

QUESTION BANK FOR WELDER-III/BLACK SMITH-III IN ENGINEERING DEPARTMENT.

Chose the correct option

1. Indian railway started in the year of
a) 1850 b) 1953 c) 1853 d) 1950
2. The head quarter of Central Railway is
a) Mumbai b) Nagpur c) Delhi d) Pune
3. At present in Indian Railway there are no of zones
a) 7 b) 17 c) 9 d) 5
4. In Central Railway there are no of division.
a) 7 b) 4 c) 6 d) 5
5. Standard gauges available in Indian Railway are.....
a) 1 b) 2 c) 3 d) 4
6. The broad gauge distance is..... mm
a) 1676 b) 1000 c) 1600 d) 1750
7. Meter gauge Distance ismm
a) 1676 b) 1000 c) 1600 d) 1750
8. The Head Post in the division is
a) GM b) DRM c) COM d) DPO
9. In railway Black smith post comes under department
a) Security b) ENGINEERING c) PERSONELL d) MEDICAL
10. The height of 60 kg rail is
a) 172 mm b) 156 mm c) 143 mm d) 136 mm
11. The Flange width of 60 kg rail is
a) 172 mm b) 150 mm c) 156 mm d) 143 mm
12. The web thickness of 60 kg rail is
a) 18.5 mm b) 17.5 mm c) 16.5 mm d) 15.5 mm
13. The Head width of 60 kg rail is
a) 72 mm b) 74.3 mm c) 50 mm d) 70 mm
14. The height of 52 kg rail is
a) 172 mm b) 156 mm c) 143 mm d) 136 mm
15. The Flange width of 52 kg rail is
a) 150 mm b) 136 mm c) 143 mm d) 153 mm
16. The web thickness of 52 kg rail is
a) 18.5 mm b) 17.5 mm c) 16.5 mm d) 15.5 mm
17. Head width of 52 kg rail is
a) 72 mm b) 67 mm c) 50 mm d) 43 mm
18. Height of 90R rail is..... mm.
a) 148 b) 142.9 c) 144.6 d) 145.8
19. Flange width of 90 R rails is mm.
a) 134 b) 136.5 c) 136 d) 140
20. Head width of 90R rail is mm.
a) 65 b) 66.7 c) 67 d) 69.5
21. Web Thickness of 90R rail is mm.
a) 15.5 b) 14.5 c) 13.9 d) 14.9
22. Actual wear of nose of crossing of 60 kg CMS xing is equal to.....
a) Measured wear -2.5 mm b) Measured wear -2 mm c) Measured wear -3 mm
d) Measured wear -1.5 mm
23. Actual wear of nose of crossing of 52 kg CMS xing is equal to
a) Measured wear -2.5 mm b) Measured wear -2 mm c) Measured wear -3 mm
d) Measured wear -1.5 mm
24. Diameter of Drill bit for hole in gapless joints should be
a) 26 mm b) 26.5 mm c) 27 mm d) 30 mm
25. Diameter of Drill bit for normal fish plate hole should be mm
a) 26.5 b) 28 c) 30 d) 31.75
26. Diameter of Drill bit for TRD bond hole should be mm
a) 26.5 b) 17.5 c) 25 d) 31.75

27. Diameter of drill bit for tongue rail holes is mm
a) 17.5 b) 22 c) 25 d) 31.75
28. The length of New drill bit is cm
a) 15 b) 20 c) 24 d) 28
29. The Diameter of holes in tongue rail for fixing stretcher bar is mm.
a) 26 b) 32 c) 22 d) 26.5
30. The Diameter of holes in Stock rail for slide chairs is mm.
a) 32 b) 28 c) 30 d) 26
31. The Diameter of holes in adjoining rail of CMS xing is mm.
a) 30 b) 28 c) 26.5 d) 31.75
32. In electrified/ track circuited area tape is used for measurement of rail
a) Steel tape b) cotton tape c) metal tape d) Aluminium tape
33. Emergency joggled fish plate are provided at every kms
a) 0.1 b) 1.0 c) 1.5 d) 2.0
34. After completion of emergency repair 1st train shall be passed
a) stop dead & 5 kmph b) 10 kmph c) stop dead & 10 kmph d) 20 kmph
35. Maximum permissible wear on Crossing & Wing is
a) 10 mm b) 8 mm c) 6 mm d) 12 mm
36. Slide chair bolt hole in stock rail of Turn out are
a) Same as normal fish bolt hole b) 6 mm below fish bolt hole
c) 6 mm above fish bolt hole d) 8 mm below fish bolt hole
37. Check rail clearance range is 41 to 44 mm in BG track for in PSC sleeper turnout.
a) Point & Crossing b) Level Crossing c) Sharp Curve d) Both b & c
38. Oiling & Greasing of SEJ Shall be done by Key man Once in
a) Fortnight b) Month c) Three month d) Week
39. Distance pieces in Platform lines shall be fixed at about meter
a) 13 b) 15 c) 30 d) 20
40. Permitted vertical wear for 60 kg Tongue rail is mm.
a) 6 b) 8 c) 5 d) 4
41. Permitted vertical wear for 52 kg Tongue rail is mm.
a) 6 b) 8 c) 5 d) 4
42. Permitted vertical wear for 60 kg Stock rail is mm.
a) 13 b) 8 c) 5 d) 4
43. Permitted vertical wear for 52 kg Stock rail is mm.
a) 6 b) 8 c) 5 d) 4
44. Minimum length of fencing at level Xing shall be meter
a) 15 b) 30 c) 35 d) 20
45. The Instrument used for measuring hogging of rail ends is
a) 1 meter straight Edge b) Levelling instrument c) 30 cm straight edge d) Nylon cord
46. The Standard length of fish bolt spanner is mm.
a) 600-700 b) 550-600 c) 680-760 d) 700-750
47. The height gauge shall be fixed at height of meter above road level.
a) 4.67 b) 5.67 c) 4.76 d) 4.50
48. The diameter of hook bolts to fixed the sleeper with Girder is mm .
a) 25 b) 32 c) 20 d) 22
49. Minimum clearance of check rail for a Curve is mm .
a) 44 b) 51 c) 75 d) 48
50. Minimum clearance of check rail for Point & Crossing for PSC sleeper is mm .
a) 44 b) 41 c) 51 d) 48
51. Maximum clearance of check rail for Point & Crossing for PSC sleeper is mm .
a) 44 b) 41 c) 51 d) 48
52. Minimum clearance of check rail for Level Xing mm .
a) 41 b) 44 c) 48 d) 51
53. Maximum clearance of check rail for Level Xing mm.
a) 44 b) 57 c) 51 d) 48
54. The Length of fish plate of Glued joint is mm.

- a) 950 b) 600 c) 750 d) 800
55. The Minimum length of rail to be cut in case of buckling of rail occurs or appears is meter.
- a) 6.5 b) 6.0 c) 4 d) 13
56. The Maximum permissible amount of creep is mm.
- a) 150 b) 100 c) 200 d) 50
57. The Check rail clearance opposite CMS crossing of BG (1673 mm gauge) is mm .
- a) 41 to 44 b) 44 to 48 c) 51 to 57 d) 44 to 50
58. Painting of weld collar shall be done for cm of either side of weld.
- a) 10 b) 15 c) 20 d) 30
59. Painting of weld collar shall be done for mm of either side of weld.
- a) 10 b) 100 c) 150 d) 115
60. The Frequency of Painting of weld collar is year.
- a) 4 b) 3 c) 2 d) 1
61. Minimum depth of space of wheel flange from rail level in BG is mm.
- a) 30 b) 28.5 c) 40 d) 41
62. Initial Gap of SEJ for 60 kg & 52 kg rail at De-stressing Temperature is mm.
- a) 40 b) 50 c) 60 d) 30
63. Anticorrosive Painting of rails should normally be done once in
- a) 6 months b) 1 Year c) 2 Year d) 3 Months
64. Anticorrosive Painting of rails in corrosion prone area shall be done once in
- a) 6 months b) 1 Year c) 2 Year d) 3 Months
65. Gap at junction fish plated joint is mm
- a) 6 b) 10 c) 15 d) 0
66. Standard Gap at fish plate joint is mm.
- a) 5 b) 6 c) 7 d) 8
67. Maximum Gap at fish plate joint is mm.
- a) 10 b) 12 c) 13 d) 15
68. No of lifting points required for handling 26 meter long panel are
- a) 2 b) 4 c) 6 d) 8
69. Rolling mark on the rail shall written at interval.
- a) 1 m b) 2 m c) 2.5 m d) 3 m
70. Permanent rail closer in running lines should not be less than meter.
- a) 6.5 b) 6 c) 5.5 d) 7
71. The height of hole in a rail from bottom of flange is mm
- a) 85 b) 50 c) 25 d) 100
72. In a junction fish plate joint distance of first hole from rail end is mm
- a) 80 b) 83 c) 85 d) 57
73. For making gapless joints of CMS crossing distance of first hole from rail end is mm
- a) 80 b) 83 c) 85 d) 50
74. On PSC sleeper turnout gap at check rail flare (check rail end) is mm
- a) 44 b) 51 c) 57 d) 67.5
75. Check rail clearance shall be 51 to 57 mm for
- a) Level Xing b) Point & Crossing c) Curve d) Guard rail
76. The length of heck saw blade is
- a) 320 mm b) 310 mm c) 340 mm d) 350 mm
77. The width of heck saw blade is.....
- a) 31 mm b) 32mm c) 33 mm d) 34 mm
78. The thickness of heck saw blade is
- a) 1.4 mm b) 1.6 mm c) 1.8 mm d) 1.2 mm
79. Length of normal Fish Plate is mm
- a) 600 b) 610 c) 650 d) 700
80. Length of 1 meter long fish plate is
- a) 610 mm b) 1000 mm c) 100 mm d) 10 cm
81. Diameter of fish bolt for BG is mm
- a) 20 b) 25 c) 26.5 d) 30
82. Diameter of fish bolts in fish plate ismm

- a) 25 b) 27 c) 28 d) 30
83. Diameter of hole in Glued joint is mm
- a) 27 b) 28 c) 30 d) 32
84. Diameter of hole in check rail is..... mm
- a) 25 to 26 b) 27 to 28 c) 30 to 31 d) 31 to 32
85. IMR rails should replaced within days
- a) 1 b) 2 c) 3 d) 4
86. Gap survey should done in month of
- a) December b) July c) February d) June
87. Greasing of rail in a curve shall be done at
- a) Gauge face of outer rail b) Gauge face of inner rail c) Top table of outer rail
- d) Top table of Inner rail.
88. Permanent rail closure on bridge approach should not be less than.....
- a) 13 m b) 11 m c) 6.5 m d) 5.5 m
89. Height of letters of rolling marks shall be.....
- a) 10 mm b) 15 mm c) 20 mm d) 25 mm
90. Free rails while stacking shall be supported at least at
- a) 2 points b) 3 points c) 4 points d) 6 points
91. Maximum permissible over hang in 13 meters (90 UTS) rails is.....
- a) 3.25 m b) 3 m c) 4 m d) 4.25 m
92. Service life of 90 UTS rail is % higher than that of MM rails
- a) 40 b) 45 c) 50 d) 55
93. Stipulated service life of 52 kg 72 UTS rails in GMT is
- a) 250 b) 350 c) 375 d) 525
94. Stipulated service life of 60 kg 90 UTS rails in GMT is
- a) 880 b) 800 c) 525 d) 550
95. Defective weld (DFW) shall be mark with
- a) 1 red cross b) 2 red cross c) 3 red cross d) 4 red cross
96. An OBS W shall be mark with
- a) 1 red cross b) 2 red cross c) 3 red cross d) None of these
97. In Concrete sleeper No of pandrol clips are required.
- a) 1 b) 2 c) 3 d) 4
98. In Concrete sleeper No of Liner are required.
- a) 1 b) 2 c) 3 d) 4
99. In Concrete sleeper No of Rubber Pad are required.
- a) 1 b) 2 c) 3 d) 4
100. Normally in LWR section, distance between two sleepers is cm
- a) 60 b) 80 c) 100 d) 50
101. Normally in LWR section, distance between two sleepers is mm
- a) 600 b) 800 c) 1000 d) 500
102. Weight of Standard keying hammer for driving keys.....
- a) 1.5 kg b) 2.0 kg c) 1.8 kg d) 3.0 kg
103. Now a days ERC Greasing is to be done by Key man no of sleeper in day
- a) 10 b) 20 c) 16 d) 0
104. Liner used in track circuited area are.....
- a) composite liner b) GFN Liner c) Metal Liner d) None of these
105. Minimum throw of switch is mm in BG
- a) 115 b) 70 c) 95 d) 57
106. Recommended throw of switch is mm in BG
- a) 115 b) 70 c) 95 d) 57
107. Minimum clearance is mm at JOH
- a) 38 b) 40 c) 41 d) 44
108. Heel Divergence for 1 in 8.5 turnout on PSC sleeper curved switch is..... mm
- a) 180 b) 182.5 c) 175 d) 115
109. Heel Divergence for 1 in 12 turnout on PSC sleeper curved switch is..... mm
- a) 180 b) 182.5 c) 175 d) 115

110. No of bolts is required in one side check rail on PSC sleeper turnout.
a) 2 b) 4 c) 3 d) 6
111. No of stretcher bars are required in 1 in 8.5 PSC sleeper turnout
a) 1 b) 2 c) 3 d) 4
112. No of stretcher bars are required in 1 in 12 PSC sleeper turnout
a) 1 b) 2 c) 3 d) 4
113. Minimum clearance of mm below foot of stock rail & top of leading stretcher bar shall be available.
a) 1.5 b) 2 c) 3 d) 2.5
114. Maximum clearance of mm below foot of stock rail & top of leading stretcher bar shall be available.
a) 1.5 b) 2 c) 3 d) 2.5
115. Spherical washer in switch portion shall used on irrespective of LH / RH turnout
a) RH side b) LH side c) LH/RH side d) None of these.
116. Length of CMS xing for 1 in 8.5 turnout is
a) 3.30 m b) 4.35 m c) 4.98 m d) None of these
117. Length of CMS xing for 1 in 12 turnout is
a) 3.30 m b) 4.35 m c) 4.98 m d) None of these
118. At level crossing Banner flag shall be provided at distance from the ends of check rail
a) 7 m b) 6 m c) 5 m d) 10 m
119. At level crossing Banner flag shall be provided at 5 meter distance from the
a) edge of road metalling b) ends of check rail c) Centre line of road metalling
d) Centre of check rail
120. Fish pated joint shall be avoided in check rail and on the running rail within from the end of level crossing.
a) 9 m b) 6 m c) 3 m d) 4 m
121. Minimum length of check rail for square crossing shall be meter more than width of gate
a) 1 b) 2 c) 3 d) 4
122. Lifting of concrete sleeper track shall not be done more than mm in one stage
a) 25 b) 40 c) 50 d) 75
123. Oiling & Greasing of SEJ shall be done once in a
a) fortnight b) month c) week d) two months
124. Diameter of disc of Abrasive rail cutter
a) 350 mm b) 400 mm c) 450 mm d) 500 mm
125. Thickness of disc of Abrasive rail cutter
a) 4.00 mm b) 5.00 mm c) 6.00 mm d) 5.50 mm
126. A Single disc can perform cuts in 52 kg 90 UTS rail
a) 4 b) 5 c) 6 d) 7
127. A Single disc can perform cuts in 60 kg 90 UTS rail
a) 4 b) 5 c) 6 d) 7
128. Engine oil of rail drilling machine is change after hours
a) 15 b) 18 c) 20 d) 22
129. Cleaning of Fuel oil tank is done after
a) 6 months b) 10 months c) 12 months d) 24 months
130. Maximum time for Hack saw blade cut should not exceed
a) 20 min b) 25 min c) 30 min d) 35 min
131. The length of ratchet in champhering kit is
a) 1 m b) 2 m c) 1.5 m d) 2.5 m
132. Maximum lift that a mechanical jack can perform.....
a) 50 mm b) 75 mm c) 100 mm d) 90 mm
133. Capacity of Hydraulic track jack is.....
a) 12 tonnes b) 13 tonnes c) 15 tonnes d) 18 tonnes
134. Length of concrete sleeper (MBC) is mm
a) 2700 b) 2750 c) 2800 d) 2850
135. Top width of MBC Sleeper is mm
a) 130 mm b) 140 mm c) 150 mm d) 160 mm

136. Bottom width of MBC sleeper is mm
a) 200 b) 230 c) 245 d) 249
137. Depth of MBC sleeper
a) 205 mm b) 210 mm c) 225 mm d) 230 mm
138. Distance between inserts at rail seat for 60 kg PSC sleeper is mm.
a) 148 b) 156 c) 162 d) 164
139. Distance between inserts at rail seat for 52 kg PSC sleeper is mm.
a) 148 b) 156 c) 152 d) 160
140. Lubrication of fish plate joints shall be done preferably in month of
a) October & November b) April & May c) June & July d) December & January
141. Patrolman shall walk
a) In direction of traffic b) facing direction of traffic c) Centre of both track d) None of these
142. Jim crow is used for
a) remove the bends of rail b) bend the rail c) bending & Debending both
d) None of these
143. Rail joint should be
a) On sleeper b) between Two sleeper c) Both D) None of these
144. Maximum distance between two slinging points
a) 6 to 6.1 m b) 6 to 6.3 m c) 6 to 6.5 m d) 6.5 to 7 m
145. Minimum distance of centre to centre of track in existing work mm
a) 4330 b) 4265 c) 5460 d) 4460
146. Length of fish bolt for 60 kg rail is mm
a) 140 b) 150 c) 160 d) 170
147. Length of check rail bolt is mm
a) 160 b) 180 c) 200 d) 210
148. Diameter of bolt of stretcher bar is..... mm
a) 12 b) 14 c) 18 d) 20
149. Combination fish plate is provided at rails
a) 52 kg & 52 kg b) 60 kg & 60 kg c) 90 R & 90 R d) 52 kg & 60 kg
150. On PSC sleeper 1 in 8.5 turnout, S & T motor is to be fixed between sleeper no.
a) 1 & 2 b) 2 & 3 c) 3 & 4 d) 5 & 6
151. On PSC sleeper 1 in 12 turnout, S & T motor is to be fixed between sleeper no.
a) 1 & 2 b) 2 & 3 c) 3 & 4 d) 5 & 6
152. On PSC sleeper 1 in 8.5 turnout leading stretcher bar is between sleeper no.
a) 1 & 2 b) 2 & 3 c) 3 & 4 d) 5 & 6
153. On PSC sleeper 1 in 8.5 turnout 2nd stretcher bar is between sleeper no.
a) 2 & 3 b) 3 & 4 c) 5 & 6 d) 7 & 8
154. On PSC sleeper 1 in 8.5 turnout 3rd stretcher bar is between sleeper no.
a) 3 & 4 b) 6 & 7 c) 7 & 8 d) 8 & 9
155. On PSC sleeper 1 in 12 turnout leading stretcher bar is between sleeper no.
a) 1 & 2 b) 2 & 3 c) 3 & 4 d) 5 & 6
156. On PSC sleeper 1 in 12 turnout 2nd stretcher bar is between sleeper no.
a) 3 & 4 b) 5 & 6 c) 7 & 8 d) 8 & 9
157. On PSC sleeper 1 in 12 turnout 3rd stretcher bar is between sleeper no.
a) 4 & 5 b) 5 & 6 c) 7 & 8 d) 8 & 9
158. On PSC sleeper 1 in 12 turnout 4th stretcher bar is between sleeper no.
a) 8 & 9 b) 10 & 12 c) 12 & 13 d) 13 & 14
159. On PSC sleeper 1 in 8.5 turnout gauge tie plate is to be fixed on sleeper no.....
a) 2 b) 3 c) 4 d) 5
160. On PSC sleeper 1 in 12 turnout gauge tie plate is to be fixed on sleeper no.....
a) 2 b) 3 c) 4 d) 5
161. In track circuited area On PSC sleeper 1 in 8.5 turnout gauge tie plate is in parts
a) 1 b) 2 c) 3 d) 4
- 162 .In track circuited area On PSC sleeper 1 in 12 turnout gauge tie plate is in parts
a) 1 b) 2 c) 3 d) 4
163. Total no of heel blocks in 1 in 8.5 PSC sleeper turnouts

- a) 1 b) 2 c) 3 d) 4
164. Total no of heel blocks in 1 in 12 PSC sleeper turnouts
- a) 1 b) 2 c) 3 d) 4
165. Heel blocks in 1 in 8.5 PSC sleeper turnout is to be fixed at to the distance mm from ATS
- a) 1500 b) 4275 c) 6400 d) 10125
166. Heel blocks in 1 in 12 PSC sleeper turnout is to be fixed at to the distance mm from ATS
- a) 1500 b) 4275 c) 6400 d) 10125
167. Total no of distance blocks in 1 in 8.5 PSC sleeper turnout are.....
- a) 3 b) 4 c) 5 d) 6
168. Total no of distance blocks in 1 in 12 PSC sleeper turnout are
- a) 3 b) 4 c) 5 d) 6
169. Total no of sleeper in PSC sleeper 1 in 8.5 turnout are
- a) 54 b) 67 c) 83 d) 96
170. Total no of sleeper in PSC sleeper 1 in 12 turnout are
- a) 54 b) 67 c) 83 d) 96
171. In CMS crossing joint No of bolts required
- a) 3 b) 4 c) 5 d) 6
172. Length of Stud bolt is mm
- a) 90 b) 100 c) 110 d) 120
173. Rahee SEJ is fixed on no of SEJ sleeper
- a) 3 b) 4 c) 5 d) 6
174. Conventional SEJ is fixed on no of SEJ sleeper
- a) 3 b) 4 c) 5 d) 6
175. Hindustan double gap SEJ is fixed on no of SEJ sleeper.
- a) 3 & 3 b) 4 & 4 c) 5 & 5 d) 6 & 6
176. Rahee SEJ sleeper spacing is cm
- a) 60 b) 65 c) 70 d) 75
177. The central sleeper spacing of conventional type of SEJ is cm
- a) 55 b) 60 c) 65 d) 70
178. Rail drilling machine starts with
- a) Water b) Petrol c) Diesel d) Kerosene oil
179. Rail drilling machine drills the holes with
- a) Water b) Petrol c) Diesel d) Kerosene oil
180. Rail cutting machine starts with
- a) Water b) Petrol c) Diesel d) Kerosene oil
181. Rail cutting machine cuts with
- a) Water b) Petrol c) Diesel d) Kerosene oil
182. Abrasive rail cutter start & cuts with
- a) Water b) Petrol c) Diesel d) Kerosene oil
183. Gauge and cross level measured with help of
- a) steel scale b) Gauge cum level c) Thermometer d) Steel tape
184. Raised check rail is provided at
- a) Point & crossing b) Bridge c) Diamond crossing d) level crossing
185. On bridges clearance between guard rail and running rail is mm
- a) 250 ± 50 b) 200 ± 50 c) 300 ± 50 d) 25
186. On bridges guard rail should not be lower than mm with respective running rail
- a) 10 b) 25 c) 30 d) 50
187. In steel channel sleeper of bridges no of hook bolts are required
- a) 1 b) 2 c) 3 d) 4
188. Normally the length of Glued joints is meter
- a) 5.5 b) 6.00 c) 6.5 d) 7.5
189. Joggled fish plate is provided at
- a) fish plate joints b) welding joints c) Glued joints d) CMS crossing joints
190. Abrasive rail cutter device which takes minutes for cutting of rail
- a) 4 to 6 b) 3 to 5 c) 2 to 3 d) 6 to 8
191. The reaction time in 25 mm gap technique at AT welding of rails is seconds.

- a) 0-5 b) 5-6 c) 17-23 d) 23-26
192. For a Good weld reaction should take place within seconds.
a) 20 ± 3 b) 25 ± 5 c) 25 ± 3 d) 20 ± 5
193. The Technique used for removal of defective/Fracture weld is
a) 25 mm ordinary b) 50mm wider gap c) 75 mm wider gap d) None of these.
194. In ATW Process rail ends are preheated to the extend of
a) $1500 \pm 20^\circ\text{C}$ b) $1000 \pm 20^\circ\text{C}$ c) $800 \pm 20^\circ\text{C}$ d) $600 \pm 20^\circ\text{C}$
195. Preheating time with LPG in ordinary AT Welding is..... minutes
a) 4 to 4.5 b) 2 to 2.5 c) 5 to 6 d) 7 to 8
196. Preheating Time with compressed air & petrol in ordinary ATW is.....
a) 2 to 2.5 min. b) 4 to 4.5 min c) 5 min d) none of these.
197. Rail end to be welded should not have any bolt/bond hole within mm in case of AT welding
a) 30 b) 40 c) 50 d) 60
198. In case of 90 UTS rails, the rail ends shall be preheated to extend of $^\circ\text{C}$ prior to flame cutting.
a) $300-350^\circ\text{C}$ b) $250 - 300^\circ\text{C}$ c) $350-400^\circ\text{C}$ d) None of these
199. AT Welding shall not be done in traffic block less than minutes.
a) 60 b) 75 c) 70 d) 90
200. Maximum tapping time is seconds.
a) 20 b) 23 c) 26 d) 17
201. Minimum tapping time is seconds.
a) 17 b) 20 c) 23 d) 25
202. In ATW welding reaction time is seconds
a) 17 ± 3 b) 20 ± 3 c) 22 ± 3 d) 25 ± 3
203. Minimum tapping time by auto tapping is seconds
a) 15 b) 17 c) 23 d) 25
204. Maximum tapping time by auto tapping is seconds
a) 15 b) 17 c) 23 d) 25
205. are used for doing alignment in ATW welding
a) fish bolt b) chisels c) wooden wedges d) MS Liner
206. Pressure during preheating by compressed Air & Petrol shall be
a) 2 to 2.5 kg/cm² b) 0.2 to 0.3 kg/cm² c) 2 to 3 kg/cm² d) 4 to 4.5 kg/cm²
207. Pressure during preheating by oxygen is
a) 7 to 8 kg/cm² b) 4 to 5 kg/cm² c) 4 to 4.5 kg/cm² d) 0.2 to 0.3 kg/cm²
208. Finished vertical tolerances on 1 meter straight edge at the centre on surface of head shall be
a) ± 0.5 mm b) + 0.5 mm c) + 0.2 d) + 0.3
209. Finished verticals tolerances on 1meter straight edge at end of straight edge on surface of head shall be?
a) 0 to +1mm b) 0 to 0.5mm c) ± 0.5 mm d) ± 1.0 mm
210. Finished lateral tolerances on 1 meter straight edge at the centre of gauge side shall be
a) 0.3 mm b) 0.2 mm c) 0.5 mm d) ± 0.5 mm
211. Finished vertical tolerances on 10 cm straight edge at end of straight edge shall be
a) 0 to 0.2 mm b) 0 to 0.3 mm c) 0 to 0.4 mm d) 0 to 0.5 mm
212. Finished lateral tolerances on 10 cm straight edge at centre of straight edge shall be
a) ± 0.3 mm b) ± 0.4 mm c) ± 0.5 mm d) ± 1.0 mm
213. On compulsory basis if two different graded rails needs welding, portion to be used shall be
a) Higher grade chemistry b) Lower grade chemistry c) any grade d) Mixed grade
214. Punching marking should be done on a strip ofin case of AT welding of rails.
a) Aluminium b) Copper c) Steel d) Stainless steel
215. The number of rejected AT welding portion can be ignited at a time are
a) 5 b) 8 c) 10 d) 6
216. The Clear working space required between sleeper during welding of rail joint is mm.
a) 150 b) 200 c) 250 d) 300
217. In case AT welding of rails compressor tank shall kept at a safe distance of meters away form burner.
a) 2 to 3 b) 1 to 3 c) 3 to 4 d) more than 1 meter
218. The weight of 52 kg welding portion for 25 mm gap is..... kg.

- a) 20 b) 25 c) 11 d) 10
219. The Temperature measuring device in AT welding of rails is
- a) Contact type pyrometer b) Optical pyrometer c) Temperature measuring device d) All Above.
220. During in Situ Welding of rails at least nos of sleeper rail fastenings should be loosened on Either side.
- a) 10 b) 8 c) 6 d) 5
221. In case of AT welding the chipping time for excess metal is minutes .
- a) 3 to 4 b) 4 to 6 c) 6 to 8 d) 8 to 10
222. In case of AT welding crack due to shrinkage happens due to
- a) Improper squaring b) Poor heating c) early chipping d) auto tapping
223. In case of AT Welding latest technique introduced to avoid the defects of fins is.....
- a) Self tapping thimble b) 1 time use crucible c) oxy LPG system d) 3 piece dry mould
224. The life of welding portion kept in good storage condition is years from date of manufacturing
- a) 5 b) 4 c) 3 d) 2
225. In case of AT welding cooling arrangement of HH rails section is minutes.
- a) 2 b) 4 c) 5 d) 8
226. In case of AT welding, the number of defective weld shall not exceed % of total number of joints welded against a particular contract.
- a) 2 b) 3 c) 4 d) None of these
227. In case of AT welding, lack of fusion is caused due to
- a) excess gap b) insufficient heating c) before tapping d) improper mould fixing.
228. In case of AT welding, slag inclusion is caused due to
- a) excess gap b) insufficient heating c) before tapping d) improper mould fixing.
229. In case of AT welding, shortage of metal is caused due to
- a) excess gap b) insufficient heating c) before tapping d) improper mould fixing.
230. In case of AT welding, fins is caused due to
- a) excess gap b) insufficient heating c) before tapping d) improper mould fixing.
231. In case of AT welding of rails on cess, full rail length should be supported on at least number of wooden block on either side of proposed weld.
- a) 10 b) 20 c) 6 d) 8
232. While executing the AT welding work if sudden rainfall occurs, what precaution has to take to complete the work?
- a) Joint should be protected by trolley umbrella b) Joint should be protected by tarpaulin
- c) Joint should be protected by rain guard d) welding should not be carried out
233. Weld collar painting to be done once in years in corrosion prone area.
- a) 4 b) 3 c) 2 d) 1
234. The First train should passed only after minutes after pouring of molten metal and after rough finishing of welded joints.
- a) 30 b) 15 c) 45 d) 20
235. The rail end face and adjacent sides at foot, web and head up to..... mm shall be thoroughly cleaned using kerosene oil and brushing with wire brush to removed all dirt, grease and rust before welding.
- a) 50 b) 60 c) 45 d) 75
236. The limiting value of defective weld executed by the welder to obtain permanent regular competency certificate as per TW2 programme is
- a) 1 % b) 2 % c) 3 % d) 5 %
237. Length of rail is to be levelled for welding of rail on cess is.....
- a) Full length of rail b) half length or minimum 5 m c) 3 meter d) 6 meter
238. Rails older than years shall not be used for AT Welding.
- a) 25 b) 40 c) 50 d) 60
239. In case of AT welding delayed tapping will cause loss of.....
- a) Thermit steel b) Molten Metal c) Super heat d) Slag inclusion
240. In case of AT welding, early tapping will cause.....
- a) sand inclusion b) slag inclusion c) excess metal d) Shortage of metal
241. In case of AT welding the life period of premixed lutting sand is months.
- a) 4 b) 6 c) 2 d) 12
242. In case of AT welding minimum time period up to which the wedges should not be removed after

trimming is minutes.

- a) 20 b) 30 c) 15 d) 10
243. The minimum height of old 60 kg rail required to be welded with new rail is
- a) 162 mm b) 163 mm c) 164 m d) 166 mm
244. The minimum height of old 52 kg rail required to be welded with new rail is
- a) 148 mm b) 149 mm c) 150 mm d) 152 mm
245. The minimum height of old 90 R rail required to be welded with new rail is.....
- a) 138 mm b) 137 mm c) 139 mm d) 140 mm
246. Maximum vertical wear permitted for old 60 kg rail to be welded with new rail is
- a) 6 mm b) 8 mm c) 9 mm d) 10 mm
247. Maximum vertical wear permitted for old 52 kg rail to be welded with new rail is
- a) 5 mm b) 6 mm c) 8 mm d) 9 mm
248. Maximum vertical wear permitted for old 90 R rail to be welded with new rail is
- a) 2 mm b) 4 mm c) 6 mm d) 7 mm
249. Permitted lateral wear on rail head of old 60 kg rail to be welded with new rail is
- a) 4 mm b) 5 mm c) 6 mm d) 7 mm
250. Permitted lateral wear on rail head of old 52 kg rail to be welded with new rail is.....
- a) 4 mm b) 5 mm c) 6 mm d) 7 mm
251. Heat affected zone is measured up to mm from weld centre.
- a) 20 b) 30 c) 40 d) 50
252. The validity of competency certificate for welder for TW2 course is
- a) 1 year b) 2 year c) 3 year d) 4 year
253. The validity of Competency certificate for welder for TW1 course is.....
- a) 12 months b) 6 months c) 3 months d) 24 months
254. No hole should there at distance of mm from welding.
- a) 30 b) 40 c) 50 d) 60
255. Gap required for wide gap welding is
- a) 75 ± 1 mm b) 50 ± 1 mm c) 25 ± 1 mm d) 70 ± 1 mm
256. Gap required for regular ATW welding is
- a) 75 ± 1 mm b) 50 ± 1 mm c) 25 ± 1 mm d) 70 ± 1 mm
257. While doing AT welding the alignment measured at both rail ends by 1 meter straight edge is..... mm
- a) ± 1 b) ± 2 c) ± 0.5 d) ± 0.4
258. For 72 UTS rail alignment at rail ends by 1 meter straight edge is mm height.
- a) 0.5 to 1 b) 1 to 1.5 c) 1.5 to 2 d) 2 to 2.5
259. For 90 UTS or higher grade of rail alignment at rail ends by 1 meter straight edge is mm height.
- a) 0.5 to 1 b) 1 to 1.25 c) 1.25 to 1.5 d) 1.5 to 2
260. Mould waiting time for 25 mm gap welding is
- a) 4 to 4.5 minutes b) 4 to 6 minutes c) 2 to 2.5 minutes d) 5 to 7 minutes
261. Mould waiting time for 75 mm gap welding is
- a) 4 to 6 minutes b) 6 to 8 minutes c) 08 to 10 minutes d) 10 to 12 minutes
262. The weight of portion for 60 kg rail for 25 mm gap is.....
- a) 10 kg b) 11 kg c) 12 kg d) 13 kg
263. The 11 kg welding portion used for rail for 25 mm gap.
- a) 90 R b) 52 kg c) 60 kg d) 65 kg
264. The 13 kg welding portion used for rail for 25 mm gap
- a) 52 kg b) 60 kg c) 90 R d) all of above
265. The weight of 52 kg portion for 75 mm gap is
- a) 20 kg b) 21 kg c) 22 kg d) 23 kg
266. If weight of portion is less, then for doing the AT Welding is added in to the portion.
- a) MS Liners b) small rail closer c) two way keys d) None of these
267. The maximum height between top of mould to bottom of crucible during heating is
- a) 25 mm b) 50 mm c) 40 mm d) 60 mm
268. For proper heating the maximum height between the bottom of torch to rail top is mm
- a) 30 to 35 b) 35 to 40 c) 40 to 45 d) 45 to 50
269. New AT weld shall be tested with USFD within months
- a) 1 b) 2 c) 3 d) 4

270. First Periodic USFD testing of new weld shall be done in
- a) 1 month b) 12 months c) 6 months d) 24 months
271. First Periodic USFD testing of new weld shall be done in
- a) 4 years b) 3 years c) 2 years d) 1 year
272. Newly welded joints is to be joggled fish plated with
- a) 2 far end bolts b) 2 far end clamps c) 1 bolt & 1 clamp d) 4 bolts
273. New AT weld shall be tested with USFD within days.
- a) 30 b) 60 c) 90 d) 120
274. In New ATW technique single shot crucible shall be used for time only.
- a) 1 b) 2 c) 3 d) 4
275. No AT welds shall be closer than from any other weld or fish plate joints.
- a) 4 m b) 5.5 m c) 6 m d) 6.5 m
276. For reconditioning of CMS crossing electrode to be used
- a) H1 b) H2 c) H3 d) H4
277. For reconditioning of tongue rail series electrodes are used
- a) A b) B c) C d) H
278. Electrodes used in reconditioning are dried for an hour time at
- a) 100°C b) 150°C c) 200°C d) 250°C
279. The length of tongue rail for reconditioning is meter
- a) 0.3 b) 0.5 c) 1 d) 1.5
280. Weld trimmer used to removed extra metal from
- a) the periphery of weld b) top & side of weld c) bottom of weld d) None of these
281. Rail tensor to used for..... the rail
- a) Stretching b) Compressing c) Breaking d) Bending
282. Rail tensor is used when
- a) rail temperature is less than t_d b) rail temperature is more than t_d
c) rail temperature is more than $t_d + 25$ d) none of these
283. Reference mark of SEJ is mm higher than top table of rail surface
- a) 0 b) 5 c) 25 d) 50
284. Rail dolly is used for carrying
- a) Ballast b) Rail c) Water d) None of these
285. In one box of detonator contains no of detonator
- a) 8 b) 10 c) 12 d) 6
286. For welding rail end should not be cut by
- a) Hexa blade b) Gas c) Rail cut machine d) Abrasive rail cutter
287. In a rail the distance of 1st hole from rail end is mm
- a) 80 b) 83 c) 166 d) 249
288. In a rail the distance of 2nd hole from rail end is mm
- a) 83 b) 160 c) 166 d) 249
289. In a rail centre to centre distance between 1st & 2nd hole is mm
- a) 83 b) 160 c) 166 d) 249
290. On PSC sleeper turnout of 1 in 8.5 there are no of slide chair
- a) 10 b) 20 c) 17 d) 34
291. On PSC sleeper turnout of 1 in 8.5 there are no of bearing plate
- a) 03 b) 06 c) 07 d) 14
292. On PSC sleeper turnout of 1 in 12 there are no of slide chair
- a) 10 b) 20 c) 17 d) 34
293. On PSC sleeper turnout of 1 in 12 there are no of bearing plate
- a) 07 b) 14 c) 17 d) 34
294. On PSC sleeper turnout of 1 in 8.5 total no of switch stops
- a) 2 b) 4 c) 6 d) 8
295. On PSC sleeper turnout of 1 in 8.5 first switch stop is between sleeper no.
- a) 6 & 7 b) 7 & 8 c) 8 & 9 d) 9 & 10
296. On PSC sleeper turnout of 1 in 8.5 second switch stop is between sleeper no.
- a) 7 & 8 b) 8 & 9 c) 9 & 10 d) 11 & 12
297. On PSC sleeper 1 in 12 60 kg turnout total no of switch stoppers in LH & RH side are.....

- a) 4 b) 8 c) 6 d) 12
298. On PSC sleeper 1 in 12 52 kg turnout total no of switch stoppers in LH & RH side are.....
- a) 4 b) 8 c) 10 d) 12
299. On PSC sleeper 1 in 12 turnout first switch stoppers is fixed on sleeper no
- a) 13 b) 15 c) 20 d) 27
300. On PSC sleeper 1 in 12 60 kg turnout last switch stoppers is fixed on sleeper no
- a) 15 b) 20 c) 21 d) 27
301. On PSC sleeper 1 in 12 52 kg turnout last switch stoppers is fixed on sleeper no
- a) 19 b) 20 c) 21 d) 27
302. Length of check rail in point & crossing on PSC sleeper in 1 in 8.5 turnout is meter
- a) 3.33 b) 4.33 c) 3.00 d) 4.35
303. Length of check rail in point & crossing on PSC sleeper in 1 in 12 turnout is meter
- a) 3.33 b) 3.00 c) 4.36 d) 4.00
304. On PSC sleeper turnout of 1 in 8.5 distance between first & second hole of check rail is mm
- a) 875 b) 1000 c) 1500 d) 1676
305. On PSC sleeper turnout of 1 in 12 distance between first & second hole of check rail is mm
- a) 875 b) 1000 c) 1500 d) 1676
306. On PSC sleeper turnout of 1 in 8.5 distance between second & third hole of check rail is mm
- a) 875 b) 1000 c) 1500 d) 1676
307. On PSC sleeper turnout of 1 in 12 distance between second & third hole of check rail is mm
- a) 875 b) 1000 c) 1500 d) 1676
308. While doing protection red hand signal is to be provided at a distance of meter from work spot
- a) 10 b) 15 c) 30 d) 45
309. With help of gauge cum level maximum slack gauge is measured up to mm
- a) 20 b) 15 c) 10 d) 6
310. Gauge cum level measure tight gauge up to mm
- a) 3 b) 10 c) 20 d) 6
311. Box spanner used for tightening of
- a) Stud bolt b) rail screw c) fish bolt d) stretcher bar bolt
312. In a turnout rail screw shall be tightened by
- a) box spanner b) fish bolt spanner c) hammer d) auger
313. Versine in a curved tongue rail & curved stock rail is measured by
- a) steel tape b) thermometer c) gauge cum level d) nylon cord
314. While doing chamfering of bolt hole by chamfering kit torque shall be fixed at
- a) 40 kg-m b) 52 kg -m c) 50 kg-m d) 60 kg-m
315. The number of fish bolt in 1 meter fish plate are
- a) 4 b) 6 c) 3 d) 2
316. A glued joint consist of no of bolts
- a) 3 b) 4 c) 5 d) 6
317. Gate post at manned level crossing is provided at meter from nearest track centre
- a) 1 b) 2 c) 3 d) 5
318. . Gate post at unmanned level crossing is provided at meter from nearest track centre
- a) 1 b) 2 c) 5 d) 3
319. The life of welding portion is
- a) 1 year b) 2 year c) 3 year d) 4 year
320. Grade pay of welder - III is
- a) 1800 b) 1900 c) 2400 d) 2800
321. Grade pay of black smith – III is
- a) 1800 b) 1900 c) 2400 d) 2800