QUESTION BANK FOR P.WAY

Objective Questions

1. As a SSE/JE(Pway) (not- in-charge), foot inspection of his entire jurisdiction should be carried out once in _____ months. a) 1 b) **6** c) 12
2. As a SSE/JE(Pway) (in-charge), push trolley inspection of his entire jurisdiction with PSC sleeper should be carried out once in _____ months. a) **1** b) 6 c) 12
3. Curve is inspected once in ___ months in A route with PSC sleeper by JE/SE/P.Way in rotation. A) 4 B) 2 c) **6**
4. Schedule of inspection of monsoon patrolling by train is once in _____ for JE/II/P.Way. a) **fortnight** b) a month c) a week
5. ERC in _____ number of PSC sleepers have to be greased during key man's daily inspection when his entire length is with PSC sleeper a) 80 b) **20** c) 10
6. Tools and equipment with gang has to be inspected once in _____ by JE/P.way a) fortnight b) **a month** c) a week
7. Points and crossing on non running line has to be inspected once in _____ months by JE/SE on rotation a) **6** b) 3 c) 1
8. The SSE/JE(Pway) (in-charge), has to inspect the small track machines once in _____ . A) **a fort night** b) a month c) 3 months
9. Gang mate has to perform the key man patrolling once a _____. A) fortnight b) **week** c) month
10. If prima facie cause of accident is rail fracture, the fractured rail pieces are sent to _____ a) CMT/PER b) **RDSO** c) Rly Board
11. Chamfering of rail holes reduces stress concentration by _____ % a) **14** b) 24 c) 4
12. In need based system of USFD testing of rails, the interval between successive tests in the field will be after the passage of ____ subject to a maximum interval of 24 months. A) 5 b) **8** c)12
13. If flame cutting of rail is unavoidable, preheating of ____ mm on either side has to be done before cutting a) 500 b) **100** c) 300
14. Second coat in the anticorrosive treatment of rails will be given with _____ emulsion. A)black b) **bituminous** c) IS - 158
15. Combination joints are provided with _____ mm gap a) 6 b) 10 c) **0**
16. _____ is used for using wornout fish plates in the track a) **shim** b) saddle plate c) half moon washer
17. Rail with rolling mark 60 880 SAIL 0 XI / 2002 indicates _____ grade rail a) 60 b) **880** c) 0
18. Rail of 13 m length should be transported by ____numbers of dip lorries. (a) 1 (b) **2** (c) 13
19. Maximum permissible vertical wear for 60kg rail section ___ mm (a)12 (b)15 (c)**13**
20. 'E' route BG Track with annual GMT of more than 20 should have minimum rail section of _____ kg a) 52 kg 880 grade b) **60 kg** c) 52 kg 710 grade
21. ____ route in NE Railway is classified as 'D spl' route a. **GKC-BBK** b) BTT-ARJ c) RMU-KGM
22. IMR defective rails shall be replaced with in _____ days. A. 1 b.**3** c.15
23. DFW welds secured with joggled fish plates and clamps shall be replaced with in _____ days. A. 3 b. **15** c. 3 months
24. The frequency of SKV weld testing in sections having 40 GMT is once in _____ years. A. 2 b. **3** c.4
25. The frequency of rail testing in sections having 48 GMT is once in _____ months. A. 1.5 b.**2** c.3
26. The double rail tester of USFD machine is having _____ No. of probes. A.4 b. 5 c.**10**
27. Grooved rubber pad used on 60 kg PSC sleeper is T-___. A) 3706 b) 3703 c) **3711**
28. T 3707 GFN liners are used at _____ side when 52 kg rail is fixed on T2496 PSC sleepers in track circuited area a) **gauge** b) non gauge c) not applicable
29. In toe load testing of ERC if 20% of sample size or more records less than 600kg of toe load, then double the _____ . A) frequency of inspection b) sample size c) **both a & b**
30. Sleeper density of 1660 nos/km has a sleeper spacing of _____ cm a) 55 b) **60** c) 65
31. PSC sleeper is having _____ scrap value a. **0** b) less c) more
32. _____mm is the nominal gauge for new BG PSC sleepers a) **1673** b) 1676 c) 1679
33. GFN liner used for fixing 52 kg rail on T2495 PSC sleeper is _____ a) **T3702** b) T3706 (GF) c) T3707 (GF) & T3708 (NGF)
34. Greasing of ERC is carried out once in _____ months for normal area. A) 6 b) 12 c) **24**
35. Sleeper spacing on curved track marked on ____ rail (a) inner (b) **outer** (c) either inner or outer
36. Mass lubrication of ERCs is carried out by keeping ____ sleepers on either side intact (a) **15** (b) 10 (c) 30
37. Minimum ballast cushion for 22.1T axle load route is _____mm. a) 250 b) 300 c) **350**
38. Measured ballast stack are identified by _____ a) Sprinkling cement mortar b) **sprinkling lime** c)sprinkling sand
39. Ballast deficiency is assessed for deep screening work at 2-3 sleeper bay for every_____ a) **km** b) hectometer c) 2 km
40. ____ number of stacks can be collected in a Plot of a ballast depot a) 4 b) 2 c) **1**

41. Unloading of ballast at centre of track and at shoulder is done by using _____ wagons.
A) BKH b) BOB c) BOX d) BOBYN
42. Retention of ballast in sieve analysis is determined by _____ a) **Weight** b) Volume c) both a & b
43. Abrasion and impact value for ballast are tested for supply of ballast for every _____ cum
a) 1000 b) **2000** c) 5000
44. The bridge is classified as _____ Bridge when total linear water way is 350m
a. minor b. major c. **important**
45. Trolley refuges are provided for bridges having main spans less than 100m at every _____m
a) 200 b) **100** c) 50
46. ____ bearing plates can be used over girder bridges a) **canted** b) Anti creep c) special size
47. Converging of guard rails for BG track over girder bridge is laid for a length of _____ mm.
A) 3660 b) **4875** c) 1800
48. Clear spacing of bridge timber on BG new track should not be more than _____mm a) **450** b) 510 c) 200
49. ____ mm is the distance between guard rail and running rail of MG track over bridges .
A) 250 b) **200** c) 150
50. Hook bolts used for plate girder bridges are___ type a)Sloping leg b) **straight leg** c) any of the above
51. Clear spacing of bridge timber at rail joints on BG track should not be more than _____ mm
(a)500 (b)450 (c) **200**
52. The length of a BG bridge sleeper is outside to outside of girder flanges plus 305mm but not less than _____mm a) **2440** b) 2750 c) 3050
53. Minimum thickness of BG bridge sleeper excluding notching is _____ mm. (a)**150** (b)175 (c)200
54. As an alternative to wooden sleeper,_____ sleepers are used in railway steel girder bridges.
(a) steel trough (b) **steel channel** (c) CST-9
55. The size of auger used for fixing rail in Bridge timber is _____ mm a) 18 b) **20** c) 22
56. The PSC sleeper to RDSO Drg.no. T- 4088-4097 are used at the _____ of bridges.
A. center b. end c. **approaches**
57. The danger mark is painted in ____ colour in bridges a) yellow b) **red** c) white
58. TBTR is done in _____ bridges a) ballasted b) **girder** c) both a & b
59. Ballast penetration profiles should be obtained at _____ intervals.
A) **every TP** b) every km c) every hectometer
60. As per five step method increasing the ballast cushion even up to _____ mm by raising the track.
A) 250 b) **350** c) 450
61. The minimum thickness of blanket is _____ mm in ordinary clay soil. a) **300** b) 500 c) 1000
62. The recommended formation width for BG double line embankment is _____ mm.
a) 11550 b) **12150** c) 6850
63. The catch water drain should be provided _____ meter away from the edge of cutting. A) **2** b) 3 c) 5
64. The bank side slope should be _____ for good formation soil. A) **2:1** b) 1:2 c) 1:1
65. The slope of top of formation should be _____. a) 1 in 20 b) 1 in 60 c) **1 in 40**
66. Soil should be filled in layers of _____ cm thickness before consolidation. a) 15 b) **30** c) 45
67. Service tolerance of gauge is _____ mm for 500m radius curved BG track
a) -6 to +6 b) **-6 to +15** c) Up to + 20
68. A ramp of 1 in ____ has to be ensured during major lifting of track before allowing the train over the work spot a) 100 b) 200 c) **500**
69. Distance pieces to platform lines are provided for every _____m a) **30** b) 100 c) 50
70. Max. Permissible creep in IR is _____ a) 50 b) **150** c) 250
71. The Gauge is measured ___ mm below rail top in the track a) **13** b) 0 c) 19
72. Grease and k.oil are mixed in _____ proportion to form stiff paste for lubricating fishplate
a) **3 :2** b) 4:7 c) 1:1
73. _____ m length of track can be left unscreened in a day's (deep, screening) work A) 13 b) 100 c) **0**
74. Shallow screening of crib ballast is carried out up to ____mm below bottom of sleeper in machine maintained section a) 50-75 b) 25 - 50 c) **75-100**
75. The screen is inclined at an angle not less than _____ ° to vertical in deep screening work.
a) 30 b) 45 c) **60**
76. Serial number of sleepers begin at every _____. a) p.way section b) **km** c) gang length
77. Sighting of rail for lifting track is done by viewing ____ a) Top of rail table on gauge face side b) top of rail table on non gauge face side c) **bottom of rail table on non gauge face side**
78. Rails are identified as LH/RH along the _____ in case of single line section
a) traffic b) **increasing km** c) both a & b
79. _____ joints are not lubricated. a) **insulated** b) combination c) both a & b
80. Each gang chart is meant for _____ months a) 3 b) **6** c) 12
81. Pre tamping works are to be done by ___ in 3 tier system of maintenance
a) OMU b) MMU c) **sectional gangs**
82. ____ activity is not carried by TTM during tamping work a) packing b) aligning c) **boxing**
83. _____are used to find out crack in bottom of rail a) Mirror b) Magnifying glass c) **Both a & b**
84. In Deep screening process, the screen of size _____ mm is used for manual deep screening.
a) 50 x 50 b) **30 x 30** c) 45 x 45

85. ___ ballast is not screened in shallow screening a) crib b) shoulder c) **cushion**
86. Deep screening of plain track is carried out once in ____ years a) **10** b) 3 c) 2
87. The curve shall be realigned within _____ from the date of measurement.
a) a week b) fortnight c) **a month**
88. The curve is measured with versine to an accuracy of ____mm a) 2 b) **1** c) 5
89. The curve in BG A route track shall be measured on ____ m chord. A) 10 b) **20** c) 6
90. Minimum radius of a turn in curve in BG is ___m a) 165 b) 220 c) **350**
91. Cant gradient of 0.25% induces inbuilt twist of _____ mm/m a) 0.25 b) **2.5** c) 5
92. Super elevation difference between two consecutive stations on a BG curved track should not exceed _____ mm without CE's approval. a) **14** b) 28 c) 35
93. _____ type junction of gradients leads to bunching of vehicles. A) **sag** b) summit c) both a & b
94. Minimum radius of a vertical curve on Gr. D route is _____ m. a) **2500** b) 3000 c) 4000
95. New track laid over a BG curve of 6 degree shall have gauge up to _____mm a) **+10** b) +15 c) +20
96. On curves,_____ rail is taken as reference for longitudinal level. a) outer b) any c) **inner**
97. Reverse curve on BG high speed route should have a minimum straight of _____m between curves.
a) 30 b) **50** c) 10
98. Speed of goods train on T/O on 1 in 8 ½ of straight switch layout is ____kmph
a)**10** (b) 15 (c) 30
99. Maximum degree of BG curve is _____. (a) 15 (b) **10** (c) 5
100. _____ is provided on curve to balance the centrifugal force. A) **cant** b) shift c) cant excess
101. If a 1 in 12 turn out with curved switch takes off from the outside of BG curve of 350 m radius, the type of turn out will be _____ . A) **similar flexure** b) contra flexure c) symmetrical split
102. 1 in 8.5 Turn outs should not normally take off from _____ curve. A) **inside** b) outside c) any side
103. Equilibrium cant for minimum sectional speed + _____ = Actual cant.
(a)cant deficiency (b)**cant excess** (c) rate of change of cant
104. In IR, transition curve shape is _____ (a)**cubical parabola** (b)spiral (c)clothoidal
105. Mid stagger joints are provided on BG 13 m rail curved track of radius ___.
(a)**less than 400m** (b)more than 400m (c)more than 600m
106. Maximum permissible cant on BG Group D route is _____ mm a) 165 b) **140** c) 100
107. If versine of 100 mm is measured over 20 m chord on the circular curve, radius of the curve is designated as _____ m. (a)**500** (b)1000 (c) 1500
108. Versine in cm measured on ___ m chord of curve gives te degree of curve. a) 20 b) 6 c) **11.8**
109. Virtual transition length on BG is _____m a) **14.6** b) 13.7 c) 20
110. _____ mm/sec is the maximum rate of change of cant permissible on BG routes. A) 35 b) **55** c) 25
111. ____ Authority will be given by the gateman after closing and locking the LC gate against road traffic
a) **PN** b) LB c) look out caution
112. In an unmanned LC, _____ board for road users should be provided in the road approaches at 5m from the centre of nearest track. a) **Stop** b) caution c) speed
113. Census at LC shall be taken by ____ department only. A. engg b. personnel c. **none**
114. In case of an obstruction at LC, banner flag should be displayed at a distance of 5 m from _____.
(a) end of LC (b) **end of check rail** (c) end of gate lodge
115. Cleaning of flange way of check rails is done by ___ in UM LC a) gang mate b) GK c) **key man**
116. LC having TVU > 50000 is classified as ____ category a) B1 b) A c) **Special**
117. ____ gradient shall be provided on road surface within gates in LC a) **No** b) 1 in 30 c) 1 in 40
118. The census is taken once in ___ years a) 1 b) **3** c) 5
119. Heigth gauge is provided at a distance of ___m from the gate in LC a) 3 b) 5 c) **8**
120. Hot weather patrolling is introduced when the prevailing rail temperature falls above Td ____ ^{0}C.
A) +10 b) -20 c) **+20**
121. Manual packing in LWR track should be done, when the prevailing rail temperature is between ____^{0}C
(a) td + 20 and td – 30 (b) **td + 10 and td – 30** (c) td + 20 and td – 20
122. Glued joints used in LWR should be _____ type a) G3S b) **G3L** c) both a & b
123. The gradient shall not be steeper than 1 in ___ for laying LWR a) 50 b) **100** c) 25
124. The other thermometer is checked for accuracy with ___ type thermometer
a) dial b) **embedded** c) pen
125. Temporary destressing is not required for deep screening when prevailing rail temprature is < Td +____ ^{0}C
a) **+10** b) +20 c) +30
126. Rollers shall be placed at every __ sleepers during destressing a) 25 b) **15** c) 50
127. The shoulder ballast shall be heaped over ___ mm above top of sleeper for LWR track a) 50 b) **100** c) 150
128. Minimum level of supervision of renewing fastenings in LWR track with lifting is ___
a) key man b) **gang mate** c) JE
129. _____ Patrolling is introduced during civil disturbance.a) monsoon b) emergency c) **security**
130. Emergency patrol can be introduced by _____ of gang. a) key man b) **gang mate** c) track man
131. Beat length of each patrol man should not exceed _____ km. a) **5** b) 10 c) 15
132. The maximum walking speed of monsoon patrol man is _____ kmph a) 5 b) 8 c) **3**
133. Tapered washers are used in _____ a) built up crossing b) **CMS crossing** c) obtuse crossing

134. _____ mm is deducted from measured wear of 52 kg CMS Xing to get actual wear of Xing.
a) **2** b) 2.5 c) 0
135. Before reconditioning, _____crossing is preheated. a) **built up** b) CMS c) obtuse
136. Turn out curvature starts from actual toe of switch for _____switches
a) straight b) **curved** c) both a & b
137. _____ heel type of switch is most preferable. a) loose b) **fixed** c) two fit
138. The sleeper spacing of 1 in 12 fan shaped layout is marked on ____ rails only
a) **main line** b) turn out rails c) lead rails
139. _____type of electrodes are used for reconditioning of curved switches a) H3 b) H3A c) **both a & b**
140. The end bend of wing rail is called as _____ a) **flare** b) toe c) heel
141. LH tongue rail of RH curved switch BG turnout shall be _____ a) **curved** b) straight c) partly curved
142. Interlocked points are attended in presence of _____ staff. A) TRD b) mechanical c) **signal**
143. Turn in curve is measured on ____ m chords at ___ m interval. A) **6 & 3** b) 3 & 6 c) 20 & 10
144. The gauge at 150 mm behind nose of CMS Xing in fan shaped layout is ____ . A) 1676 b) **1673** c) 1679
145. The gap between lead rail and toe of CMS crossing is ___ mm. a) 6 b) 4 c) **0**
146. Obtuse crossing check rail is raised by____ mm over rail top table a) 13 (b) 39 (c) **25**
147. Heel divergence is _____ mm for BG 1 in 8 ½ curved switch turnout. A) 136 b) 175 c) **182.5**
148. Tongue rail table is _____ mm higher than stock rail table at heel of switch for thick web switch
a) 6 b) **0** c) 12
149. The gauge in ATS is _____ mm for 1 in 12 PSC fan shaped layout a) **1673** b) 1676 c) 1679
150. Stretcher bar is assembled by keeping ____the throw of switch a) full b) **half** c) quarter
151. The limiting vertical wear of 60 kg tongue rail is _____ mm of 1 in 12 fan shaped layout.
A) **8** b) 13 c) 10
152. The minimum gap between top of leading stretcher bar and bottom of stock rail of a new point shall be ___mm a) 5 b) **1.5** c) 0
153. Lubrication of rail joints comes under work of _____ (a) **short duration** (b) long duration (c) line block
154. Rail renewal is carried out with _____ protection (a) short duration (b) long duration (c) **line block**
155. RAW means _____ a) Rain affecting works b) Railway affecting water c) **Railway affecting works**
156. The accident due to failure of _____ is classified under K category. a) **P.Way** b) signal c) mechanical
157. Speed indicator is provided at __m from work spot when one speed restriction is in force
a) 600 b) 5 c) **30**
158. Stop indicator will be provided in the LC road approaches at 5m from the ___
a) gate b) **centre of nearest track** c) centre of road
159. Deep screening comes under work of _____ (a) short duration (b) **long duration** (c) line block
160. Speed indicator will be erected at a height of _____ m from rail level a) 1.65 b) 2.5 c) **2**
161. Termination indicator will be erected at a height of _____ m from rail level (a) 2.25 (b) **1.65** (c) 2.0
162. Caution indicator is provided at a distance of ___m from BG work spot. a) 600 b) 30 c) **1200**
163. Minimum level of supervision for rail dolley working is _____ a) JE b) Gang mate c) **key man**
164. Detonators can be used in main line for ___ years. a) **8** b) 17 c) 3
165. The caution indicator is provided at ___ m height above rail level. A) 1 b) 1.5 c) **2**
166. Engineering indicators are used for work of _____ duration. A) **long** b) short c) both a & b
167. Minimum check rail clearance of 52 kg CMS Xing used for PSC layout is _____ mm. a) **41** b) 44 c) 51
168. The minimum Check rail clearance at LC is ____ mm (a) 47 (b) **51** (c) 67 m
169. The Permissible throw of switch in new BG turnout is _____ mm. a) **115** b) 100 c) 95
170. Min. height of FOB at the centre of a BG track in electrified sections is _____mm.
a.5870 b. 6100 c.**6250**
171. Min. height of a BG high level passenger platform from rail level is _____mm a) **760** b) 840 c) 1035
172. SWR can be continued over bridge upto a span of _____ m for unsymmetrical condition.
A) 13.3 b) **6.1** c) 30.5
173. SWR shall not be laid over curved PSC sleeper track with Radius less than _____ metre
a) 500 b) **440** c) 875
174. Gap Survey is conducted once in _____ a) a month b) **a year** c) fortnight
175. The fish plated joints of SWR track at level crossing shall not be located with in ____ m from end of LC.
A) 3 b) 0 c) **6**
176. Gap survey shall be carried out when the rail temperature is in _____ trend only.
A) **rising** b) falling c) both a & b
177. Profiling and distribution of ballast is carried out by _____ machine a) **BRM** b) BCM c) PQRS
178. ___ number of insertions is given per sleeper by TTM when BG PSC sleeper track is lifted by 50 mm.
a) 1 b) **2** c) 3
179. Motorized trolleys in T-28 machine shall shift the loaded P&C to a maximum of _____ mm to avoid infringements a) 450 b) **300** c) 750
180. In smoothening mode of TTM working with four point lining method, the residual error ratio is 1: ____.
A) 3.14 b) **6.09** c) 1
181. The machine that pack 3 sleepers at a time is _____ a) Unimat b) CSM c) **Tamping Express**

182. Generally, in BCM working, the machine can screen the ballast for a width of ____ mm
a) 3400 b) 2750 c) **4100**
183. The tamping cycle for track having other than PSC sleeper is once in _____ years. A) 1 b) **2** c) 3
184. The dynamic gauge of auxiliary track is ___ mm in PQRS work. a) 1750 b) 1673 c) **3400**
185. Alignment correction can be made when UNIMAT work on _____ track only.
a) **main line** b) turnout c) any
186. Design mode of working of Tamping machines cause _____ residual error.
A) 1: 3.14 b) 1: 6.09 c) **zero**
187. ___ based method suitable for isolated attention in track monitoring a) **peak** b) SD c) both a & b
188. The BG track with section speed more than 110 kmph having > ___g location require attention
a) **0.15** b) 0.2 c) 0.1
189. OMS inspection for track with 100 kmph is once in ___ months a) 1 b) **2** c) 4
190. Minimum height of a 52 kg rail section for AT welding of rail joints is ____mm a) 156 b) **150** c) 153
191. _____ fuel is adopted for AT welding of rail joints. (a) Air - petrol (b) LPG-OXY (C) **both a & b**
192. If 880 grade rail has to be welded with 710 grade rail in unavoidable circumstances, welding portion to be used should be _____ grade. a) 1000 b) 710 c) **880**
193. During AT welding of rail joints using second hand rails , old AT weld and ____ mm length on either side should be removed.(a)85 (b) 100 (c) **150**
194. Gap for SKV type of AT weld is ___ mm (a) 20± 1 (b) **25± 1** (c) 30 ± 1
195. Fastenings of at least ___ sleepers on either side should be made free before welding in the track.
(a) 2 (b) 4 (c) **5**
196. At least _____ no. of supports should be provided on either side for cess welding (a) 5 (b) 2 (c) **10**
197. The tolerance for the finished welds of lateral alignment is _____ mm on 10 cm straight edge. A.+/- 1
b.+/- 0.5 c**.+/- 0.3**
198. The railway boundary stones are provided at every ___. a) 50m b) change in alignment c) **both a & b**
199. The Stock indent is prepared in _____ number of copies. A) 2 b) **6** c) 5
200. The accounts stock verification of P.WAY materials are conducted once in _____ years a) **1** b) 2 c) 3.