

## C&W Objective Question Bank

Fill in the blanks picking up the appropriate option.

- Riding Index of ICF Coach is ----- .  
(a) **3.5** (b) 4.78 (c) 5.8 (d) 2.2
- Maximum Speed of LHB Coach is ----- KMPH.  
(a) 120 (b) **160** (c) 110 (d) 130
- roller bearing is used in BTPN.  
(a) Cylindrical (b) Plan (c) **Cartage taper** (d) Ball
- POH of BOX N Wagon is done at the interval of ----- month.  
(a) 12 (b) 09 (c) 18 (d) **54**
- POH of ICF Coach is done at the interval of ----- month.  
(a) 24 (b) 12 (c) **18** (d) 30
- Axle Load of Non- AC coach is -----ton.  
(a) 16.0 (b) **13.0** (c) 20.3 (d) 18.3
- Minimum buffer height of coach from Rail level is ----- mm.  
(a) **1030** (b) 1105 (c) 900 (d) 1075
- Length of modified brake beam hanger in Indo-German project is ----- mm.  
(a) 325 (b) **235** (c) 250 (d) 150
- Maximum Flange thickness of worn wheel profile is ..... mm.  
(a) 22 (b) 16 (c) **25** (d) 28.5
- Roof sheet thickness in BCNA wagon is ----- mm.  
(a) 2.4 (b) 0.6 (c) **1.6** (d) 2.5
- Material of Floor sheet of BOXR wagon is -----  
(a) Mild Steel (b) Corton Steel (c) **Stainless Steel** (d) Non of them
- Wheel base of casnub bogie is ----- mm.  
(a) **2000** (b) 2400 (c) 1200 (d) 900
- Length of anchor link is ----- mm.  
(a) **451** (b) 500 (c) 580 (d) None of these
- Testing of alarm chain is done at ----- Kg weight.  
(a) 05 (b) **10** (c) 25 (d) 20
- Greasing of equalizing stay rod is done in----- schedule.  
(a) A (b) **B** (c) C (d) D

16. A dimension of high speed Coach is -----mm.  
 (a)  $16\pm 2$  (b)  $18\pm 2$  (c)  **$22\pm 2$**  (d) None of these
17. DCP Type fire extinguisher is suitable to extinguish ----- fire.  
 (a) Diesel (b) Electric (c) Petrol (d) **All**
18. There are.....Nos. of lavatory in a LHB coach  
 (a) 02 (b) **03** (c) 04 (d) 06
19. Minimum buffer height of goods wagon is ----- mm.  
 (a) **1030** (b) 1075 (c) 1105 (d) 995
20. Minimum Wheel dia of Casnub Bogie is ----- mm.  
 (a) 1000 (b) **906** (c) 1092 (d) 950
21. Condemn height of Elastomeric Pad is ----- mm.  
 (a) 40 (b) **42** (c) 46 (d) None
22. ----- bearing is used in UIC Bogie.  
 (a) **Cylindrical** (b) Spherical (c) CTRB (d) None of these
23. Permissible variation in Wheel dia of same casnub bogies of a wagon is ----- mm.  
 (a) 5 (b) 10 (c) **13** (d) 25
24. Permissible limit of sharp flange of wheel is ----- mm.  
 (a) 35 (b) 50 (c) 16 (d) **None of these**
25. ----- mm packing is used in Casnub Bogie to adjust CBC height.  
 (a) **37** (b) 25 (c) 35 (d) None of these
26. A dimension of BOXN is ----- mm.  
 (a)  $70\pm 2$  (b)  **$70+2-0$**  (c)  $50\pm 2$  (d)  $22\pm 2$
27. In empty condition of BOXN Piston stroke is -----mm.  
 (a)  $75\pm 10$  (b)  **$85\pm 10$**  (c)  $130\pm 10$  (d)  $60\pm 10$
28. BOXNHL feed pipe pressure is ----- Kg/Cm<sup>2</sup>  
 (a) 5 (b) **6** (c) 3.8 (d) None of these
29. Axle is checked by ----- .  
 (a) DPT (b) **UST** (c) Wheel gauge (d) None of these

30. Track gauge distance on a straight track is ----- mm.  
 (a) **1676±6** (b) 1600+2-1 (c) 1599 (d) None
31. Over hauling of Alarm chain system is done after ----- Month.  
 (a) **3** (b) 5 (c) 9 (d) None of these
32. Centre pivot of Casnub Bogie is made of -----  
 (a) Cast Iron (b) **Cast steel** (c) Mild Steel (d) Stainless Steel
33. Proof load Capacity of enhance screw coupling is ----- ton.  
 (a) 36 (b) 70 (c) **75** (d) 130
34. In one unit of BLC wagon there are ----- car A unit.  
 (a) 3 (b) 5 (c) **2** (d) 4
35. Maximum buffer height of goods wagon is ----- mm.  
 (a) 1030 (b) 1075 (c) **1105** (d) 995
36. Maximum Wheel dia of UIC bogie is ----- mm.  
 (a) **1000** (b) 990 (c) 1092 (d) 950
37. Free height of CC Pad is ----- .  
 (a) **114** (b) 36 (c) 56 (d) None of these
38. ----- bearing is used in casnub bogie.  
 (a) Cylindrical (b) Spherical (c) **CTRB** (d) None of these
39. Permissible Wheel dia difference of both casnub bogies of a wagon is -----mm.  
 (a) 5 (b) 10 (c) 13 (d) **25**
40. Permissible limit of Deep flange in wheel is----- mm.  
 (a) **35** (b) 50 (c) 28 (d) 22
41. 37 MM packing is used in 22 WM casnub bogie to adjust CBC height wheel  
 dia----- mm  
 (a) **924** (b) 900 (c) 905 (d) 950
42. A dimension of BTPN is----- mm.  
 (a)  $70 \pm 2$  (b)  **$70+2-0$**  (c)  $50 \pm 2$  (d)  $22 \pm 2$
43. Piston stroke of BTPN (empty condition) is ----- mm.  
 (a)  $70 \pm 10$  (b)  **$87 \pm 10$**  (c)  $130 \pm 10$  (d)  $117 \pm 10$
44. Brake pipe pressure is----- Kg/Cm<sup>2</sup>  
 (a) **5** (b) 6 (c) 3.8 (d) 4

45. ----- is checked with tyre defect gauge.  
(a) **wheel defect** (b) Buckle defect (c) CBC defect (d) door defect
46. Wheel gauge (distance between two wheels) is ----- .  
(a)  $1600\pm 2$  (b)  **$1600+2-1$**  (c) 1599 (d)  $1676\pm 3$
47. Riding index of LHB coach is ----- .  
(a) **2.75** (b) 2.0 (c) 4.8 (d) None of these
48. Friction coefficient of K type composite brake block is -----.  
(a) 1.4 (b) 2.8 (c) 1.6 (d) **0.25**
49. In one unit of BLC wagon there are ----- car B unit.  
(a) **3** (b) 5 (c) 2 (d) 4
50. ----- gms Grease is used in CTRB.  
(a)  **$455\pm 30$**  (b)  $250\pm 30$  (c) NIL (d) 1500
51. ----- roller bearing is used in BTPGLN Coach.  
(a) Cylindrical (b) Plan (c) **Cartage taper** (d) Ball
52. IOH of ICF Coach is done in the interval of ----- month.  
(a) 12 (b) **9** (c) 18 (d) 54
53. Limit of flat tyre in wagon is ----- mm.  
(a) 20 (b) 50 (c) 75 (d) **60**
54. Axle Load of AC coach is ----- Ton.  
(a) **16.3** (b) 13.3 (c) 20.3 (d) 18.3
55. Minimum buffer height of a wagon from Rail level is -----mm.  
(a) **1030** (b) 1105 (c) 900 (d) 1075
56. 'A' schedule of coaching stock is done after ----- month.  
(a) **01** (b) 03 (c) 09 (d) 12
57. Speed limit of A Class ODC during day is ----- kmph.  
(a) 100 (b) 110 (c) 90 (d) **40**
58. Minimum Flange thickness in worn wheel profile is ----- mm.  
(a) 22 (b) 16 (c) 25 (d) **20**
59. A- dimension of BOXN is ----- mm.  
(a) 85 (b) 22 (c) 16 (d) **70**
60. Material of Floor sheet of BOXNHL is -----  
(a) Mild Steel (b) Corton Steel (c) **IRSM 44** (d) None of these

61. Wheel base of UIC bogie is \_\_\_\_\_mm.  
(a) **2000** (b) 2400 (c) 2896 (d) none of these
62. Lateral and longitudinal guidance to wheel of ICF bogie is taken from .....  
(a) **Dashpot** (b) Spring (c) Side bearer (d) None of these.
63. E- dimension of BOXN is -----mm.  
(a) 255 (b) 300 (c) **555** (d) None of these.
64. Speed of Medical vane is fixed at ----- kmph .  
(a) **100** (b) 110 (c) 75 (d) 120
65. Permissible speed of 4 wheel tank wagon (in empty condition) is ..... kmph  
(a) 100 (b) **60** (c) 90 (d) 110
66. Piston stroke of BVZI is ----- mm.  
(a) 22 (b) **32** (c) 72 (d) None of these.
67. Length of LHB coach is.....mm.  
(a) **23540** (b) 22996 (c) 26740 (d) 24351
68. Maximum diameter of Axle mounted Disc brake in LHB coach is.....mm  
(a) 890 (b) **640** (c) 540 (d) None of these.
69. Thickness of brake pad in disc brake system is.....mm  
(a) 32 (b) 38 (c) **35** (d) 40
70. No. of brake cylinders in one LHB coach are .....  
(a) **08** (b) 04 (c) 18 (d) 16
71. No. of dump valve in one LHB coach are.....  
(a) 08 (b) 02 (c) 06 (d) **04**
72. Type of coupler used in LHB coach is.....  
(a) **H-type.** (b) HETA (c) Alliance-II (d) None of these.
73. Cylinder Piston stroke of LHB coach is.....mm  
(a) 32 (b) **10** (c) 15 (d) None of these.
74. Cylinder dia of disc brake system is-----inch.  
(a) 08 (b) 18 (c) **10** (d) 12
75. Capacity of auxiliary reservoir of LHB coach is.....litre  
(a) 100 (b) **125** (c) 200 (d) 150

76. Choke dia of PEAV of LHB coach is.....mm  
(a) 08 (b) **19** (c) 7.5 (d) None of these.
77. POH of LHB coach is done in the interval of.....months.  
(a) 12 (b) 18 (c) **36** (d) 48
78. Total no. of shock absorbers in fiat bogie are.....  
(a) 04 (b) 08 (c) 09 (d) **None of these**
79. No. of articulated arms in fiat bogie are.....  
(a) **04** (b) 08 (c) 06 (d) None of these.
80. Primary suspension used in fiat bogie is.....  
(a) **Double-nest coil spring** (b) single-nest coil spring (c) shock absorber (d) None of these.
81. Lateral & longitudinal guidance of fiat bogie is made by.....  
(a) Dashpot (b) **Articulated control arms** (c) side bearer. (d) None of these.
82. New Wheel dia of fiat bogie is.....mm  
(a) 940 (b) 825 (c) 1000 (d) **915**
83. Condemning wheel dia in FIAT bogie is.....mm  
(a) **845** (b) 813 (c) 915 (d) None of these
84. ....type of bearing is used in FIAT Bogie:  
(a) Spherical Roller Bearing (b) **CTRB** (c) Ball Bearing (d) None of these
85. Type of coach body shell used in hybrid coach is:  
(a) **ICF** (b) LHB (c) BEML (d) None of these
86. Type of bogie used in hybrid coach is:  
(a) ICF (b) FIAT (c) **Modified ICF** (d) None of these
87. FIAT bogie is capable to negotiate the curve of  $10^0$  at the speed up to:  
(a) 100 Kmph (b) **60 Kmph** (c) 40 Kmph (d) 30 Kmph
88. Air Spring working pressure in Hybrid coach is \_\_\_\_\_  $\text{Kg/cm}^2$ :  
(a) **6** (b) 5 (c) 4.8 (d) 3.5
89. Capacity of main reservoir of air spring system is \_\_\_\_\_ Liter.  
(a) 180 (b) 170 (c) **150** (d) None of these
90. Capacity of Auxiliary Reservoir used in air spring is \_\_\_\_\_ Liter .  
(a) 100 (b) 60 (c) 80 (d) **40**
91. Nos. of levelling valves fitted in one air spring bogie are:  
(a) **02** (b) 06 (c) 04 (d) 08

92. More than  $1.5 \text{ Kg/cm}^2$  pressure drop in air spring fitted train the restricted speed is permissible up to \_\_\_\_\_ Kmph:  
(a) 50 (b) 40 (c) **60** (d) 25
93. No. of Duplex check valve fitted in Air Spring bogie are:  
(a) **01** (b) 04 (c) 05 (d) None of these
94. During Proper pressure in air spring the position of leveling valve becomes  
(a) Vertical (b) **Horizontal** (c) Inclined (d) None of these
95. In Air Spring Bogie gap maintained between lower plank and upper plank is.....mm  
(a) 280 (b) 240 (c) 355 (d) **255**
96. Capacity of Intermediate Tank used for CDTS is .....ltr  
(a) 100 (b) **50** (c) 60 (d) 80
97. In CDTS supply of Air pressure is made through:  
(a) BP (b) AR (c) **FP** (d) None of these
98. Axle capacity of BOXNR wagon is \_\_\_\_\_ Tones:  
(a) 33.9 (b) 19.9 (c) **22.9** (d) None of these
99. Side panel thickness of BOXNR wagon is \_\_\_\_\_ mm.  
(a) **3.15** (b) 5.15 (c) 2.0 (d) 7.0
100. Floor Sheet thickness of BOXNR wagon is \_\_\_\_\_ mm.  
(a) 1.5 (b) **4.0** (c) 3.5 (d) None of these
101. Height of BOXNR wagon is \_\_\_\_\_ mm.  
(a) 2000 (b) 3125 (c) 1827 (d) **2127**
102. No. of side stanchions used in BOXNR wagon are:  
(a) 12 (b) **09** (c) 11 (d) None of these.
103. Floor sheet material used in BOXNR wagon is.....  
(a) IRSM-41 (b) Mild Steel (c) **IRSM-44** (d) None of these
104. H-type coupler is used in .....  
(a) **Coaching stock** (b) Wagon stock (c) Engine (d) none of these.
105. .... type of coupler is used in locomotive.  
(a) **AAR-'E'** (b) H-type (c) HTEA type (d) Alliance -II
106. Horizontal gripping in H-type coupler is.....mm  
(a) **+/-110** (b) +/-90 (c) +/-80 (d) +/-100

107. Vertical gripping in H-type coupler is.....mm  
 (a) +/-110 (b) +/-**90** (c) +/-80 (d) +/-100
108. ....Draft gear is used with HTEA coupler  
 (a) **RF-361** (b) HR-40-1 (c) HR-8-1. (d) none of these
109. In case of fully locked condition of knuckle in H-type coupler, Position of rib should be.....  
 (a) **Vertical** (b)Horizontal (c) 60° (d) 45°
110. Standard distance between knuckle nose & guard arm is.....mm  
 (a) **127** (b) 135 (c) 130 (d) None of these.
111. Permissible wear in knuckle nose is.....mm  
 (a) **10** (b) 08 (c) 15 (d) 06
112. CBC knuckle is divided into.....zones  
 (a) 3 (b) **4** (c) 2 (d) 5
113. Position of CBC knuckle broken from knuckle pivot pin hole is called.....  
 (a) A-zone (b) **B-zone** (c) C-zone (d) D-zone
114. Position of CBC knuckle nose broken after wear is called.....  
 (a) A-zone (b) B-zone (c) C-zone (d) **D-zone**
115. Function of auxiliary anticreap is done by.....  
 (a) **Lever connecting nose** (b) locking piece (C) knuckle thrower(d) anti rotation lug
116. Size of anti rotation lug is.....mm  
 (a) **210 X 16X 16** (b) 220X16X16 (c) 235X12X12 (d)310X16X16
117. CBC control gauge No. 3 is used to detect the diffect of.....  
 (a) **Knuckle** (b) locking piece (c) knuckle thrower (d)toggle
118. Capacity of RF-361 draft gear is.....Kgm  
 (a) 5385 (b) **5725** (c) 6200 (d) 6000
119. Capacity of MK-50 draft gear is.....Kgm  
 (a) **5385** (b) 5725 (c) 6200 (d) 6000
120. In wagon stock during service Maximum slack permitted in CBC is.....mm.  
 (a) 12 (b) 19 (c) **25** (D) None of these.
121. Stroke of H-type coupler in tension position is.....mm.  
 (a) 58 (b) **60** (c) 65 (d) 42
122. Stroke of H-type coupler in compressed position is.....mm.  
 (a) **80** (b) 60 (c) 65 (d) 42



123. Revised codal life of blanket used in linen is.....months.  
 (a) 14 (b) **48** (c) 60 (d) 30
124. Quality of linen to be inspected.....percentage after receiving washed linen.  
 (a) 1 (b) **2** (c) 3 (d) 5
125. Slackless drawbar is used in.....wagon  
 (a) **BLC** (b) BOXNHA (c) BOXNEL (d) BOXNHL
126. Helical springs are used in.....draft gear.  
 (a) **MK-50** (b) RF-361 (c) HR-40 (d) None of these.
127. Rehabilitation of coaching stock is carried out between .....
- (a) 10 to 15 years (b) **12 to 15 years** (c) 15 to 18 years (d) None of these.
128. The periodicity of pest control in AC coaches is.....  
 (a) **15 days** (b) 7 days (c) 1 month (d) None of these.
129. Coach holding capacity of a coaching depot is.....  
 (a) Primary Coaches (b) Secondary coaches  
 (c) **Primary + 50% of Secondary coaches** (d) None of these.
130. Side bearer oil level is checked at the interval of .....
- (a) 15 days (b) one month (c) Two month (d) **None of these.**
131. Dirt collector should be cleaned at the interval of .....
- (a) **one month** (b) Two month (c) Three month (d) None of these.
- 132..... Oil is used in dashpot guide?  
 (a) Servo RR-3 (b) **Servoline 68** (c) Lithium base grease (d) None of these.
133. The standard thickness of compensating rings is.....  
 (a) 2 mm (b) **6 mm** (c) 4 mm (d) 8 mm
134. Difference of Hardness of both wheels on the same axle should not be more than.....  
 (a) 70BHN (b) **35 BHN** (c) 65 BHN (d) 45 BHN
135. Total length of ICF-axle is .....
- (a) 2310+0.5/-0.0 (b) **2316+0.5/-0.0** (c) 2318+0.5/-0.0 (d) None of these.

136. On ICF journal, a taper should not exceed.....mm.  
(a) 0.010/0.015 (b) **0.015/0.010** (c) 0.010/0.025 (d) None of these.
137. The wheel gauge should be measured on.....  
(a) **Off load condition** (b) Loaded wagon (c) Empty wagon (d) None of these.
138. Types of side bearers fitted in CASNUB 22 HS bogie .....  
(a) metal CC type (b) **Spring loaded CC type side bearer & PU type**  
(c) Roller Type (d) None of these.
139. The diameter of buffer plunger face of ICF coaches is.....  
(a) 552 mm (b) **457 mm** (c) 493 mm (d) 510 mm
140. The distance between two buffers at one end.....  
(a) **1956 mm** (b) 1952 mm (c) 1976 mm (d) 1992 mm
141. The ICF buffer plunger is made of.....  
(a) Mild Steel (b) **Cast Steel** (c) Cast iron (d) None of these.
142. Water tank capacity of ICF coach is.....  
(a) **1600 liter** (b) 1800 liter (c) 1700 liter (d) None of these.
143. The capacity of control reservoir of passenger coach is.....  
(a) 6 litre (b) 7 liter (c) **9 liter** (d) None of these.
144. After reaching on a accident site first step to .....  
(a) prima facie cause of accident (b) First aid of injured (c) **protection of site** (d) arranging food.
145. Work of Control reservoir in air brack system is.....  
(a) To control BP pressure (b) **To control DV valve** (c) To control Brack system (d) None of these.
146. The capacity of control reservoir in Goods Stock is.....  
(a) **6 litre** (b) 7 liter (c) 9 liter (d) **None of these.**
147. Brack power certificate issued for Premium rakes is valid for.....  
(a) 7+/-4 dayes (b) 10+/-2/o dayes (c) 15+/-3 dayes (d) **None of these.**
148. The colour of BPC of CC rake is.....  
(a) **Yellow** (b) Red (c) Green (d) None of these.
149. The colour of BPC of Premium rakes is .....  
(a) Yellow (b) Red (c) **Green** (d) None of these.

150. A category depot will issue BPC of CC rake valid up to.....  
 (a) 4500Km (b) 7500 Km (c) **6000Km** (d) None of these.
151. Special A category depot will issue BPC of CC rake valid up to.....  
 (a) 4500Km (b) **7500 Km** (c) 6500Km (d) None of these.
152. A category depot will issue BPC of CC rake valid .....  
 (a) **30 days** (b) 35 days (c) 45 days (d) None of these.
153. Special A category depot will issue BPC of CC rake valid .....  
 (a) 30 days (b) **35 days** (c) 45 days (d) None of these.
154. The BPC of ballast train is valid for.....  
 (a) **30 days** (b) 15 days (c) 7 days (d) None of these.
155. .... is the Maintenance manual of Casnub bogie  
 (a) G 97 (b) **G95** (c) G 72 (d) None of these.
156. The Maintenance manual of BOXN wagon fitted with Casnub bogie.....  
 (a) G 97 (b) G95 (c) **G 70** (d) None of these.
157. The time of overcharged protection in control chamber of coaching stock is.....  
 (a) **25 sec** (b) 30 sec (c) 45 sec (d) None of these.
158. Working pressure of BTPN safety valve is.....  
 (a) **1.4 kg/cm<sup>2</sup>** (b) 2.1 Kg/cm<sup>2</sup> (c) 4.1 Kg/cm<sup>2</sup> (d) None of these.
159. Automatic twist locks used in BLC wagon.....  
 (a) 7 (b) **8** (c) 9 (d) None of these.
160. Force required to lock automatic twist lock of BLC wagon is.....  
 (a) **600Kg** (b) 700Kg (c) 800kg (d) None of these.
161. Force required releasing automatic twist lock of BLC wagon is.....  
 (a) 600Kg (b) 700Kg (c) 800kg (d) **1000kg**.
162. Failure of locomotive is the ..... class of accident.  
 (a) **J** (b) N (c) E (d) P.
163. If gauge is found more than 1682 mm it is termed as.....  
 (a) **Slack gauge** (b) Standard gauge (c) Tight gauge (d) Short gauge.
164. As per accident manual accidents are classified in 16 categories from A to R excluding.....  
 (a) B & D (b) **I & O** (c) P & Q (d) J & K
165. .... does not cover under definition of cattle as per accident Manual.  
 (a) Cow (b) Elephant (c) Buffalo (d) **Donkey**

166. Rate of variation in cross level per meter is called

- (a) **Twist** (b) Creep (c) Cant (d) Buckling

167. The longitudinal movement of rails in the track is called----

- (A) Twist (b) Buckling (C) **Creep** (d) Cant

168. Cant or super elevation is provided at.....

- A) Straight track (b) Left curve only (c) Right curve only (d) **Curves**

169. Clearance of check rail on the curves in BG.....

- (a) 30mm (b) 36mm (c) **44mm** (d) 50mm

170. Tack Gauge is measured.....mm below the rail top

- (a) **13mm** (b) 10mm (c) 14mm (d) 08mm

171. If gauge is found less than 1670 mm on straight track is termed as.....

- A) Slack gauge (b) Standard gauge

- (c) **Tight gaurd** (d) Short gauge.

## Answers.

1.	A	41.	A	81.	B	121.	B	161.	D
2.	B	42.	B	82.	D	122.	A	162.	A
3.	C	43.	B	83.	A	123.	B	163.	A
4.	D	44.	A	84.	B	124.	B	164.	B
5.	C	45.	A	85.	A	125.	A	165.	D
6.	B	46.	B	86.	C	126.	A	166.	A
7.	A	47.	A	87.	B	127.	B	167.	C
8.	B	48.	D	88.	A	128.	A	168.	D

9.	C	49.	A	89.	C	129.	C	169.	C
10.	C	50.	A	90.	D	130.	D	170.	A
11.	C	51.	C	91.	A	131.	A	171.	C
12.	A	52.	B	92.	C	132.	B		
13.	A	53.	D	93.	A	133.	B		
14.	B	54.	A	94.	B	134.	B		
15.	B	55.	A	95.	D	135.	B		
16.	C	56.	A	96.	B	136.	B		
17.	D	57.	D	97.	C	137.	A		
18.	B	58.	D	98.	C	138.	B		
19.	A	59.	D	99.	A	139.	B		
20.	B	60.	C	100.	B	140.	A		
21.	B	61.	A	101.	D	141.	B		
22.	A	62.	A	102.	B	142.	A		
23.	C	63.	C	103.	C	143.	C		
24.	D	64.	A	104.	A	144.	C		
25.	A	65.	B	105.	A	145.	B		
26.	B	66.	B	106.	A	146.	A		
27.	B	67.	A	107.	B	147.	D		
28.	B	68.	B	108.	A	148.	A		
29.	B	69.	C	109.	A	149.	C		
30.	A	70.	A	110.	A	150.	C		
31.	A	71.	D	111.	A	151.	B		

32.	B	72.	A	112.	B	152.	A
33.	C	73.	B	113.	B	153.	B
34.	C	74.	C	114.	D	154.	A
35.	C	75.	B	115.	A	155.	B
36.	A	76.	B	116.	A	156.	C
37.	A	77.	C	117.	A	157.	A
38.	C	78.	D	118.	B	158.	A
39.	D	79.	A	119.	A	159.	B
40.	A	80.	A	120.	C	160.	A