it delays formation of \_\_\_\_\_ [ d ]  
a) Transverse cracks b) longitudinal cracks c) horizontal cracks d) star cracks
37. Chamfering of bolt holes should be done with \_\_\_\_\_ chamfering kit. [ c ]  
a) Good b) suitable c) approved d) any
38. The following holes drilled in rail shall be chamfered. [ d ]  
a) rail joint holes b) S&T bond holes c) Electrical bond holes d) all the above
39. Torque wrench is pre set to a torque of \_\_\_\_\_ in case of 25 mm dia. Bolt [ b ]  
a) 44 kg-m b) 52 kg-m c) 58 kg-m d) 72 kg-m
40. While tightening the wrench \_\_\_\_\_ indicates pre-set torque is achieved. [ b ]  
a) Maximum tightening b) a click sound c) reading on wrench d) bit coming out
41. Length of torque wrench is \_\_\_\_\_. [ c ]  
a) 60 cm b) 1.00 m c) 1.25m d) 1.50m
42. During tightening a bolt the operator shall \_\_\_\_\_ over the wrench. [ d ]  
a) Sit b) climb c) lean d) not lean
43. The torque wrench shall periodically \_\_\_\_\_ as per the instructions of manufacturer. [ d ]  
a) Painted b) oiled c) greased d) calibrated
44. The torque wrench, when not in use, shall be kept set at its \_\_\_\_\_ setting range [ b ]  
a) Maximum b) minimum c) average d) standard
45. In chamfering, the bolt shall be \_\_\_\_\_ before every use. [ b ]  
a) Checked b) lubricated c) replaced d) rethread
46. Best equipment to cut the rail is \_\_\_\_\_. [ a ]  
a) Abrasive rail cutter b) rail cutting machine hacksaw type  
c) gas cutting equipment d) heavy hack saw frame
47. Best suited for quick cutting of wear resistant and higher UTS rails is \_\_\_\_\_. [ c ]  
a) Hand frame b) hack saw cutting machine c) abrasive rail cutter d) all the above



48. Prime mover of abrasive rail cutter is \_\_\_\_\_ [a]  
a) Petrol engine b) diesel engine c) kerosene engine d) air petrol engine
49. HP of abrasive rail cutter engine is \_\_\_\_\_ [c]  
a) 5 HP 5000 RPM b) 6HP 6000 RPM c) 7 HP 7000 RPM d) 8HP 8000 RPM
50. Fuel tank capacity of abrasive rail cutter is \_\_\_\_\_ [a]  
a) 1 litre b) 2 litre c) 3 litre d) 4 litre
51. One litre petrol shall be sufficient for at least \_\_\_\_\_ no of cuts for 52'kg /90 uts rails [b]  
a) 3 b) 5 c) 6 d) 7
52. Minimum No. of cuts per disc on 52kg /90 uts rails is \_\_\_\_\_ [c]  
a) 3 b) 5 c) 7 d) 9
53. Overall weight of abrasive disc cutter is \_\_\_\_\_ [b]  
a) Max.25 kg b) Max. 35 kg c) max 50 kg d) max 70 kg
54. Recommended cutting time with disc cutter, for 60 kg/90uts rail is \_\_\_\_\_ minutes. [c]  
a) 2 min b) 3 min c) 4 min d) 5 min
55. Recommended cutting time with disc cutter, for 52 kg/90uts rail is \_\_\_\_\_ minutes. [b]  
a) 2 min b) 3 min c) 4 min d) 5 min
56. Recommended cutting time with disc cutter, for 52 kg/72uts rail is \_\_\_\_\_ minutes. [a]  
a) 2 min b) 3 min c) 4 min d) 5 min
57. Recommended cutting time with disc cutter, for 60 kg/110uts rail is \_\_\_\_\_ minutes. [d]  
a) 2 min b) 3 min c) 4 min d) 5 min
58. The operator shall wear \_\_\_\_\_ before start the abrasive disc cutter machine. [d]  
a) safety clothing b) shoes c) goggles d) all the above
59. In abrasive cutting machine circular cutting disc is made of \_\_\_\_\_ [d]  
a) Mild steel b) high strength spl steel  
c) Abrasive steel d) abrasive sand and bonding material

60. Diameter of cutting disc is \_\_\_\_\_ [ a ]  
a) 400 +5-3mm    b) 400 +10=5 mm    c) 350 +/-5 mm    d) 300 +/-3mm
61. Thickness of cutting disc is \_\_\_\_\_ [ b ]  
a) 3.0+/-0.25mm    b) 4.0 +/-0.25mm    c) 5.0 +/-0.25mm    d) 6.0 +/-0.25mm
62. Minimum No. of cuts per disc on 60kg /90 uts rails is \_\_\_\_\_ [ c ]  
a) 3    b) 5    c) 6    d) 7
63. Discard diameter of a abrasive disc is \_\_\_\_\_ [ c ]  
a) 200mm    b) 240 mm    c) 260 mm    d) 280 mm
64. Operating speed of the disc shall be \_\_\_\_\_ [ a ]  
a) 100 m/sec    b) 200m /sec    c) 500m /sec    d) 1000m /sec
65. For each cut maximum time taken by Rail cutting machine saw type is \_\_\_\_\_ [ c ]  
a) 10 min    b) 20 min    c) 30 min    d) 60 min
66. Fuel consumption for cutting by Rail cutting machine saw type is \_\_\_\_\_ [ b ]  
a) min 1 cut / litre    b) min 2 cuts / litre    c) min 1 cut / 2 litres    d) none
67. Prime mover (engine) of rail cutting machine saw type is \_\_\_\_\_ [ a ]  
a) Petrol start, petrol/kerosene run    b) kerosene start, kerosene run  
c) self start, k.oil run    d) none
68. Capacity and rpm of the engine of rail cutting machine saw type is \_\_\_\_\_ [ a ]  
a) 2-3 HP, 3000-4000 rpm.    b) 4-5 HP, 3000-4000 rpm.  
c) 2-3 HP, 1000-2000 rpm    d) none of the above
69. Rail tensor is used for \_\_\_\_\_ [ c ]  
a) Distressing LWR,    b) maintaining gap at AT welding rail joint  
c) Both a & b    d) none
70. Diameter of drill bit for TRD bond hole is \_\_\_\_\_ [ b ]  
a) 26.5mm    b) 17.5 mm    c) 22 mm    d) 25 mm



71. Diameter of holes in stock rail for slide chairs is \_\_\_\_\_ [ c ]  
a) 32 mm b) 30mm c) 28 mm d) 26 mm
72. Diameter of holes in tongue rails for fixing stretcher bar is \_\_\_\_\_ [ c ]  
a) 18 mm b) 20 mm c) 22mm d) 25mm
73. Diameter of holes in adjoining rails of CMS crossing is \_\_\_\_\_ [ b ]  
a) 25 mm b) 26.5 mm c) 28 mm d) 32 mm
74. Fuel tank capacity of abrasive rail cutter shall be at least [ a ]  
a) 1 Litre b) 1.5 Litre c) 2 Litre d) 0.5 Litre
75. Maximum overall weight of abrasive rail cutter shall be [ d ]  
a) 30 Kgs b) 35 Kgs c) 25 Kgs d) 35 Kgs
76. While cutting rails with abrasive rail cutting wheel the vertical tolerance for squareness on face of rail heads of cut shall not be more than [ b ]  
a)  $\pm 0.5$  mm b)  $\pm 1.0$  mm c)  $\pm 1.5$  mm d)  $\pm 1.75$  mm
77. While cutting rails with abrasive rail cutting wheel the lateral tolerance for squareness on face of rail heads of cut shall not be more than [ b ]  
a)  $\pm 0.5$  mm b)  $\pm 1.0$  mm c)  $\pm 1.5$  mm d)  $\pm 1.75$  mm
78. \_\_\_\_\_ is used for trimming of extra weld metal from rail top and sides at AT welding rail joint after the welding process [ c ]  
a) Hammer b) hack saw blade  
c) Hydraulic weld trimmer d) Rail profile grinder
79. \_\_\_\_\_ is used for grinding of AT welded joints after trimming operation is complete [ d ]  
a) Hammer b) Chisel c) Hydraulic weld trimmer d) Rail profile grinder
80. For adjusting gaps in jointed track without damaging rail ends \_\_\_\_\_ small track machine is used [ c ]  
a) Abrasive rail cutter b) Hydraulic rail tensor  
c) Rail creep adjuster d) Hydraulic rail bender
81. For straightening the dipped fish plated joint and for de hogging the joint \_\_\_\_\_ small track machine is used [ d ]  
a) Rail creep adjuster b) Hydraulic rail tensor  
c) Hydraulic rail bender d) Hydraulic rail joint straightener

82. For bending and de kinking of all types of flat bottom rail in horizontal plane \_\_\_\_\_ small track machine is used [ c ]  
a) Rail creep adjuster b) Hydraulic rail tensor  
c) Hydraulic rail bender d) Hydraulic rail joint straightener
83. Machine used for rail de stressing in LWR track and for maintaining specified gap at rail joints for AT welding [ b ]  
a) Rail creep adjuster b) Hydraulic rail tensor  
c) Hydraulic rail bender d) Hydraulic rail joint straightener
84. ADEN will check small track machines once in \_\_\_\_\_ months [ c ]  
a) 03 b) 04 c) 06 d) 12
85. SSE/P.Way in charge will inspect small track machines once in \_\_\_\_\_ months [ a ]  
a) 03 b) 04 c) 06 d) 12
86. \_\_\_\_\_ shall ensure to arrange for the repairs and maintenance of small track machines available with him. [ c ]  
a) ADEN b) JE/P.Way c) SSE/P.Way in charge d) All the above
87. Fuel tank capacity of abrasive rail cutter shall be at least [ a ]  
a) 1 Litre b) 1.5 Litre c) 2 Litre d) 0.5 Litre
88. Maximum overall weight of abrasive rail cutter shall be [ d ]  
a) 30 Kgs b) 35 Kgs c) 25 Kgs d) 35 Kgs
89. RDSO drawing no. of ERC Mk-III is \_\_\_\_\_ [ a ]  
a) RT-3701, b) RT- 3703 c) RT-3711 d) RT-5919
90. RDSO drawing no. of ERC Mk-V is \_\_\_\_\_ [ d ]  
a) RT-3701, b) RT- 3703 c) RT-3711 d) RT-5919
91. 6mm GRSP for 52 kg rail and 52 kg sleeper is \_\_\_\_\_ [ b ]  
a) RT-3701, b) RT- 3703 c) RT-3711 d) RT-5919
92. 6mm GRSP for 52/60 kg rail and 60 kg sleeper is \_\_\_\_\_ [ c ]  
a) RT-3701, b) RT- 3703 c) RT-3711 d) RT-5919
93. PSC sleeper for 60 kg rail is \_\_\_\_\_ [ b ]  
a) T-2495 b) T-2496 c) T-8527 d) none of the above



94. PSC sleeper for 60/136RE kg rail designed for 25 t axle load is \_\_\_\_\_ [ c ]  
a) T-2495 b) T-2496 c) T-8527 d) none of the above
95. Metal liner for 52 kg rail on 52 kg psc sleeper is \_\_\_\_\_ [ a ]  
a) RT-3738 b) RT-3740 c) RT-3702 d) RT-3706
96. GFN liner for 52 kg rail on 52 kg psc sleeper is \_\_\_\_\_ [ c ]  
a) RT-3738 b) RT-3740 , c) RT-3702 d) RT-3706
97. Metal liner for 60 kg rail on 60 kg psc sleeper is \_\_\_\_\_ [ b ]  
a) RT-3738 b) RT-3740 , c) RT-3702 d) RT-3706
98. GFN liner for 60 kg rail on 60 kg psc sleeper is \_\_\_\_\_ [ d ]  
a) RT-3738 b) RT-3740 , c) RT-3702 d) RT-3706
99. Metal liners for 52 kg rail on 60 kg psc sleeper are \_\_\_\_\_ [ a ]  
a) RT-3741(GS), RT-3742(NGS) b) RT-3707(GS), RT-3708(NGS) c) RT-3740 d) none
100. GFN liners for 52 kg rail on 60 kg psc sleeper are \_\_\_\_\_ [ b ]  
a) RT-3741(GS), RT-3742(NGS) b) RT-3707(GS), RT-3708(NGS) c) RT-3740 d) none
101. GFN full form \_\_\_\_\_ [ c ]  
a) Gauge face new b) gauge face number c) Glass filled nylon d) Gauge face nylon
102. Gap to be provided at SEJ at time of laying or distressing is \_\_\_\_\_ [ b ]  
a) 20 mm b) 40mm c) 60 mm d) 80 mm
103. Improved SEJ have \_\_\_\_\_ no. of SEJ sleepers. [ c ]  
a) 2 b) 4 c) 5 d) 6
104. Conventional SEJ have \_\_\_\_\_ no. of SEJ sleepers. [ d ]  
a) 2 b) 4 c) 5 d) 6
105. Oiling and greasing of SEJ should be done by keyman once in \_\_\_\_\_ [ b ]  
a) week b) 15 days c) 3 weeks d) month
106. 1 in 12 FSL will have \_\_\_\_\_ no of sleepers [ d ]  
a) 51 b) 54 c) 72 d) 83

107. 1 in 8.5 FSL will have \_\_\_\_\_ no of sleepers [b]  
a) 51      b) 54      c) 72      d) 83
108. In one set of 1 in 12 FSL total sleepers including approach and exit are \_\_\_\_\_ [d]  
a) 54      b) 67      c) 83      d) 96
109. In one set of 1 in 8.5 FSL total sleepers including approach and exit are \_\_\_\_\_ [b]  
a) 54      b) 67      c) 83      d) 96
110. SRJ full form \_\_\_\_\_ [d]  
a) Standard joint    b) Straight rail joint    c) Stock rail junction    d) Stock rail joint
111. Combination fish plate can be fixed at \_\_\_\_\_ [d]  
a) SRJ      B) HOC      c) 6.50 m from SRJ      d) one rail from SRJ
112. Nominal gauge in PSC sleeper is \_\_\_\_\_ [a]  
a) 1673 mm      b) 1676 mm      c) 1676+/- 3mm      d) none
113. Minimum check rail clearance in PSC sleeper FSL \_\_\_\_\_ [a]  
a) 41 mm      b) 44 mm      c) 45 mm      d) 48mm
114. Maximum check rail clearance in PSC sleeper FSL \_\_\_\_\_ [c]  
a) 41 mm      b) 44 mm      c) 45 mm      d) 48mm
115. Minimum check rail clearance in non psc sleeper turnout is \_\_\_\_\_ [b]  
a) 41 mm      b) 44 mm      c) 45 mm      d) 48mm
116. Maximum check rail clearance in non psc sleeper turnout is \_\_\_\_\_ [d]  
a) 41 mm      b) 44 mm      c) 45 mm      d) 48mm
117. Minimum check rail clearance in LC is \_\_\_\_\_ [c]  
a) 44mm      b) 48mm      c) 51mm      d) 57mm
118. Maximum check rail clearance in LC is \_\_\_\_\_ [d]  
a) 44mm      b) 48mm      c) 51mm      d) 57mm
119. Throw of switch (opening) in OR switches, FSL is \_\_\_\_\_ [c]  
a) 95 mm      b) 115mm      c) 115+/-3mm      d) none



120. Throw of switch (opening) in thick web switches, FSL is \_\_\_\_\_ [ d ]  
a) 160 mm    b) 115mm    c) 115+/-3mm    d) 160+/-3mm
121. Heel divergence of 1in 12 is \_\_\_\_\_ [ a ]  
a) 175mm    b) 182.5mm    c) 185mm    d) 178mm
122. Heel divergence of 1in 8.5 is \_\_\_\_\_ [ b ]  
a) 175mm    b) 182.5mm    c) 185mm    d) 178mm
123. PSC sleepers marked by paint with "FTC" indicate [ c ]  
a) Fit for track in curve    b) Fit for transition curve  
c) Fit for track circuit    d) All the above
124. On PSC track fish plate joint should preferably be provided with \_\_\_\_ fish plates [ b ]  
a) 60 cm long    b) 1 M long    c) Both a & b    d) Joggled
125. Colour of RT-3706 GFN liner for 60/60 kg is [ d ]  
a) Yellow    b) Green    c) Pink    d) White
126. Colour of RT-3702 GFN liner for 52/52kg is [ c ]  
a) Yellow    b) Green    c) Pink    d) White
127. Colour of RT-3707 combination GFN liner is [ a ]  
a) Yellow    b) Green    c) Pink    d) White
128. Colour of RT-3708 combination GFN liner is [ b ]  
a) Light Yellow    b) Light Green    c) Light Pink    d) White
129. Colour of RT-3741 combination metal liner is [ a ]  
a) Yellow    b) Green    c) Pink    d) White
130. Colour of RT-3742 combination metal liner is [ b ]  
a) Yellow    b) Green    c) Pink    d) White
131. Frequency of ERC greasing in corrosion prone areas is [ a ]  
a) Once in a year    b) Once in six months  
c) Once in 1 ½ years    d) Once in 2 years
132. Frequency of ERC greasing in other than corrosion prone areas is [ d ]  
a) Once in a year    b) Once in six months  
c) Once in 1 ½ years    d) Once in 2 years

133. Frequency of lubrication of plate screws in points and crossings in corrosion prone areas is [ b ]

- a) Once in a year                      b) Once in six months  
c) Once in 1 ½ years                d) Once in 2 years

[ b ]

134. Frequency of lubrication of plate screws in points and crossings in other than corrosion prone areas is

- a) Once in a year  
b) Once in six months  
c) Once in 1 ½ years  
d) Once in 2 years

[a]

135. Frequency of lubrication of SEJ is once in

- a) Week                      b) 10 days                      c) 15 days                      d) Month

[c]

136. Frequency of greasing of gauge face of rails in points and crossings is once in

- a) Week                      b) 15 days                      c) 21 days                      d) Month

[ b ]

137. Adequate distance of \_\_\_\_\_ in the direction of approaching train should be visible while working on bridges without caution order and with lookout man is

- a) 0.6KM      b) 0.8 KM      c) 1 KM      d) 1.2 KM

[d]

138. Lubrication of rail joints is done to

- a) Facilitate expansion of rails      b) Reduce wear on fishing planes of rail  
c) Reduce wear on fishing planes of fish plates      d) All the above

[d]

139. Lubrication of rail joints is carried out

- a) Once in six months in the month of October and February
- b) Once in a year between October and February
- c) Once in two year between October and February
- d) None of the above

[ b ]

140. Lubrication of rail joints on important girder bridges and their approaches should be done \_\_\_\_\_

- a) Twice in a year  
b) Once in a year  
c) Once in 4 months  
d) Once in four months

[a]

141. Temporary rail closure with SR 30kmph in track should not be less than \_\_\_\_\_

- a) 11 m                      b) 6.5 m                      c) 5.5 m                      d) 4 m

[d]

142. Permanent rail closure in running lines other than LWR track on routes above 100 kmph should not be less than \_\_\_\_\_ [a]

- a) 11 m                      b) 6.5 m                      c) 5.5 m                      d) 4 m

[a]



143. Permanent rail closure in running lines other than LWR track on routes less than 100 kmph should not be less than \_\_\_\_\_ [ c ]  
 a) 11 m                      b) 6.5 m                      c) 5.5 m                      d) 4 m
144. Distance pieces to platform lines are provided at an interval of \_\_\_\_\_ [ a ]  
 a) 30 m                      b) 25 m                      c) 35 m                      d) 50 m
145. Fouling marks should be fixed at a point at which spacing between tracks is not less than \_\_\_\_\_ for existing yards [ b ]  
 a) 4255 mm                      b) 4265 mm                      c) 4275 mm                      d) 4285 mm
146. Record of work in artisans diary should be submitted to office of SSE/P.Way in charge \_\_\_\_\_ [ c ]  
 a) At the every week                      b) Once in 15 days  
 c) At the end of every month                      d) On every day
147. The \_\_\_\_\_ shall ensure that all tools are deposited in the tool box after working hours and kept locked. [ c ]  
 a) Track maintainer    b) Key man                      c) Gang mate                      d) JE/P.Way
148. \_\_\_\_\_ should not leave any tool unprotected during the course of working or during mid-day-break. [ a ]  
 a) Track maintainer    b) Key man                      c) Gang mate                      d) JE/P.Way
149. \_\_\_\_\_ tapes should be avoided in track circuited areas [ b ]  
 a) Linen                      b) Steel                      c) Cloth                      d) Plastic
150. No work shall be done within a distance of \_\_\_\_\_ metres from the live wire in electrified section without 'permit-to-work'/OHE block. [ c ]  
 a) 1                      b) 1.5                      c) 2                      d) 2.5
151. No part of the tree shall be nearer than \_\_\_\_\_ meters from the nearest live conductor. [ d ]  
 a) 2.5                      b) 3                      c) 3.5                      d) 4
152. Permanent way staffs are advised to keep clear of the tracks and avoid contact with the rails when an electrically hauled train is within \_\_\_\_\_ [ c ]  
 a) 150 m                      b) 200 m                      c) 250 m                      d) 300 m.
153. When unloading rails along tracks, care shall be taken to ensure that rails do not touch each other to form a continuous metallic mass of length greater than \_\_\_\_\_ metres. [ a ]  
 a) 300                      b) 200                      c) 250                      d) 500

154. When joggled fish plates are removed for deployment of track machines, a SR \_\_\_\_\_ shall be imposed till such time the joggled fish plates are re-fixed. [ b ]  
a) 30 kmph      b) 50kmph      c) 45 kmph      d) 20 kmph
155. The shortest distance between the gauge faces of rails of a track is called [ a ]  
a) Track gauge    b) Cross level      c) Versine    d) Unevenness
156. The level difference between two rails, on a sleeper, of a track is called [ b ]  
a) Track gauge    b) Cross level      c) Versine    d) Unevenness
157. The total traffic carried on a line, is expressed as [ c ]  
a) load      b) CC      c) GMT      d) No. of trains
158. GMT full form is \_\_\_\_\_ [ c ]  
a) Gross metric tonnes    b) gross moving traffic    c) gross million tonnes    d) none
159. Height of 52 kg IRS rail is \_\_\_\_\_ mm. [ b ]  
a) 136      b) 156      c) 150      d) 172
160. Height of 60 kg UIC rail is \_\_\_\_\_ mm. [ d ]  
a) 136      b) 156      c) 150      d) 172
161. Bottom flange width of 52 kg IRS rail is \_\_\_\_\_ mm. [ a ]  
a) 136      b) 156      c) 150      d) 172
162. Bottom flange width of 60 kg UIC rail is \_\_\_\_\_ mm. [ c ]  
a) 136      b) 156      c) 150      d) 172
163. Weight of one metre length of 52 kg IRS rail is \_\_\_\_\_ kg/m. [ b ]  
a) 51.34      b) 51.89      c) 51.98      d) 52
164. Weight of one metre length of 60 kg UIC rail is \_\_\_\_\_ kg/m. [ a ]  
a) 60.34      b) 60.20      c) 59.34      d) 60
165. Group A route is classified with speeds up to \_\_\_\_\_ [ d ]  
a) 110 kmph      b) 120 kmph    c) 130 kmph      d) 160 kmph
166. Group B route is classified with speeds up to \_\_\_\_\_ [ c ]  
a) 110 kmph      b) 120 kmph    c) 130 kmph      d) 160 kmph



167. Group D spl routes is classified with speeds up to \_\_\_\_\_ [ b ]  
 a) 110 kmph and annual traffic density is 30 GMT or more  
 b) 110 kmph and annual traffic density is 20 GMT or more  
 c) 110 kmph and annual traffic density is less than 30 GMT  
 d) 110 kmph and annual traffic density is less than 20 GMT
168. Group D route is classified with speeds up to \_\_\_\_\_ [ d ]  
 a) 110 kmph and annual traffic density is 30 GMT or more  
 b) 110 kmph and annual traffic density is 20 GMT or more  
 c) 110 kmph and annual traffic density is less than 30 GMT  
 d) 110 kmph and annual traffic density is less than 20 GMT
169. Group E route is classified with speeds up to \_\_\_\_\_ [ a ]  
 a) 100 kmph      b) 110 kmph      c) 120 kmph      d) 50 kmph
170. Suburban sections of Mumbai, Delhi, Chennai and Kolkata are classified as \_\_\_\_\_ routes [ c ]  
 a) Group A      b) Group B      c) Group C      d) Group D
171. Full form of ERC [ b ]  
 a) Elastic rail clamp      b) Elastic rail clip  
 c) Elastic roller clip      d) Elastic roller clamp
172. Full form of GRSP [ c ]  
 a) Grooved rubber sleeper pad      b) Grooved rubber sole pad  
 c) Grooved rubber sole plate      d) Grooved rubber sleeper plate
173. All the new AT welded joints shall be ultrasonically tested as early as possible in any case not later than \_\_\_\_\_ [ b ]  
 a) 15 days      b) 30 days      c) 45 days      d) 60 days
174. Joggled fishplate with clamps or two far end bolts on good AT welds shall be provided on curves of \_\_\_\_\_ [ d ]  
 a)  $2^{\circ}$       b)  $2^{\circ}$  or sharper      c)  $3^{\circ}$       d)  $3^{\circ}$  or sharper
175. Joggled fishplates with far end bolts shall be provided on AT welds which have undertaken traffic equal to or more than \_\_\_\_\_ of stipulated fatigue life (GMT) of the rail. [ c ]  
 a) 40%      b) 45 %      c) 50%      d) 70%
176. Joggled fishplate with clamps or two far end bolts on good AT welds shall be provided on banks having height \_\_\_\_\_ or more. [ b ]  
 a) 4 m      b) 5 m      c) 4.5 m      d) 5.5 m

177. Joggled fish plate with clamps or two far end bolts on good AT welds shall be provided on bridges having length of water way as 100 m or more and on approaches up to \_\_\_\_\_ length [ b ]  
 a) 200 Mts                      b) 100 Mts                      c) 150 Mts                      d) 250 Mts
178. A Thermit welding done in-situ shall be joggled fish plated with two clamps and supported on wooden blocks of length \_\_\_\_\_ until tested as good by USFD. [ c ]  
 a) 300 x 300 mm              b) 250 x 300 mm              c) 300 x 450 mm              d) 350 x 400 mm
179. Maximum weight of rail profile grinder including generator is [ a ]  
 a) 80 Kgs              b) 75 Kgs                      c) 65 Kgs                      d) 50 Kgs
180. Maximum grinding time for grinding of AT weld with rail profile grinder [ b ]  
 a) 20 minutes              b) 15 minutes              c) 10 Minutes              d) 12 minutes
181. Minimum Man power required to operate rail profile weld grinder is [ c ]  
 a) 2 – Both skilled                                      b) 2 – Both unskilled  
 c) 2 – One skilled and one unskilled              d) All the above
182. One metre straight edge is used for [ d ]  
 a) Check the vertical and lateral tolerances  
 b) Aligning the rail ends both laterally and vertically  
 c) Check the straightness of rail ends              d) All the above
183. Traffic can be allowed only after \_\_\_\_\_ minutes have elapsed after welding of rail joint. [ c ]  
 a) 10              b) 20              c) 30              d) 45
184. A minimum traffic block of \_\_\_\_\_ minutes is required for one joint to ensure good quality of welding. [ d ]  
 a) 30-40 min                      b) 40-50 min                      c) 50-60 min                      d) 60-70 min
185. Welding of rail joint work should be carried out with \_\_\_\_\_ [ d ]  
 a) Protection              b) caution order              c) line block              d) all the three required
186. Cut rail renewal work should be carried out with \_\_\_\_\_ [ d ]  
 a) Protection              b) caution order              c) line block              d) all the three required
187. At welding of rail joint work banner flag should be placed at a distance of \_\_\_\_\_ metres from work spot. [ c ]  
 a) 30m              b) 100m              c) 600 m              d) 1200m



188. At welding of rail joint work detonators should be placed at a distance of \_\_\_\_\_ metres from work spot. [ d ]  
a) 30m b) 100m c) 600 m d) 1200m
189. Protection of track for works which are completed on the same day is done by \_\_\_\_\_ [ c ]  
a) walky talkie b) look out men c) HS flags, banner flags & detonators  
d) Engg fixed indicators
190. Protection of track for works which will be carried for more than one day is done by \_\_\_\_\_ [ d ]  
a) walky talkie b) look out men c) HS flags, banner flags & detonators  
d) Engg fixed indicators
191. Life of a detonator is \_\_\_\_\_ years [ b ]  
a) 3 b) 5 c) 7 d) 10
192. Life of a detonator can be extended upto maximum \_\_\_\_\_ years with certain tests. [ b ]  
a) 7 b) 8 c) 10 d) 12
193. Caution indicator board for stop dead, long duration works shall be placed at a distance of \_\_\_\_\_ metres. [ c ]  
a) 600 m b) 1000m c) 1200m d) 30 m
194. SR (Speed restriction) board should be placed at distance of \_\_\_\_\_ metres from work spot. [ a ]  
a) 30 m b) 600m c) 800m d) 1200m
195. Length of check rail at level crossing shall be [ d ]  
a) width of road + 0.5 m b) width of road + 1 m  
c) width of road + 1.5 m d) width of road + 2 m
196. Check rail clearance to be provided at level crossing is [ c ]  
a) 41 – 45 mm b) 44 – 48 mm c) 51 – 57 mm d) 52 – 58 mm

197. The amount by which one of the rail is raised with reference to the other rail of a track is called as [ d ]

- a) Cant deficiency   b) Cant excess   c) Cross level   d) Super elevation

198. \_\_\_\_\_ is used to measure the distance between gauge faces of rails of a track at 13 to 15 mm below top of the rails from nominal gauge [ c ]

- a) Spirit level                      b) Tape  
c) Gauge cum level                d) Hemp cord

199. The measured gauge which is less than the nominal gauge is called [ b ]

- a) Slack gauge    b) Tight gauge    c) Neat gauge    d) None

200. The measured gauge which is more than the nominal gauge is called [ a ]

- a) Slack gauge    b) Tight gauge    c) Neat gauge    d) None

201. The lowest division in gauge cum level instrument for gauge reading is [ b ]

- a) 0.5 mm            b) 1 mm            c) 1.5 mm            d) 2 mm

202. In gauge cum level instrument the tight gauge reading is shown in \_\_\_\_\_ window [ d ]

- a) White                      b) Green                      c) Yellow                      d) Red

203. In gauge cum level instrument the slack gauge reading is shown in \_\_\_\_\_ window [ a ]

- a) White                      b) Green                      c) Yellow                      d) Red

204. In gauge cum level instrument the maximum tight gauge that can be read is [ a ]

- a) 10 mm                      b) 15 mm                      c) 20 mm                      d) 25 mm

205. In gauge cum level instrument the maximum slack gauge that can be read is [ c ]

- a) 10 mm                      b) 15 mm                      c) 20 mm                      d) 25 mm

206. \_\_\_\_\_ is used to measure the level difference between two rails, on a sleeper, of a track [ b ]

- a) Tape                      b) Spirit level                      c) Gauge cum level                      d) Hemp cord

207. The lowest division in gauge cum level instrument for level reading between two rails of a track is [ b ]

- a) 0.5 mm                      b) 1 mm                      c) 1.5 mm                      d) 2 mm

208. Deviation of rails in vertical plane, from its original/intended position, measured individually for each of the rail with reference to a chord of specified length is called as [ d ]

- a) Gauge                      b) Versine                      c) Alignment                      d) Unevenness



209. Deviation of rails in horizontal plane, from its original/intended position, measured individually for each of the rail with reference to a chord of specified length [ c ]  
 a) Gauge                      b) Versine                      c) Alignment                      d) Unevenness
210. \_\_\_\_\_ is the perpendicular distance measured at the midpoint of a chord from the arc of curved track. [ b ]  
 a) Gauge                      b) Versine                      c) Cross level                      d) Unevenness
211. A circular curve in vertical plane. [ c ]  
 a) Transition curve                      b) Horizontal curve  
 c) Vertical curve                      d) Turn in curve
212. A welded rail, the central part of which does not undergo any longitudinal movement due to temperature variations is called [ c ]  
 a) Fish plated track                      b) Short welded rail  
 c) Long welded rail                      d) Buffer rail
213. A welded rail that contracts and expands, throughout its length, due to temperature variations is called [ b ]  
 a) Fish plated track                      b) Short welded rail  
 c) Long welded rail                      d) Buffer rail
214. An easement curve which has curvature change throughout its length [ a ]  
 a) Transition curve                      b) Horizontal curve  
 c) Vertical curve                      d) Turn in curve
215. \_\_\_\_\_ installed at each end of LWR/CWR to permit expansion /contraction of the adjoining breathing lengths due to temperature variations. [ c ]  
 a) Switch expansion joint                      b) Buffer rail  
 c) Both a & b                      d) None of the above
216. Plate screws are used at \_\_\_\_\_ [ a ]  
 a) Switch of t/out                      b) crossing of t/out                      c) lead of t/out                      d) none of the above
217. Spherical washers are used at \_\_\_\_\_ [ a ]  
 a) Heel and check blocks of t/out                      b) LC                      c) GB                      d) SEJ
218. Tapered washers are used at \_\_\_\_\_ [ b ]  
 a) Heel and check blocks of t/out                      b) CMS crossing                      c) LC                      d) SEJ
219. Hook bolts are used at \_\_\_\_\_ [ d ]  
 a) SEJ                      b) LC                      c) P & C                      d) GB
220. After laying Steel sleepers, tightening of all fittings including hook bolts should be done once in \_\_\_\_\_ for initial one month [ d ]  
 a) Every day                      b) 7 days                      c) 10 days                      d) 15 days

221. After initial one month of laying of steel channel sleepers, tightening of all fittings including hook bolts should be done once in \_\_\_\_\_ for next six months [ b ]  
 a) 15 days                      b) a month                      c) Two months                      d) 45 days
222. Guard rail bolts should be tightened once in a \_\_\_\_\_ for first six month [ d ]  
 a) 15 days    b) Month                      c) 2 months                      d) 3 months
223. Sudden or Gradual shifting of Track in lateral or vertical direction due to unbalanced thermal stress in rail / track is called [ d ]  
 a) Creep    b) Movement of rail    c) Sun kinks                      d) Buckling of track
224. \_\_\_\_\_ is used to measure the gap at rail joints [ c ]  
 a) Scale                      b) Steeped gauge                      c) Gap gauge                      d) Feeler gauge
225. \_\_\_\_\_ is used to check the squareness of sleepers [ b ]  
 a) Chord                      b) T square                      c) Straight edge                      d) L square
226. \_\_\_\_\_ is used to check the soundness of packing under concrete sleepers  
 a) Canne boule                      b) shovel                      c) Crow bar                      d) all the above [ a ]
227. \_\_\_\_\_ is used to check the squareness of rail cut [ d ]  
 a) Chord                      b) T square                      c) Straight edge                      d) L square
228. Mechanical track jack used for lifting of track is [ a ]  
 a) Infringing type                      b) Non infringing type  
 c) Both a & b                      d) None of the above
229. Hydraulic track jack used for lifting of track is [ b ]  
 a) Infringing type                      b) Non infringing type  
 c) Both a & b                      d) None of the above
230. \_\_\_\_\_ is used for re spacing and squaring of sleepers [ c ]  
 a) Concrete sleeper breaker                      b) Hydraulic rail tensor  
 c) Hydraulic sleeper spacer                      d) Concrete sleeper drilling machine
231. \_\_\_\_\_ is used for removing the jammed ERC from concrete sleepers without damage to the sleepers [ a ]  
 a) Hydraulic extractor for ERC                      b) Concrete sleeper drilling machine  
 c) Angle grinder                      d) Hydraulic sleeper spacer





- b) Not more than + 0.5 mm to - 0.0 mm at end of straight edge
- c) Not more than + 1.0 mm to - 0.0 mm at centre of straight edge
- d) Not more than + 0.5 mm to - 0.0 mm at centre of straight edge

244. Tolerance for lateral alignment of finished AT welded joint measured with one metre straight edge is [ d ]

- a) Not more than  $\pm 1.0$  mm at end of straight edge
- b) Not more than  $\pm 0.5$  mm at end of straight edge
- c) Not more than  $\pm 1.0$  mm at centre of straight edge
- d) Not more than  $\pm 0.5$  mm at centre of straight edge

245. Tolerance for finishing of top surfaces of finished AT welded joint measured with 10 cm straight edge is [ b ]

- a) Not more than + 0.5 mm to - 0.0 mm at end of straight edge
- b) Not more than + 0.4 mm to - 0.0 mm at end of straight edge
- c) Not more than + 0.5 mm to - 0.0 mm at centre of straight edge
- d) Not more than + 0.4 mm to - 0.0 mm at centre of straight edge

246. Tolerance for head finishing of sides of finished AT welded joint measured with 10 cm straight edge is [ c ]

- a) Not more than  $\pm 0.4$  mm over gauge face side at centre of straight edge
- b) Not more than  $\pm 0.5$  mm over gauge face side at centre of straight edge
- c) Not more than  $\pm 0.3$  mm over gauge face side at centre of straight edge
- d) Not more than  $\pm 0.2$  mm over gauge face side at centre of straight edge

247. The turnouts on which trains are to be received from SRJ side are called [ c ]

- a) Non interlocked points
- b) Trailing points
- c) Facing points
- d) Interlocked points

248. The turnouts on which trains are received from crossing side from any of two tracks are called [ b ]

- a) Non interlocked points
- b) Trailing points
- c) Facing points
- d) Interlocked points

249. Pair of tongue rails connected to each other with stretcher bars is called as [ b ]

- a) Point
- b) Switch
- c) Turnout
- d) All the above

250. Pair of tongue rails along with attached stock rails and all other fittings is called [ a ]

- a) Point
- b) Turnout
- c) Crossing
- d) None of the above

251. SRJ is [ c ]

- a) Switch rail joint
- b) stock rail junction
- c) stock rail joint
- d) Switch rail junction

252. HOC is [ b ]

- a) Head of crossing
- b) Heel of crossing
- c) Heel on crossing
- d) none of above



253. In CMS crossing, CMS stands for \_\_\_\_\_ [ d ]  
a) Carbon manganese steel      b) Carbon magnesium steel  
c) Cobalt manganese steel      d) Cast Manganese Steel
254. ATS is \_\_\_\_\_ [ a ]  
a) Actual toe of switch      b) Ahead of tongue and stock  
c) Advance toe of switch      d) none of the above
255. TTS is \_\_\_\_\_ [ b ]  
a) Theoretical tongue of switch      b) theoretical toe of switch  
c) Theoretical throat of switch      d) none of the above
256. ANC is \_\_\_\_\_ [ c ]  
a) Actual number of crossing      b) advance nose of crossing  
c) Actual nose of crossing      d) ahead of nose in crossing
257. TNC is \_\_\_\_\_ [ b ]  
a) Total number of crossing      b) Theoretical nose of crossing  
c) Terminal nose of crossing      d) None of the above
258. Point assembly is designated as RH or LH depending on the side to which a train travelling in the \_\_\_\_\_ of switch is diverted [ a ]  
a) Facing direction      b) Trailing direction  
c) Direction of traffic      d) Unidirectional traffic
259. The joint at which the stock rail is joined to the rail at the approach is called as [ c ]  
a) Fish plated joint      b) Machined joint  
c) Stock rail joint      d) Heel joint
260. \_\_\_\_\_ is a point at which the tongue rail starts at the front end [ b ]  
a) Theoretical toe of switch      b) Actual toe of switch  
c) Heel block      d) Switch entry angle
261. The distance through which a tongue rail moves at its toe from its closed position to open position is called as [ c ]  
a) Switch entry angle      b) Heel divergence  
c) Throw of switch      d) Actual toe of switch

262. Throw of switch is the distance measured from the [ d ]

- a) Non gauge face of stock rail to gauge face of tongue rail
- b) Non gauge face of stock rail to non gauge face of tongue rail
- c) Gauge face of stock rail to gauge face of tongue rail
- d) Gauge face of stock rail to non gauge face of tongue rail

263. In curved switches point on the gauge line of tongue rail opposite the centre of the heel block is called as [ c ]

- a) Heel divergence
- b) Toe of switch
- c) Heel of switch
- d) Switch length

264. The distance between the gauge lines of stock rail and that of tongue rail at the heel measured at right angle to gauge face of stock rail is called as [ a ]

- a) Heel divergence
- b) Toe of switch
- c) Heel of switch
- d) Switch length

265. Heel divergence for 1 in 8.5 curved switch on PSC is [ d ]

- a) 133 mm
- b) 136 mm
- c) 175 mm
- d) 182.5 mm

266. Heel divergence for 1 in 12 curved switch on PSC is [ c ]

- a) 133 mm
- b) 136 mm
- c) 175 mm
- d) 182.5 mm

267. Heel divergence for 1 in 16 curved switch on PSC is [ c ]

- a) 133 mm
- b) 136 mm
- c) 145 mm
- d) 150 mm

268. 1 in 12 PSC Turnout consist of ----- Number of sleepers in a set [ b ]

- a) 83
- b) 96
- c) 91
- d) 95

269. 1 in 8.5 PSC Turnout consist of ----- Number of sleepers in a set [ d ]

- a) 54
- b) 62
- c) 65
- d) 67

270. 1 in 16 PSC Turnout consist of ----- Number of sleepers in a set [ c ]

- a) 101
- b) 111
- c) 114
- d) 109

271. Clearance between the bottom of stock rail and top of stretcher bar should be [ c ]

- a) 0.5 to 2 mm
- b) 1.5 to 2 mm
- c) 1.5 to 5 mm
- d) 2 to 3 mm

272. Number of approach sleepers in PSC layout are [ d ]

- a) 10
- b) 11
- c) 12
- d) 13

273. In crossing the point at which the converging wing rails are closest to each other is called as [ d ]

- a) Actual nose of crossing
- b) Toe of crossing
- c) Theoretical nose of crossing
- d) Throat of crossing



274. In crossing the angle contained between gauge lines of crossing measured at theoretical nose of crossing is called as [ c ]
- Actual nose of crossing
  - Toe of crossing
  - Crossing angle
  - Throat of crossing
275. Stretcher bars are fixed to tongue rails at the time when [ d ]
- One tongue rail is closed and another in open condition
  - Both the tongue rails are in closed condition
  - Both tongue rails are in open condition
  - Both tongue rails are at half throw
276. Check rails at crossing assembly provide [ c ]
- Lateral guidance to wheel from Toe of crossing to heel of crossing
  - Lateral guidance to wheel from Toe of crossing to actual nose of crossing
  - Lateral guidance to wheel in the unguided gap between throat to actual nose of crossing
  - Lateral guidance to wheel in the unguided gap between throat to heel of crossing
277. Check rails clearance for PSC layout to be maintained as [ b ]
- 40 to 44 mm
  - 41 to 45 mm
  - 41 to 44 mm
  - 40 to 45 mm
278. At Stock rail joints and at heel of Xing. Junction fish plates \_\_\_\_\_ [ b ]
- Must be provided
  - Not to be provided
  - Can be provided if required
  - None of the above
279. There should be at least \_\_\_\_\_ rail length on either side of points of same rail section as of points. [ a ]
- One
  - Two
  - Two and half
  - Three
280. 1 in 8 ½ fan shape layout has \_\_\_\_\_ No. of stretcher bars [ b ]
- 4
  - 3
  - 2
  - None of the above
281. 1 in 12 fan shape layout has \_\_\_\_\_ No. of stretcher bars [ a ]
- 4
  - 3
  - 2
  - None of the above
282. The permissible speed on 1 in 8.5 curved switch is [ a ]
- 15 kmph,
  - 25 kmph
  - 30 kmph
  - 40 kmph
283. The permissible speed on 1 in 12 curved switch is [ c ]
- 15 kmph,
  - 25 kmph
  - 30 kmph
  - 40 kmph
284. The permissible speed for 1 in 12 TWS is ..... Kmph [ d ]
- 20
  - 30
  - 40
  - 50
285. In points & xings, the spherical washer should invariably be provided on the \_\_\_\_\_ side of switch assembly. [ a ]
- Left
  - right
  - both
  - None

286. In points & xings, no junction fishplates at ..... rail joints or at the ..... of crossings should be provided. [ c ]

- a) Tongue, toe      b) GI, SEJ      c) stock, heel      d) Lead, toe

287. Wear on switches can be reduced by lubrication of the \_\_\_\_\_ of tongue rail [ c ]

- a) Tip      b) Non gauge face      c) Gauge face      (d) top

288. In curved switches the tongue rail is \_\_\_\_\_ mm higher than the stock rail. [ c ]

- a) 2      b) 4      c) 6      d) 8

289. Excluding approach and exit sleepers the number of sleepers in 1:8.5 turn out is

- a) 54      b) 67      c) 83      d) 96 [ a ]

290. Excluding approach and exit sleepers the number of sleepers in 1:12 turn out is

- a) 54      b) 67      c) 83      d) 96 [ c ]

291. Excluding approach and exit sleepers the number of sleepers in 1:16 turn out is

- a) 100      b) 103      c) 101      d) 105 [ c ]

292. The Spring setting device should be fixed on sleeper No \_\_\_\_\_ in 1 in 12, 60 Kg Turnout.

- a) 13      b) 14      c) 15      d) 16 [ a ]

293. The gap to be maintained at SSD in Thick web switches between stock Rail and Tongue Rail is [ c ]

- a)  $56 \pm 2$       b)  $58 \pm 2$       c)  $60 \pm 2$       d)  $64 \pm 2$

294. Throw (Clearance between toe of open switch and stock rail) of curved switches shall be \_\_\_\_\_ mm [ d ]

- a)  $105 \pm 10$       b)  $100 \pm 3$       c)  $110 \pm 5$       d)  $115 \pm 3$

295. Throw (Clearance between toe of open switch and stock rail) to be maintained for thick web switch is \_\_\_\_\_ mm [ d ]

- a)  $115 \pm 3$       b)  $165 \pm 3$       c)  $160 \pm 5$       d)  $160 \pm 3$

296. The centre to centre distance between motor point sleeper no 3 & 4 in TWS is [ b ]

- a) 750 mm      b) 745 mm      c) 740 mm      d) 725 mm

297. In curved switches for 1 in 12 minimum \_\_\_\_\_ numbers .of sleepers up to which tongue rail is to be housing properly with stock rail [ a ]

- a) 4      b) 5      c) 3      d) 6



298. In curved switches for 1 in 8.5 minimum \_\_\_\_\_ numbers of sleepers up to which tongue rail is to be housing properly with stock rail [ c ]

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

299. In thick web switches for 1 in 12 housing between tongue and stock rail is achieved up to sleeper number \_\_\_\_\_ [ d ]

- a) 10                      b) 11                      c) 12                      d) 13

300. The check rail clearances in BG PSC turnouts and L-Xings are – [ d ]

- a) 44-48mm and 51-57 mm respectively    b) 38-41mm and 48-51 mm respectively  
c) 48-51mm and 63-68 mm respectively    d) 41-45mm and 51-57mm respectively

301. To get gapless joint first hole from rail end should be drilled at [ a ]

- a) 83 mm                      b) 80 mm                      c) 82 mm                      d) 81 mm

302. Size of drill bit used for gapless joint fish bolt holes is [ a ]

- a) 26.50 mm                      b) 28 mm                      c) 25mm                      d) 26 mm

303. The joint which are provided with zero gap is called as [ a ]

- a) Machined joint                      b) Fish plated joint  
c) Flash butt joint                      d) Combination joint

304. A sanded track, which works as isolation, provided after loop lines to avert collision with main line vehicles is called. [ d ]

- a) Derailing switch                      b) Slip siding                      c) Catch siding                      d) Sand hump

305. When a vehicle standing on loop line escapes and rolls down it will not infringe the main line and train operation will go on at normal speed the arrangement is called as [ d ]

- a) Shunting neck    b) Scotch block    c) Snag dead end    d) Derailing switch

306. \_\_\_\_\_ prevent vehicles escaping from the station and trying to enter into the next block section. [ c ]

- a) Catch siding                      b) Derailing switch                      c) Slip siding                      d) Snag dead end

307. A low-speed track section distinct from a running line or through route such as a main line or branch line is called as [ a ]

- a) Siding                      b) Loop line                      c) Shunting neck                      d) Goods line

308. A line leading to marshalling sidings on which actual shunting of a train may be done clear of running train. [ a ]

- a) Shunting neck    b) Stabling siding    c) Marshalling Siding    d) Goods line

309. Siding is one where rakes or engines are stored (usually without any maintenance) away from the home yard, before they are assigned to the next train service is called. [ b ]  
a) Shunting neck    b) Stabling siding    c) Marshalling Siding    d) Goods line
310. A device to connect two lines by using two turnouts and straight or curved track in between is called as [ a ]  
a) Crossover    b) Diamond crossing    c) Scissors crossover    d) Derailing switch
311. The curve beginning from the toe of curved switch and extending up to toe of crossing is called as [ b ]  
a) Turn in curve    b) Lead curve    c) connecting curve    d) Horizontal curve
312. CMS crossing should be planned for reconditioning before reaching maximum vertical wear limit on Rajdhani/shatabdi routes [ c ]  
a) 10 mm    b) 9 mm    c) 8 mm    d) 6 mm
313. CMS crossing should be planned for reconditioning before reaching maximum vertical wear limit on other than Rajdhani/shatabdi routes [ a ]  
a) 10 mm    b) 9 mm    c) 8 mm    d) 6 mm
314. \_\_\_\_ series of electrodes, duly approved by RDSO are to be used for reconditioning of points and crossings [ d ]  
a) A2    b) E2    c) M3    d) H3
315. Diameter of electrode in depot/cess reconditioning is [ d ]  
a) 3 mm    b) 3.15 mm    c) 3.75 mm    d) 4 mm
316. Position of arrows on top of the bolts should be at \_\_\_\_\_ to the rails pointing towards the rail [ a ]  
a) Right angle    b) Parallel    c) Inclined    d) Opposite
317. When parting of train is noticed \_\_\_\_\_ signal shall not be shown during day time [ a ]  
a) Red flag    b) Green flag    c) hand gesture    d) none of the above
318. When hot axle, hanging parts or any other situation endangering safe running of trains is noticed \_\_\_\_\_ shall be shown during night time. [ a ]  
a) Red light    b) Green light    c) White light    d) Both b & c



319. \_\_\_\_\_ indication shown to loco pilot to proceed slowly reducing speed during day time at work site [ d ]

- a) Waving Red flag                      b) Waving green flag  
c) Waving red flag vertically up and down   d) Waving green flag vertically up and down

320. \_\_\_\_\_ indication shown to loco pilot to proceed slowly reducing speed during night time at work site [ c ]

- a) Waving Red light vertically up and down  
b) Waving white light vertically up and down  
c) Waving green light vertically up and down  
d) None of the above

321. \_\_\_\_\_ indication shown to loco pilot to stop the train during night time [ d ]  
a) Showing Red light                      b) Waving white light violently across the body  
c) Waving green light violently across the body                      d) Both a & b

322. BCM full form is \_\_\_\_\_ [ a ]  
a) Ballast cleaning machine                      b) Ballast crushing machine  
c) Ballast collecting machine                      d) Ballast compaction machine

333. SBCM is \_\_\_\_\_ [ d ]  
a) Standard ballast cleaning machine                      b) shoulder ballast collecting machine  
c) Shoulder ballast compaction machine                      d) shoulder ballast cleaning machine

333. DTS is \_\_\_\_\_ [ c ]  
a) Dynamic tamping system                      b) dynamic train stabilizer  
c) Dynamic track stabilizer                      d) dynamic tamper and stabilizer

334. PQRS is \_\_\_\_\_ [ d ]  
a) Permanent and quick restoration system                      b) Prime quality relaying system  
b) Plasser's quick relaying and stabilizing                      d) ) Plasser's quick relaying system

335. RBMV is \_\_\_\_\_ [ a ]  
a) Rail borne maintenance vehicle                      b) Railway board maintenance vehicle  
c) Railway board monitoring vehicle                      d) Railway ballast moving van

336. TRT is \_\_\_\_\_ [ a ]  
a) Track relaying train                      b) Track restoration train                      c) Turnout renewal train  
d) Track relaying and tamping

337. USFD is \_\_\_\_\_ [ a ]  
a) Ultra sonic flaw detection                      b) Ultra sonic fast detection  
c) Ultrasound finding of defects                      d) Ultra sonic flaw deflection

338. RDSO is \_\_\_\_\_ [ d ]  
a) Railway design standards organization  
b) Research development standard organization  
c) Railway design standard office d) Research designs standard organization
339. OMS is \_\_\_\_\_ [ b ]  
a) Oscillations measuring system b) Oscillation monitoring system  
c) Oscillation monitoring schedule d) Oscillation management system
340. TRC is \_\_\_\_\_ [ c ]  
a) Track reading car b) Track reporting car  
c) Track recording car d) Track recording coach
341. IRPWM is \_\_\_\_\_ [ b ]  
a) Indian railway permanent works manual b) Indian railway permanent way manual  
c) Indian railway permanent way machine d) Indian railway primary works manual
342. IRTMM is \_\_\_\_\_ [ d ]  
a) Indian railway train monitoring manual b) Indian railway track monitoring manual  
c) Indian railway track management manual d) Indian railway track machine manual
343. IRSTMM is \_\_\_\_\_ [ b ]  
a) Indian railway standard track machine manual  
b) Indian railway small track machine manual  
c) Indian railway standard track management manual  
d) Indian railway standard track monitoring manual
344. IRSOD is \_\_\_\_\_ [ c ]  
a) Indian railway standard overall dimensions  
b) Indian railway schedule of damages  
c) Indian railway schedule of dimensions  
d) Indian railway schedule of official dimensions
345. In LWR track, when there is no SR, condition for renewal of ERC is \_\_\_\_\_ [ c ]  
a) Tackle only one in a stretch of 5 sleepers  
b) Tackle only one in a stretch of 10 sleepers  
c) Tackle only one in a stretch of 15 sleepers  
d) Tackle only one in a stretch of 30 sleepers
346. In LWR track, when there is no SR, condition for renewal of rubber pad is \_\_\_\_\_ [ d ]  
a) Tackle only one in a stretch of 10 sleepers  
b) Tackle only one a in stretch of 15 sleepers  
c) Tackle only one in a stretch of 20 sleepers  
d) Tackle only one a in stretch of 30 sleepers



347. In LWR track, when there is no SR, condition for renewal of sleeper is \_\_\_\_\_ [ d ]
- Tackle only one in a stretch of 10 sleepers
  - Tackle only one a in stretch of 15 sleepers
  - Tackle only one in a stretch of 20 sleepers
  - Tackle only one a in stretch of 30 sleepers
348. When buckling of track occurs gas cutting of rails should be done at a distance of \_\_\_\_\_ [ c ]  
\_\_\_\_\_ metres apart.
- 4.00 m
  - 5.50 m
  - 6.50 m
  - 13.00 m
349. Rectification of buckled track can be done by \_\_\_\_\_ [ c ]
- Hot weather patrol man
  - Gang mate
  - JE /P.way
  - incharge sse only
350. Cutting of rails in running line should be done under the supervision of \_\_\_\_\_ [ d ]
- MCM
  - gang mate
  - key man
  - JE/P.way
351. Drilling of holes in running line should be done under the supervision of \_\_\_\_\_ [ d ]
- MCM
  - gang mate
  - key man
  - JE/P.way
352. Lubrication of rail joints should be carried out by gangs under the supervision of \_\_\_\_\_ [ d ]
- MCM
  - gang mate
  - key man
  - JE/P.way
353. Lubrication of rail joints can be done \_\_\_\_\_ [ d ]
- By proper protection
  - with caution order
  - traffic block only
  - With caution order and engg signals or traffic block
354. Minimum length of closure rail to be provided during rail fracture repair is \_\_\_\_\_ [ a ]
- 4.00 m
  - 5.50 m
  - 6.00 m
  - 6.50 m
355. Closure rail during permanent repair should be \_\_\_\_\_ [ d ]
- Sound quality
  - Usfd tested and fit
  - Minimum 4.00m
  - all the above
356. Plate screw greasing in corrosion prone areas should be done \_\_\_\_\_ [ b ]
- once in 3 months
  - once in 6 months
  - once in a year
  - once in 2 years
357. ERC greasing in corrosion prone areas should be done \_\_\_\_\_ [ c ]
- once in 3 months
  - once in 6 months
  - once in a year
  - once in 2 years
358. AC painting of rails is done to \_\_\_\_\_ [ c ]
- Have good look
  - Prevent wear
  - Prevent corrosion
  - prevent fractures

359. Galvanizing of p.way fittings is done to \_\_\_\_\_ [ c ]  
 a) Have good look b) prevent wear c) prevent corrosion d) have good grip
360. Elcometer is a instrument to measure \_\_\_\_\_ [ c ]  
 a) Length of track b) Area of paint c) Thickness of paint d) Depth of corrosion
361. Procedure of p.way material trucking on material trolley is \_\_\_\_\_ [ d ]  
 a) Carefully with lookout man b) With HS and banner flag  
 c) With walky talkies d) with block protection
362. When trolley is loaded with p.way or other heavy material it should be treated as \_\_\_\_\_ [ b ]  
 a) Heavy material trolley b) Lorry c) Engg material trolley d) none of the above
363. Shape of caution indicator is \_\_\_\_\_ [ d ]  
 a) Round b) rectangle c) triangle d) fish tailed
364. Shape of stop indicator is \_\_\_\_\_ [ b ]  
 a) Round b) rectangle c) triangle d) fish tailed
365. Shape of speed restriction board is \_\_\_\_\_ [ c ]  
 a) Round b) rectangle c) triangle d) fish tailed
366. Shape of termination board is \_\_\_\_\_ [ a ]  
 a) Round b) Rectangle c) Triangle d) Fish tailed
367. Permanent way staff are advised to keep clear of the tracks and avoid contact with the rails when an electrically hauled train is within \_\_\_\_\_ meters [ c ]  
 a) 150 b) 200 c) 250 d) 300
368. No work shall be done within a distance of \_\_\_\_\_ metres from the live parts of the O.H.E. without a 'permit-to-work'. [ c ]  
 a) 1 b) 1.5 c) 2 d) 2.5
369. No part of the tree shall be nearer than \_\_\_\_\_ meters from the nearest live conductor. [ d ]  
 a) 2.5 b) 3 c) 3.5 d) 4
370. When joggled fish plates are removed for deployment of track machines, a SR \_\_\_\_\_ shall be imposed till such time the joggled fish plates are re-fixed. [ b ]  
 a) 30 kmph b) 50kmph c) 45 kmph d) 20 kmph
371. The Spring setting device should be fixed on sleeper No. \_\_\_\_\_ in 1:12, 60 Kg Turnout. [ a ]  
 a) 13 b) 14 c) 15 d) 16



372. The gap to be maintained at SSD in Thick web switches between stock Rail and Tongue Rail is \_\_\_\_ [ c ]  
 a)  $56 \pm 2$       b)  $58 \pm 2$       c)  $60 \pm 2$       d)  $64 \pm 2$
373. Throw (Clearance between toe of open switch and stock rail) of curved switches shall be \_\_\_\_ mm. [ d ]  
 a)  $105 \pm 10$       b)  $100 \pm 3$       c)  $110 \pm 5$       d)  $115 \pm 3$
374. Throw (Clearance between toe of open switch and stock rail) to be maintained for thick web switch is \_\_\_\_ mm [ d ]  
 a)  $115 \pm 3$       b)  $165 \pm 3$       c)  $160 \pm 5$       d)  $160 \pm 3$
375. In curved switches for 1 in 12 turnout, upto a minimum \_\_\_\_ numbers of sleepers tongue rail should have proper housing with stock rail [ a ]  
 a) 4      b) 5      c) 3      d) 6
376. In curved switches for 1 in 12 turnout, upto a minimum \_\_\_\_ numbers of sleepers tongue rail should have proper housing with stock rail [ c ]  
 a) 4      b) 5      c) 3      d) 6
377. In thick web switches for 1 in 12 turnout, housing between tongue and stock rail is achieved up to sleeper number \_\_\_\_ [ d ]  
 a) 10      b) 11      c) 12      d) 13
378. A minimum traffic block of \_\_\_\_ minutes is required to ensure good quality AT welding. [ d ]  
 a) 30 min    b) 45 min    c) 60 min    d) 70-75 min
379. Rail ends upto \_\_\_\_ mm should be thoroughly cleaned with kerosene before fixing moulds [ b ]  
 a) 25 mm    b) 50 mm    c) 75 mm    d) 100 mm
380. Fatigue strength of AT welding, when compared to stipulated fatigue strength of the Parent Rail is \_\_\_\_ [ b ]  
 a) 35%      b) 56%      c) 75%      d) 100%
381. Fatigue strength of FB welding, when compared to stipulated fatigue strength of the Parent Rail is \_\_\_\_ [ c ]  
 a) 56%      b) 75%      c) 90%      d) 100%
382. The two rail ends to be welded shall be held in position with a uniform gap of \_\_\_\_ mm. [ b ]  
 a)  $20 \pm 1$  mm    b)  $25 \pm 1$  mm    c)  $28 \pm 1$  mm    d)  $30 \pm 1$  mm

383. Wide gap welding should have a gap of \_\_\_\_\_ mm for repairing of fractured/defective welds

[ d ]

- a) 25                      b) 50                      c) 75                      d) both (b) & (c)

384. In welding of rail ends, there should not be any bolt hole within \_\_\_\_\_ mm from either rail end

[ a ]

- a) 40                      b) 50                      c) 83                      d) 166

385. Cropping of rail ends to eliminate Heat Affected Zone during repairing of AT weld fracture is \_\_\_\_\_.

[ c ]

- a) 85 mm from centre of weld                      b) 100 mm from centre of weld  
c) 150 mm from centre of weld                      d) 175 mm from centre of weld

386. The minimum traffic block required for one AT welding is \_\_\_\_\_

[ c ]

- a) 45 minutes                      b) 60 minutes                      c) 70 minutes                      d) 75 minutes

387. Minimum traffic block required for performing two continuous welds is \_\_\_\_\_

[ a ]

- a) 90 minutes                      b) 80 minutes                      c) 95 minutes                      d) 100 minutes

388. The traffic block requirement involving two cuts and two welds shall be \_\_\_\_\_ where the cutting is done by abrasive disc cutters.

[ c ]

- a) 70 minutes                      b) 90 minutes                      c) 100 minutes                      d) 120 minutes

389. The traffic block requirement involving two cuts and two welds shall be \_\_\_\_\_ where the cutting is done by hacksaw blades.

[ d ]

- a) 70 minutes                      b) 90 minutes                      c) 100 minutes                      d) 120 minutes

390. No alumino-thermic welded joint shall be located closer than \_\_\_\_\_ metres from any other welded or fish plated joint.

[ b ]

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

391. In case of in situ welding the rail fastenings for at least \_\_\_\_\_ sleepers on either side shall be loosened.

[ d ]

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

392. During AT welding of rails on cess, the full rail length should be supported on at least

- a) 5 sleepers                      b) 7 sleepers                      c) 8 sleepers                      d) 10 sleepers                      [ d ]



393. The joint shall be kept higher after vertical alignment for AT welding when checked with one meter straight edge for 90 UTS is [ a ]

- a) 2 to 2.4 mm      b) 3 to 4 mm      c) 4 to 5 mm      d) 1 to 2 mm

394. The latest development in pre fabricated moulds used for AT welding of rails is [ c ]

- a) Green moulds      b) two piece moulds  
c) Three piece moulds      d) None of the above

395. What are the ingredients in AT welding portion? [ d ]

- a) Aluminium powder & Mill scale      b) Ferro manganese & Ferro vanadium  
c) Steel chips, Flour spar & Silicon carbide      d) All the above

396. After fixing and luting of moulds for AT welding the rail ends are heated to a desirable temperature of [ a ]

- a)  $600 \pm 20^\circ\text{C}$       b)  $700 \pm 20^\circ\text{C}$       c)  $800 \pm 20^\circ\text{C}$       d)  $1000 \pm 20^\circ\text{C}$

397. In alumino thermit welding short pre-heating is done by compressed [ b ]

- a) Air diesel fuel mixture      b) Air petrol fuel mixture  
c) Air kerosene oil mixture      d) none of the above

398. For AT welding with Compressed Air petrol technique for pre heating of rails, air pressure should be maintained in the range of [ b ]

- a)  $0.1$  to  $0.2 \text{ kg/cm}^2$       b)  $0.2$  to  $0.3 \text{ kg/cm}^2$       c)  $0.3$  to  $0.4 \text{ kg/cm}^2$       d)  $0.4$  to  $0.5 \text{ kg/cm}^2$

399. Preheating time would be about \_\_\_\_\_ minutes for 60kg rail section with compressed air petrol preheating technique. [ c ]

- a) 3.0 to 4.0      b) 3.5 to 4.5      c) 4.0 to 4.5      d) 4.5 to 5.0

400. The Reaction time for AT welding portion is [ b ]

- a)  $15 \pm 3$  seconds      b)  $20 \pm 3$  seconds      c)  $25 \pm 3$  seconds      d)  $30 \pm 3$  seconds

401. After pouring of the molten metal into the mould of 25 mm gap weld, trimming should be done after waiting for [ c ]

- a) 2 to 3 minutes      b) 3 to 4 minutes      c) 4 to 6 minutes      d) 6 to 8 minutes

402. \_\_\_\_\_ is used for trimming of extra weld metal from rail top and sides at AT welding rail joint after the welding process [ c ]  
a) Hammer    b) Chisel    c) Hydraulic weld trimmer    d) Rail profile grinder
403. The wedges used for alignment of rails for AT welding shall not be removed after trimming for at least [ a ]  
a) 20 minutes    b) 30 minutes    c) 40 minutes    d) None of these
404. The first train should be allowed to pass on the newly insitu AT welded joint after pouring of the weld metal shall be only after a lapse of [ c ]  
a) 20 minutes    b) 25 minutes    c) 30 minutes    d) none of these
405. In single line, the welded joints shall be serially numbered in the direction of [ c ]  
a) Train traffic    b) opposite to the train traffic  
c) Increasing kilometer    d) Decreasing kilometer
406. In double line, the welded joints shall be serially numbered in the direction of [ c ]  
a) Train traffic    b) opposite to the train traffic  
c) Increasing kilometer    d) Decreasing kilometer
407. Jogging of AT welding done [ a ]  
a) Immediately after grinding operation over  
b) Next day    c) After a week    d) After USFD testing
408. Painting of weld collar should be done on all welds to protect them against corrosion is [ a ]  
a) Immediately after the welding    b) after USFD testing  
c) After one month    d) After one year
409. Frequency of weld collar anticorrosive painting of AT welds should be carried out once in \_\_\_\_\_ in corrosion prone areas. [ d ]  
a) 4 years    b) 3 years    c) 2 years    d) 1 year
410. Frequency of weld collar anticorrosive painting of AT welds should be carried out once in \_\_\_\_\_ in non corrosive prone areas. [ a ]  
a) 4 years    b) 3 years    c) 2 years    d) 1 year



411. All new welded joints should be ultrasonically tested as early as possible but in any case not later than [ b ]

- a) 45 days                      b) 30 days                      c) 15 days                      d) 10 days

412. A thermit welding done insitu shall be joggled fish plated with two clamps and supported on wooden blocks of 300 – 450 mm length until tested as [ d ]

- a) Good by JE/P.Way                      b) Good by SSE/P.Way  
c) Good by ADEN                      d) Good by JE/SSE/USFD

413. Joggled fishplates with far end bolts shall be provided on AT welds, which have undertaken traffic equal to or more than \_\_\_\_\_ of stipulated fatigue life (GMT) of the rail. [ b ]

- a) 30%                      b) 50%                      c) 75%                      d) 100%

414. Anti corrosive Painting of new welds as well as old welds, shall be done on welds and \_\_\_\_\_ cm on either side [ b ]

- a) 5                      b) 10                      c) 15                      d) 20

415. The test weld shall withstand minimum transverse breaking load for 60kg, 90UTS rails in tonnes \_\_\_\_\_ [ d ]

- a) 60                      b) 80                      c) 90                      d) 115

416. Engineering works can be broadly divided into [ b ]

- a) 4 categories                      b) 3 categories                      c) 2 categories                      d) none of these

417. Works of short duration are those works which are completed [ a ]

- a) On the same day of commencement                      b) On the next day of commencement  
c) On the third day of commencement                      d) none of these

418. Works of long duration are those works which are completed [ c ]

- a) Within three hours                      b) within 6 hours  
c) Taking more than a day                      d) none of these

419. While doing short duration works the track is protected with [ b ]

- a) Fixed signals                      b) hand signals                      c) operating signals                      d) none of these

420. While doing Long duration works the track is protected with [ c ]

a) Operating fixed indicators

b) hand signals

c) Temporary engineering fixed indicators

d) none of these

421. During works of short duration when the train is required to stop and proceed, the

Flagman should exhibit Banner flag at a distance from work spot [ b ]

a) 30 mts

b) 600 mts

c) 800 mts

d) 1200 mts

**DEN/North/HYB**