



# KD Campus Pvt. Ltd

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

## Answer-key & Solution

SSC JE (Mechanical)  
MOCK -(96)  
Date 6.5.2017

|       |       |       |        |        |        |        |        |
|-------|-------|-------|--------|--------|--------|--------|--------|
| 1. C  | 26. * | 51. D | 76. A  | 101. B | 126. B | 151. C | 176. A |
| 2. D  | 27. B | 52. C | 77. C  | 102. A | 127. B | 152. A | 177. B |
| 3. C  | 28. A | 53. D | 78. A  | 103. D | 128. C | 153. B | 178. C |
| 4. D  | 29. B | 54. A | 79. D  | 104. D | 129. D | 154. C | 179. C |
| 5. D  | 30. C | 55. D | 80. D  | 105. A | 130. C | 155. D | 180. D |
| 6. A  | 31. A | 56. B | 81. D  | 106. A | 131. A | 156. C | 181. A |
| 7. D  | 32. B | 57. A | 82. A  | 107. B | 132. A | 157. C | 182. A |
| 8. B  | 33. C | 58. C | 83. B  | 108. D | 133. D | 158. A | 183. C |
| 9. D  | 34. D | 59. D | 84. B  | 109. A | 134. C | 159. C | 184. B |
| 10. B | 35. C | 60. B | 85. B  | 110. D | 135. B | 160. B | 185. A |
| 11. C | 36. B | 61. A | 86. A  | 111. C | 136. D | 161. D | 186. A |
| 12. A | 37. C | 62. D | 87. D  | 112. C | 137. B | 162. D | 187. A |
| 13. D | 38. A | 63. D | 88. C  | 113. C | 138. C | 163. A | 188. B |
| 14. D | 39. B | 64. B | 89. D  | 114. A | 139. B | 164. D | 189. B |
| 15. B | 40. C | 65. C | 90. A  | 115. C | 140. D | 165. A | 190. A |
| 16. A | 41. D | 66. A | 91. A  | 116. D | 141. C | 166. C | 191. B |
| 17. D | 42. D | 67. D | 92. C  | 117. D | 142. A | 167. B | 192. A |
| 18. B | 43. D | 68. C | 93. C  | 118. B | 143. D | 168. D | 193. D |
| 19. D | 44. D | 69. C | 94. C  | 119. C | 144. A | 169. D | 194. B |
| 20. A | 45. A | 70. D | 95. D  | 120. A | 145. C | 170. A | 195. D |
| 21. C | 46. C | 71. B | 96. C  | 121. B | 146. A | 171. C | 196. D |
| 22. D | 47. B | 72. D | 97. D  | 122. B | 147. A | 172. D | 197. D |
| 23. B | 48. A | 73. B | 98. C  | 123. B | 148. D | 173. A | 198. D |
| 24. A | 49. D | 74. C | 99. D  | 124. B | 149. B | 174. B | 199. A |
| 25. A | 50. B | 75. C | 100. B | 125. B | 150. A | 175. A | 200. B |

**Note :** If your opinion differ regarding any answer, please message the mock test and Question number to 9560620353

**Note :** If you face any problem regarding result or marks scored, please contact : 9313111777

**SOLUTION SSC JE (Mechanical) MOCK TEST no. 96**

1. (C) Forecast is related to future. In the same way regret is related to Past.  
2. (D) Breeze is related to cyclone. In the same way Drizzle is related to Downpour

3. (C)  $B P M : G N J :: V M G : A K D$

|    |    |
|----|----|
| +5 | +5 |
| -2 | -2 |
| -3 | -3 |

4. (D)  $6 : 222 :: 7 : 350$

$6^3 + 6 = 222$        $7^3 + 7 = 350$

5. (D) Much is related to many. In the same way Measure is related to count.  
6. (A) All have an Indian National Park except sangpo.  
7. (D)

|         |        |        |        |
|---------|--------|--------|--------|
| K P     | B Y    | D W    | H U    |
| 11 + 16 | 2 + 25 | 4 + 23 | 8 + 21 |
| 27      | 27     | 27     | 29     |

All are opposite letters except option 'D'

8. (A) All are multiple of 19 except 306  
9. (D) All option solve in the following way-  
(Ist number)  $\times 3 + 5 =$  IInd number  
Except  $10 : 54$   
 $10 \times 5 + 4 = 54$

10. (B) Mustard is an oil seed.  
(11-15):

|         |        |                   |
|---------|--------|-------------------|
| SOUND   | ikmp   | A $\rightarrow$ v |
| ADDRESS | bloppv | C $\rightarrow$ j |
| CRUX    | cjmv   | D $\rightarrow$ o |
| NET     | abi    | N $\rightarrow$ i |
| CRONY   | ijktv  | S $\rightarrow$ p |
| CROWDY  | jkgot  |                   |

11. (C) With the help of common letters, we find the code.

16. (A)  $7 \quad 17 \quad 40 \quad 149 \quad 436$

$\times 3 - 11$        $\times 3 - 11$   
 $\times 4 - 11$        $\times 4 - 11$

17. (D)  $4 \quad 8 \quad 28 \quad 80 \quad 244 \quad 728$

$3^1 + 1$     $3^2 - 1$     $3^3 + 1$     $3^4 - 1$     $3^5 + 1$     $3^6 - 1$

18. (B)  $1000 \quad 1100 \quad 990 \quad 1089 \quad 980.1$

$+10\% \text{ of } 1000$  |  $-10\% \text{ of } 1100$  |  $+10\% \text{ of } 990$  |  $-10\% \text{ of } 1089$

19. (D)    A D A C B    B D C C

1 3    1 2 4 2         

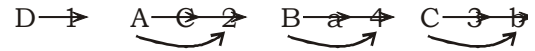
a    b    c d d c a a

B  $\rightarrow$  2  $\rightarrow$  d  
C  $\rightarrow$  1  $\rightarrow$  a  
A  $\rightarrow$  3  
D  $\rightarrow$  4  $\rightarrow$  c

20. (A) B       D       C A B D A C B

      4 1 3 2             1 2 3 4

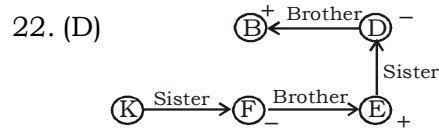
a    a    b c    c            



21. (C) Son-in-law of my friend's mother = My friends

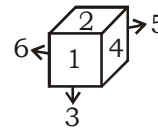
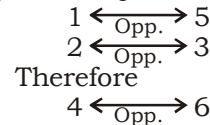
husband

Their daughter = My friend's daughter  
i.e my niece

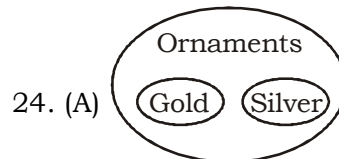


Hence, we can't say about relationship of K to B. K is either brother or sister of B

23. (B) In this Question



But opposite face will never be adjacent to each other  
 $\therefore$  Option 'B' is possible.



25. (A)

|     |    |     |
|-----|----|-----|
| 17  | 24 | 13  |
| 14  | 6  | 16  |
| 117 | 70 | 102 |

$(17 \times 14) \div 2 = 119$   
 $119 - 2 = 117$   
 $(24 \times 6) \div 2 = 72$   
 $72 - 2 = 70$

Similarly,

$(13 \times x) \div 2 = \frac{13x}{2}$

$\frac{13x}{2} - 2 = 102$

$\Rightarrow \frac{13x - 4}{2} = 102$

$\Rightarrow x = 16$

$\Rightarrow 13x - 4 = 204$

$\Rightarrow 13x = 208$

$\Rightarrow x = 16$

26. (\*)

|   |   |   |
|---|---|---|
| $\begin{array}{c} 3 \\ 2 \text{ (193) } 4 \\ 5 \\ (3+4+5+2)^2-3 \\ 196-3=193 \end{array}$ | $\begin{array}{c} 7 \\ 3 \text{ (321) } 6 \\ 2 \\ (7+6+2+3)^2-3 \\ 324-3=321 \end{array}$ | $\begin{array}{c} 4 \\ 6 \text{ (438) } 8 \\ 3 \\ (4+8+3+6)^2-3 \\ 441-3=438 \end{array}$ |
|---|---|---|

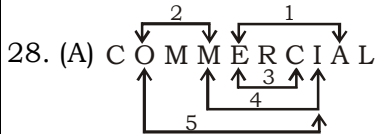
27. (B)

$$72 \div 6 + 3 \times 5 - 3 = 85$$

$$72 - 6 \div 3 + 5 \times 3 = 85$$

$$72 - 2 + 15 = 85$$

$$85 = 85$$



Five pair of letters are possible

29. (B) For Non-leap year

|        |     |     |       |       |     |      |
|--------|-----|-----|-------|-------|-----|------|
| Month- | Jan | Feb | March | April | May | June |
| code - | 0   | 3   | ③     | 6     | 1   | 4    |

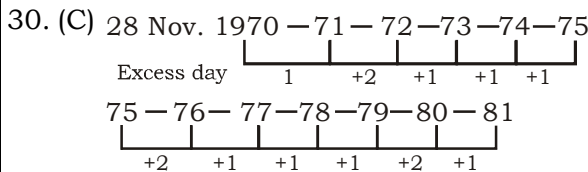
|        |      |     |      |     |     |     |
|--------|------|-----|------|-----|-----|-----|
| Month- | July | Aug | Sept | Oct | Nov | Dec |
| code - | 6    | 2   | 5    | 0   | ③   | 5   |

For a leap year

|        |     |     |       |       |     |      |
|--------|-----|-----|-------|-------|-----|------|
| Month- | Jan | Feb | March | April | May | June |
| code - | 0   | 3   | ④     | 0     | 2   | 5    |

|        |      |     |      |     |     |     |
|--------|------|-----|------|-----|-----|-----|
| Month- | July | Aug | Sept | Oct | Nov | Dec |
| code - | 0    | 3   | 6    | 1   | ④   | 6   |

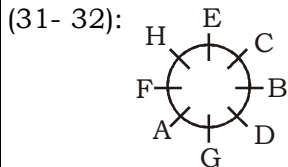
The calendar of March and November will be same because the codes of both the months are same.



Total excess days = 14

$$\frac{14}{7} = 2$$

Hence next birthday on Sunday will come in the year 1981.



33. (C) Let the number of persons = number of horses =  $x$

The number of persons walking =  $\frac{x}{2}$

and number of horses walking =  $x$

Number of legs of person = 2

and number of legs of one horses = 4

Again,  $\left(\frac{x}{2} \times 2\right) + (x \times 4) = 70$

or,  $x + 4x = 70$

or,  $5x = 70$

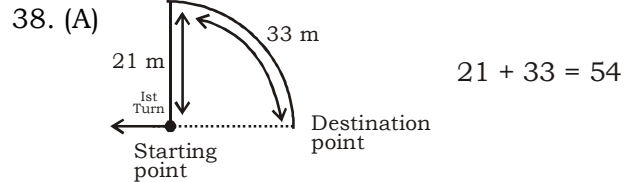
$$\Rightarrow x = \frac{70}{5} = 14$$

Hence, number of horses = 14

34. (D)  $0 \times 1 \times 2 \times 3 \times 4 \times 5 \times 6 \times 7 \times 8 \times 9 = '0'$

36. (B) Only II is Implicit

37. (C) neither I nor II follow.



39. (B) Both hands of a clock make an angle of  $90^\circ$  twice in one hour but between 2 and 4 this is possible only 3 times

So,  $1 \leftrightarrow 2 \leftrightarrow 3 \leftrightarrow 4 \leftrightarrow 5$

$$2 + 3 + 2$$

$$= 7 \text{ times}$$

41. (D) No such number is there.

197.(D) According to Ernst - Merchant theory

$$\phi = \frac{\pi}{4} - \frac{\beta}{2} + \frac{\gamma}{2}$$

$$2\phi + \beta - \gamma = 90^\circ$$

$$\phi = 22.8^\circ$$

$$\gamma = 75^\circ$$

$$(2 \times 22.8) + \beta - 75^\circ = 90^\circ$$

$$\beta = 119.4^\circ$$

198.(D)  $C = VT^n$

$$n = 0.25 \text{ or } \frac{1}{4}$$

$$V_1 = V$$

$$V_2 = \frac{V}{2}$$

$$V_1 \times T_1^n = V_2 \times T_2^n$$

$$V_1 \times T_1^{0.25} = \frac{V}{2} T_2^{0.25}$$

$$T_2 = 16T_1$$