

Model Question bank of Technician/Black Smith

1. For making the gapless joint the first hole to be drilled at a distance ofmm from rail end.
(a) 80 (b) 83 (c) 86 (d) 166 [b]
2. While drilling of holes for gap less joint the size of drill bit to be used is
(a) 25 mm (b) 26.5 mm (c) 27 mm (d) 32 mm [b]
3. The spherical washers are used in -----
(a) SEJs (b) Girder Bridges (c) Level Crossings (d) Points and Crossings [d]
4. The gap to be maintained at SSD in Thick web switches between stock Rail and Tongue Rail is ---
(a) 56 ± 2 (b) 58 ± 2 (c) 60 ± 2 (d) 64 ± 2 [c]
5. Throw (Clearance between toe of open switch and stock rail)of curved switches shall be----mm.
(a) 105 ± 10 (b) 100 ± 3 (c) 110 ± 5 (d) 115 ± 3 [d]
6. Throw (Clearance between toe of open switch and stock rail) to be maintained for thick web switch is -----mm
(a) 115 ± 3 (b) 165 ± 3 (c) 160 ± 5 (d) 160 ± 3 [d]
7. Check Rail clearance to be maintained at Level crossing shall be----mm
(a) 44 to 48 (b) 41 to 45 (c) 51 to 57 (d) 41 to 57 [c]
8. Check Rail clearance to be maintained in crossings of PSC lay outs shall be----mm
(a) 44 to 48 (b) 41 to 45 (c) 51 to 57 (d) 41 to 57 [b]
9. Creep of tongue rail shall not exceed --- mm.
(a) 10 (b) 15 (c) 20 (d) 25 [b]
10. Size of fish bolts for 60 kg Rail is mm.
(a) 170 (b) 160 (c) 130 (d) 150 [b]
11. Which one of the following is not connected to points & crossing ?
(a) Stock rail (b) tongue rail (c) check rail (d) guard rail [d]
12. Which one of the following is not connected to maintenance of track circuit ?
(a) Glued joint (b) Axle counter (c) Insulated joint (d) SEJ [b]
13. Out of the following 4 , which one is odd one regarding its use of location.
(a) Joggled fish plate (b) 1 m fish plate

(c) 2' fish plate (d) slotted fish plate [a]
14. The height of 52 kg Rail section mm.
(a) 152 (b) 154 (c) 156 (d) 162 [c]
15. The height of 60 kg Rail section mm. [d]
(a) 162 (b) 154 (c) 156 (d) 172

16. The weight of 52 kg Rail kgs. [b]
 (a) 52 (b) 51.89 (c) 44.64 (d) 52.36
17. The weight of 60 kg Rail Kgs. [a]
 (a) 60.34 (b) 51.89 (c) 60 (d) 52
18. The gap at combination fish plated joint is mm. [b]
 (a) 2 (b) 0 (c) 4 (d) 6
19. Minimum distance of Gate post from center line of Track is ____ m [b]
 (a) 3.1 (b) 3 (c) 5 (d) 3.3
20. Minimum ____ m length of fencing from each gate post parallel to Track [c]
 (a) 10 (b) 20 (c) 15 (d) 30
21. The gap between the top of the leading stretcher bar and bottom of stock rail should be between 1.5 mm to 5 mm.
 (a) 1.0 to 2.0 (b) 1.5 to 3.0 (c) 1.5 to 4.0 (d) 1.5 to 5.0 (d)
22. For drilling of holes in rails at CMS crossing joint..... diameter drill bit is used. [c]
 (a) 31.50 mm (b) 35.00 mm (c) 26.50 mm (d) 32.00 mm
23. For drilling of holes in rails to create free fish plated joint..... diameter of drill bit is used. [a]
 (a) 31.50 mm (b) 35.00 mm (c) 26.50 mm (d) 27.00 mm
24. The joint at CMS crossing is mm gap joint. [d]
 (a) 6 (b) 4 (c) 8 (d) 0
25. At ordinary fish plated joint mm gap is generally kept. [a]
 (a) 6 (b) 4 (c) 8 (d) 0
26. The First hole distance from rail end to make the joint gapless is mm. [b]
 (a) 86 (b) 83 (c) 80 (d) 88
27. The First hole distance from rail end to make the joint 6 mm.gap ismm. [c]
 (a) 86 (b) 83 (c) 80 (d) 88
28. The distance between the First hole to second hole in a rail is.....mm. [d]
 (a) 160 (b) 188 (c) 180 (d) 166
29. The Gap at combination joint is gap. [a]
 (a) 0 (b) 4 (c) 8 (d) 6
30. After drilling of holes in rails done. [b]
 (a) punching (b) chamfering (c) boring (d) Hammering
31. Chamfering of rail holes is done to avoid..... [c]
 (a) low joints (b) high joints (c) cracks (d) None

- 32.. washers are used at CMS crossing joints.
 (a) Flat (b) spring (c) tapered (d) None [c]
- 33.. In psc track at rail joints Fish plates are used
 (a) 1 metre (b) 600 mm (c) Joggled (d) glued [a]
34. Glued joints are used in areas.
 (a) non track circuited (b) track circuited [b]
35. Insulated joints are used in areas.
 (a) non track circuited (b) track circuited [b]
36. Abrasive rail cutter is used for
 (a) drilling of hotes (b) chamfering (c) Rails cutting (d) grinding [c]
37. Rail tensor is used for.....
 (a) welding (b) destressing (c) rail drilling (d) Rail cutting [b]
38. When Buckling took place in track or sunkinks developed in LWR track during summer then arrange the following steps to be taken in a sequential order.
- I . Cut the Rails with gas . II. Protect the track.
 III. Inform Station Master & SSE/P.Way . IV. Cool the rail with possible means.
- (a) I II III IV (b) II III I IV
 (C) II I III IV (d) II IV I III [b]
39. While working with JCB / Plying of vehicle for earth work or any other works on track block is required when it works less than ----meters from centre line of track.
 (a) 2.8 (b) 3.5 (c) 6 (d) 7.5 [b]
40. Partial distressing to be done after.....
 (a) Complete track renewals (b) Through rail renewals
 (c) Through sleeper renewal (d) Alumino thermit welding at site [d]
41. When doubling or tripling works are in progress barricading should be provided along side of track at a distance not less than ---- metres from centre line of nearest track.
 (a) 2,8 (b) 3.5 (c) 6 (d) 7.5 [a]
42. In track works in case movement of vehicle is less than 6m but more than 3.5m away from track centre it is permitted when
 (a) Presence of look out men{ authorized by Engineer in charge }with protection equipment
 (b) Contractor supervisor
 (c) Issuing of Whistle free or requisite caution order
 (d) All of the above full filled. [d]
43. The staff required for fixing hand signal of keyman / patrolman should be at a height of ---
 (a)3 feet (b) 4 feet (c) 5 feet (d) 6 feet [c]
44. The sleeper spacing in 1660 sleeper density track is ----

- (a) 55 cm (b) 60 cm (c) 65 cm (d) 70 cm [b]
45. What will be the effect of tight gauge at nose of crossings----
- (a) Wheel flange hits the nose of crossing
 (b) More wear on check rails
 (c) Shearing of bolts on check rail
 (d) All of the above [a]
46. What will be the effect of slack gauge at nose of crossing
- (a) Wheel flange hits the nose of crossing
 (b) More wear on check rails
 (c) Shearing of bolts on check rail
 (d) All of the above [b]
47. For PQRS work for running of portal cranes the gauge of auxiliary track is --- mm.
- (a) 1673 (b) 1676 (c) 3400 (d) 3500 [c]
48. The Spring setting device should be fixed on sleeper No.----- in 1:12 , 60 Kg Turnout.
- (a) 13 (b) 14 (c) 15 (d) 16 [a]
49. The SEJ shall not be laid at following location
- (a) Circular portion of a curve (b) Transition portion of curve
 (c) 100m from level crossing (d) 100m from points and crossings [b]
50. Lubrication of rail joints to be completed in the annual maintenance period of
- (a) Pre Monsoon attention (b) During Monsoon attention
 (c) Post Monsoon attention (d) Any of the above [c]
51. While doing rectification of rail/weld failures and welding which of the following equipment is necessary in the electrified sections----
- (a) Steel Tape (b) Insulated Gauge (c) Rail Jumper (d) All of the above [c]
51. In track circuited areas which one is not permitted -----
- (a) Steel Tape (b) Insulated gauge (c) Linen Tape (d) Insulated trolley [a]
52. While working in track circuited areas ---- permission must be obtained.
- (a) SSE/Signal (b) SSE/P.way (c) OHE control (d) Station Master on duty. [d]
53. When buckling occurred the emergency repairs to be done in the presence of ---
- (a) Patrolman (b) Keyman (c) Mate (d) JE / SSE .Pway [d]
54. When rail / weld failure occurs the emergency repairs to be done by ---
- (a) Keyman / Patolman (b) Mate (c) JE/P.way (d) SSE/P.way [a]
55. Key man can pass the train in case of Rail breakage, when gap is.....
- (a) > 30 mm (b) >50 mm (c) < 30 mm (d) None [c]
56. In LWR section the Mate shall record the Rail temperature at what time ?
- (a) For every 2 hrs (b) For every 1 hr (c) For every 3 hrs (d) every day [b]
57. The purpose of going as key man by mate in once in week is.....
- (a) To know the condition of the section (b) to see any encroachments

- (c) to check the work done by key man (d) All the above [d]
58. In LWR track Lowering of track should not exceed mm at a time.
 (a) 75 (b) 50 (c) 25 (d) 100 [a]
59. In LWR track Lifting of track should not exceed mm at a time
 (a) 75 (b) 50 (c) 25 (d) 100 [b]
60. While recording temperature at site during carrying maintenance works, if the temperature shows in Red colored zone on the rail thermometer, then what is the action to be taken?
 (a) Carry regular maintenance works (b) stop doing regular maintenance works
 (c) close the empty galas (d) introduce Hot Weather Patrolling [d]
61. While recording temperature at site during carrying maintenance works, if the temperature shows in Yellow colored zone on the rail thermometer, then what is the action to be taken?
 (a) Carry regular maintenance works
 (b) stop doing regular maintenance works & close the empty galas
 (c) introduce Hot Weather Patrolling
 (d) None of the above [b]
62. Track men are responsible for maintenance of track and performing various duties like.....
 (a) relieving Gateman/Keyman (b) patrolling
 (c) material leading / loading/ unloading (d) All the above [d]
63. At work spot during packing , the prime duty of track manwhile passage of a train.
 (a) discuss with mate and others (b) Can do what ever he wish
 (c) should observe loose packing of sleepers (d) All of the above [c]
64. At LC gate after closing the gate with long chains & stop boards, the gateman should stand at..... for passing the train
 (a) gate lodge (b) LC gate (c) behind the long chains (d) None [b]
65. The purpose of lubrication of Rail Joints
 (a) To identify cracks (b) for expansion& contraction of rail ends
 (c) to reduce wear on fishing planes (d) All the above [d]
66. While measuring track gauge, the RED reading shown in the Gauge –cum-level indicates....
 (a) Slack gauge (b) neat gauge (c) tight gauge (d) None [c]
67. In hot weather patrolling if patrolman notices a kink then he has to check --- sleepers on either side of kink for sound ness of packing
 (a) 30 (b) 50 (c) 100 (d) 200 [c]

68. Including approach and exit sleepers the number of sleepers in 1:12 turnout is
 (a) 54 (b) 67 (c) 83 (d) 96 [d]
69. In curved switches the tongue rail is ---- mm higher than the stock rail .
 (a) 2 (b) 4 (c) 6 (d) 8 [c]
70. While doing shallow screening/over hauling the depth of shoulder ballast to be screened below the sleeper level is
 (a) 50 mm (b) 75 mm (c) 100 mm (d) entire ballast upto formation level [d]
71. In the event of abnormal rainfall or storm during day or night, minimum who should on his own initiate / organize patrolling over the length affected, independently of other patrolling, if any, being done.
 (A) DEN (B) ADEN (C) Key man (D) Mate [d]
72. The walking speed of a Patrolman may be taken as
 (A) 4 Km/h (B) 5 Km/h (C) 3 Km/h (D) 6 Km/h (C)
73. On double line section when LWR/CWR exist on both roads - One Hot Weather patrolman for every -----length of UP and DN road.
 (A) 1 km (B) 2Km (C) 3Km (D) 4Km [a]
74. Check rail clearance at LC gate.....mm.
 (a) 41-44 (b) 44-48 (c) 51-57 (d) 48-51 [c]
75. The distance between consecutive stations in a curve..... mtrs.
 (a) 3 (b) 5 (c) 10 (d) 20 [c]
76. For measurement of Versine in a curve , chord length is taken as Mtrs.
 (a) 10 (b) 20 (c) 5 (d) 3 [b]
77. The Sleeper density is expressed as of track [a]
 (a) the number of sleepers per km (b) the number of sleepers per 100 m
 (c) the number of sleepers per 10 km (d) the number of sleepers per m
78. Cut liners shall be used with clip at fish plated Joint/ Glued Joint [a]
 (a) ERC J (b) ERC (c) Anti theft (d) None
79. How many types of patrolling are in vogue in Indian railways as per IRPMM [c]
 (A) 4 (B) 5 (C) 6 (D) 7
80. If a Patrolman who is due to arrive at a station does not turn-in time or does not turn up at all, the Station Master shall issue caution orders to all trains with SR of
 (A) 40 Km/h (B) 50 Km/h (C) 30 Km/h (D) 20 Km/h (A)

81. The maximum distance covered by a Patrolman should not normally exceed ----- Kilo meter in a day.
 (A) 15 (B) 10 (C) 20 (D) 25 (C)
82. The length of each patrol beat should not normally exceed
 (A) 15 (B) 10 (C) 5 (D) 25 (C)
83. Hot Weather Patrolling will be introduced, when the rail temperature rises above ---- on PSC sleeper track with sleeper density 1540 nos. Per km and above.
 (A) $t_d + 25^\circ \text{C}$ (B) $t_d + 10^\circ \text{C}$ (C) $t_d + 20^\circ \text{C}$ (D) $t_d - 30^\circ \text{C}$ (A)
84. Cold weather patrolling shall compulsorily be started when rail temperature goes below ----
 (A) t_d (B) $t_d + 10^\circ \text{C}$ (C) $t_d + 20^\circ \text{C}$ (D) $t_d - 30^\circ \text{C}$ (D)
85. Height gauges should be located at a minimum distance of _____ m from the gate post
 a) 6 (b) 8 (c) 10 (d) 20 [b]
86. Frequency of census at a level crossing is ___ years.
 (a) 1 (b) 5 (c) 3 (d) $2\frac{1}{2}$ [c]
87. Which Rail level will be taken as reference Rail in curves?
 (a) outer rail (b) inner rail (c) Left rail (d) Right rail [b]
88. Curve Board at each approach of a curve should be provided on the of the curve.
 (a) inside (b) outside (c) left side (d) right side (b)
89. Check-rails should be provided on curves having Radius
 (a) $\geq 8^\circ$ (b) $\geq 10^\circ$ (c) $\geq 6^\circ$ (d) $\geq 4^\circ$ (a)
90. In a LWR/CWR, two different rail sections are ----- [B]
 A) Permitted B) Not permitted C) None
91. Deficiency of ballast on LWR track during summer may result in (B)
 (A) Creep (B) Buckling (C) sinking (D) cracking

92. Minimum Ballast cushion in LWR under PSC sleeper is _----- (A)
A) 300mm b)250mm c) 200mm d) 150mm
98. Long welded rails LWR have Welded length greater than ____ on BG (C)
(A) 125mts (B)200mts (C)250mts (D) 500mts
93. Greasing of SEJ by Keyman to be done _____ (D)
(A) monthly (B) Weekly (C)Everyday (D) fort nightly
94. During cold weather patrolling, patrolman should look out for _____ (C)
A) Weld fractures B) Rail fractures c) Both A and B D) None of the above
95. During hot weather patrolling, patrolman should look out for _____ (A)
A) Sun kinks B) Gauge C) Uneveness D) None
- 96.Red zone in rail thermometer indicates (C)
A) work can be done B) work can not be done
C) introduce hot weather patrolling D) All above
97. Temperature in green zone indicates (D)
A) Cold weather patrolling B) Hot weather patrolling
C) Special attention D) Allow work in LWR /CWR
- 98.Temperature in between green & red zone indicates (B)
A) To start work B) No work to be done
C) Introduce Hot weather patrolling D) None of the above
99. While doing Through Packing of Track, ballast is opened out upto the end of the sleeper and on inside it isfrom the rail seat for B.G. [c]
A) 250 mm B) 350 mm C) 450 mm D) 500 mm
100. In through packing, ballast should be opened out on either side of rail seat to a depth of [D]
A) 15 mm B) 25 mm C) 35 mm D) 50 mm

101. Gauge tolerances for B.G on Straight track are..... [A]
- a. A) -6 mm to +6 mm B) -3 mm to + 6mm
 C) -6mm to + 15mm D) up to + 20 mm
102. Minimum distance between two or more push trolleys running together on the same line- [B]
- A) 250 m B) 100 m C) 200 m D) 150 m
103. Not more than Rail Dolleys should be worked in a group in any one block section [C]
- A) 4 B) 8 C) 6 D) 9
104. The person in-charge for the working of rail dolleys shall be a railway servant not lower in rank [C]
- A) JE/P.Way B) SSE/P.Way C) Key man D) Gang mate
105. All Engineering Indicators shall be placed on theside as seen by the Drivers except on CTC sections (Single line) [A]
- A) Left B) Right
 C) Centrally D) Oblique
106. Whistle Indicators(W/L) should be provided at a distance ofm. [c]
- A) 500 B) 400
 C) 600 D) 300
107. The normal life of Detonator is [B]
- A) 10 years B) 5 years
 C) 15 years D) 7 years
108. Safety Range of detonator is Mtrs. [D]
- A) 30 B) 20 C) 100 D) 45
109. There are.....no. of categories of Engineering works. [C]
- A) 1 B) 2
 C) 3 D) 4
110. Expand TMS [d]
- (a) Track Monitoring system
 (b) Track Machine system
 (c) Track mobility system
 (d) Track Management System
111. Trackmaintainer induction course duration is _____ [a]

122. During works of long duration one termination indicator bearing letters **T/G** should be located a distance equal to the length of longest [C]
 a) Express train b) passenger train c) goods train d) non of these
123. During works of long duration one termination indicator bearing letters **T/P** should be located a distance equal to the length of longest [B]
 a) Coal train b) passenger train c) goods train d) none of these
124. Shape of a Stop indicator board [B]
 a) square b) rectangle c) triangle d) round
125. Shape of a Speed restriction board [C]
 a) square b) rectangle c) triangle d) round
126. Shape of a Termination board [D]
 a) square b) rectangle c) triangle d) round
127. T/P on termination Board indicates [D]
 a) termination for passenger
 b) driver of passenger train can pickup normal speed from this point
 c) should be fixed at a distance of longest passenger train in that section
 d) all the above
128. The flagman should stand at a distance of mts after fixing in the line for Protection [C]
 a) 10 mts b) 20 mts c) 45 mts d) 29
129. For intermediate tracks on triple or multiple lines, engineering indicators shall be fixed between tracks to within mm from rail level [C]
 a) 100 b) 200 c) 300 d) 400
130. The bottom most parts of Caution & Speed indicators should be above rail level by [B]
 a) 1 metre b) 1.5 metres c) 2 metres d) 2.5 metres
131. The staff required for fixing hand signal of keyman / patrolman should be at a height of [C]
 (a) 3 feet (b) 4 feet (c) 5 feet (d) 6 feet
132. Stationary watch man should have book [B]
 (a) Patrol (b) Note (c) Key man (d) None
133. What are all the indicator boards to be provided ahead of speed restriction location [D]
 (a) Caution board (b) speed board (c) stop dead board (d) All the above.
134. What are all the indicator boards to be provided in rear of speed restriction location [A]
 (a) T/P & T/G boards (b) speed board (c) stop dead board (d) Caution board
135. While working with JCB / Plying of vehicle for earth work or any other works on track block is required when it works less than ----meters from centre line of track. [B]

- (a) 2.8 (b) 3.5 (c) 6 (d) 7.5

136. When doubling or tripling works are in progress barricading should be provided along side of track at a distance not less than ---- metres from centre line of nearest track.[B]

- (a) 2,8 (b) 3.5 (c) 6 (d) 7.5

137. In track works in case movement of vehicle is less than 6m but more than 3.5m away from track centre it is permitted when [D]

- (a) Presence of look out men{ authorized by Engineer in charge }with protection equipment
(b) Contractor supervisor
(c) Issuing of Whistle free or requisite caution order
(d) All of the above full filled.

138. Marking of USFD defects done with Color paint. [a]

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

139.OBS/OBSW , USFD marks to be watched during daily patrolling by.....till it is joggled fish plated.

- (a) Keyman (b) mate (c) patrolman (c) watchman [a]

140..... Liners are used in track circuited areas. [b]

- (a) Metal (b) GFN (c) combination (d) None

141. Use of Tapes should be avoided in track-circuited section [d]

- (a) Cloth (b) Fibre (c) Wood (d) metal

142. All rail joints should normally be lubricated once in a [b]

- A) Half year B) Year C) 2 Years D) 3 years

143.Minimum men required for Trolly..... [a]

- (a) 4 (b) 6 (c) 8 (d) 10

144. Every rail dolley shall be manned by not less than.....able bodied persons.

- (a) 3 (b) 2 (c) 4 (d) 6 [b]

145. Spherical washers are to be used on LH turn out for.....

- (a) LH stock rail & LH tongue rail (b) RH stock rail & RH tongue rail

- (c) RH stock rail & LH tongue rail (d) LH stock rail & RH tongue rail [d]