Answer-key & Solution

SSC JE (Civil)
Practice Set-12

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

Note : *If your opinion differ regarding any answer, please message the mock test and Question number to 8375805483*

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

SOLUTION SSC JE (Civil) Practice Set-12

1. (C) As for sewing with the 'Needle', Thread' is used. Similarly, to write with 'Pen', 'Ink' is used.

2. (B) As 'Money' is transacted through 'Bank'. Similarly, 'Goods' are transported through 'Transport'.

3. (B) As 'Justice' is done in 'Court'. Similarly, 'Education' is imparted in 'School'.

4. (C) As 'January' and 'December' are the first and last months of the year. Similarly, 'A' and 'Z' are the first and the last letters of English Alphabet.

5. (C) H K S Q : A B C D : : **J H P S** : W X Y Z
(opp.)

6. (A) As Beautiful and Awful are opposite. Similarly, Peace and War are opposite.

7. (A) 0814 : 1526 : : 1623 : 2335
   +712   +712

8. (D) As Island is a piece of land surrounded by water on all side. Similarly, Oasis is a pond of water in a Desert.

9. (C) 248 : 3 : : 328 : **4**
   24÷8   32÷8

10. (B) As, 'Scissors' cuts 'Cloth'. Similarly, 'Razor' cuts "Beard".

11. (C) All others come under the category of Jewellery.

12. (A) All others are metals.

13. (A) All others are some relevant activities.

14. (D) Except moon, all others are planets. Moon is a Satellite.

15. (D) Except option D, all others are work and their related work fields.

16. (D) (A) 32 — 41   (B) 62 — 44
        3+2=5   4+1=5   6+2=8   4+4=8
    (C) 46 — 28   (D) 33 — 56
        4+6=10 2+8=10   3+3=6   5+6=11

17. (C) 'UVWX' are four consecutive alphabet. The same relationship is not found in others.

20. (A) (A) I J N R   (B) Z C F I
           +1 +4 +4   +3 +3 +3
        (C) Q T W Z   (D) G J M P
           +3 +3 +3   +3 +3 +3

21. (B) It takes 22 seconds to ring 12 dongs

    Time taken to ring 1 dong $= \dfrac{22}{12-1} = \dfrac{22}{11}$

    = 2 seconds

    Time taken to ring 6 dongs = (6-1)×2 =10

22. (D) Order of bags with respect to weight-

    S > T > W > V

23. (A) Arrangements as per question:

    8 → **7** → any other digit except 8

    8, **8, 7, 7**, 8, 8, 7, **8, 7, 7**, **8, 7, 7**, 8, 8, 7, 8

24. (D) B   D   A   F   C   G   E

25. (A) Rahul Ravi Abhishek Ranjan Kaushik Saket Gautam
    Left ←————————————→ Right

    Ravi is between Rahul and Abhishek.

26. (D) a **b** a b **c** / b c b c **a** / c a c a **b**

27. (D) K D W   M G T   O J Q   **Q M N**
    +2   +3   -3   +2   +3   -3

28. (A) 33, 28, 24, **21**, 19, 18
$\quad$ −5 $\quad$ −4 $\quad$ −3 $\quad$ −2 $\quad$ −1

29. (C) 6, 10, 18, 34, **66**
$\quad$ ×2−2 $\quad$ ×2−2 $\quad$ ×2−2 $\quad$ ×2−2

30. (A) 4, 8, 12, 24, 36, **72**
$\quad$ ×3 (8→24) ×3 (12→36)
$\quad$ ×3 (4→12) ×3 (8→24)

31. (B) Day on 1 March 1997 = Friday

$\quad$ Day on 1 March 2000

$\quad\quad$ = Friday +[{(2000−1997) + leap years}]

$\quad\quad$ = Friday + [(3 + 1)]

$\quad\quad$ = Friday + 4 = Tuesday

32. (D) In the given given formats '2' and '3' are common. Hence, as per rule number '6' will be opposite to '5'.

33. (D)
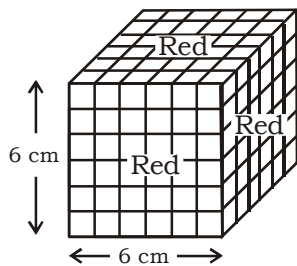
Any of the small cubes can have maximum of three sides coloured. Hence, there will be no such cube whose more than three sides will be red in colour.

34. (A)

35. (B)
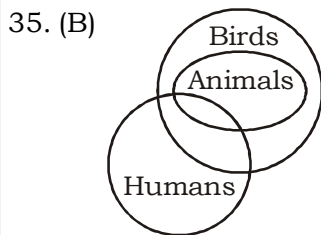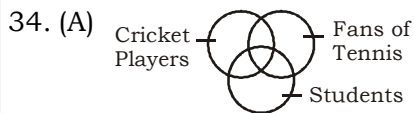
36. (D) 30 × 5 − 4 ÷ 10 + 5 = 41

$\quad$ Changing the notations as per question

$\quad\quad$ 30 ÷ 5 + 4 × 10 − 5 = 41

$\quad\Rightarrow$ 6 + 40 − 5 = 41

$\quad\Rightarrow$ 46 − 5 = 41

37. (*)

38. (C)

| '−' Female |
| '+' Male |
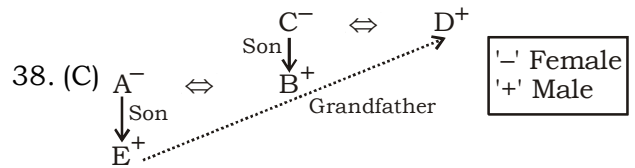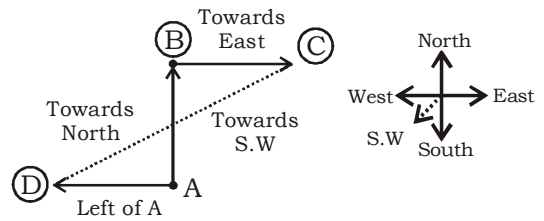
40. (C) $\quad$ R = 2S ....(i)

$\quad\quad$ R − 10 = 4 (S − 10) ....(ii)

$\quad$ Taking R as 2S

$\quad$ 2S − 10 = 4 (S − 10)

$\quad$ 2S − 10 = 4S − 40

$\quad$ 2S = 30

$\quad$ S = 15 yrs

$\quad$ R = 2S

$\quad$ R = 2 × 15 = 30 yrs

41. (D) Words formed with the letters SDEU

$\quad\Rightarrow$ USED, DUES and SUED

42. (C)

Figure $\quad\quad$ Image
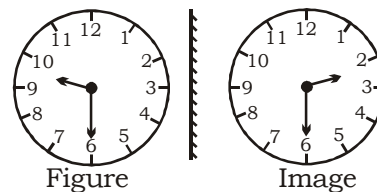
Hence, in the reflection time is 2:30

44. (B)

Figure

Image
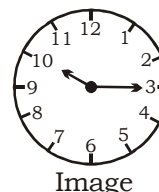
∴ The time in the clock will show 10:15.

102. (D) A good brick earth should contain about 20 to 30% to alumina. This constituent imparts plasticity to earth so that it can be moulded.

104. (B) The main removal to sap from timber is done by seasoning of timber

106. (D) The permissible deflection of a timber beam supporting a roof = L/360

108. (B) Battered pile is an inclined pile and under ream pile is used where soil is having swelling characteristics. It is done by making bulbs in the pile.

110. (C) for preparation of clay is cleaning, weathering, blending and tempering

118. (A) The included angle ABC
     = fore bearing - back bearing
     = 68° 30' + 1180 - 146° 30'
     = 102°

130. (C) If mach number is greater than one then it is supersonic and if mach number is equal to one then it is sonic flow and if mach number is less than one then it is subsonic flow.

135. (A) stoke's law is not valid for the particle smaller than 0.0002 mm.

136. (B) The coefficient of curvature for a well graded soil is 1 to 3. Otherwise it will be poorly graded soil.

139. (C) $K_a = \dfrac{1 - \sin\phi}{1 + \sin\phi}, \quad K_a = \dfrac{1 + \sin\phi}{1 - \sin\phi}$

140. (D) $\dfrac{1}{3} = \dfrac{1 - \sin\phi}{1 + \sin\phi} = K_a, \dfrac{1 + \sin\phi}{1 - \sin\phi} = K_p = 3$

145. (C) G = 2.5,   w = 40%
     S.e = wG
     for saturated soil S = 1
     e = 40 × 2.5 = 1

     n = $\dfrac{e}{1+e}$ = $\dfrac{1}{2}$ = 0.5 = 50%

     $\gamma_d = \dfrac{G\gamma_\omega}{1+e}$

     $= \dfrac{2.5 \times 9.8}{2} = 12.25$

     $\gamma_{Sat} = \left(\dfrac{G+e}{1+e}\right)\gamma_\omega = 17.15 \, kn/m^3$

171. (C) When two members meet at a joint & there is no force occure then force in this member will be zero.