Answer-key & Solution

SSC JE (Civil)
MOCK -(85)
Date 11.02.2017

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

Correction Mock Test 84- (81. A, 87. 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 (Civil) MOCK TEST no. 85

1. (B) $64 = (8)^2$
   $100 = (8 + 2)^2 = (10)^2$
   $16 = (4)^2$
   36 $= (4 + 2)^2 = (6)^2$

2. (C) $6 \rightarrow 2 + 4 \rightarrow 6$
   $29 \rightarrow 2 + 9 = 11 \rightarrow$ **119** $= 1 + 1 + 9 = 11$

3. (B) As Saw is an instrument of carpenter, Similarly Scissors is an instrument of **tailor**.

4. (C) Milk is the raw material for cream. Similarly, **clay** is the raw material for **pottery**.

5. (B) Husband of Vikas's mother means father of Vikas. Therefore, that boy is the **son** of Vikas.

6. (D) K J M L   G F I H
   $\underset{-1\quad +3\quad -1}{\llcorner\_\uparrow\uparrow\_\uparrow\uparrow\_\uparrow}$ $\underset{-1\quad +3\quad -1}{\llcorner\_\uparrow\uparrow\_\uparrow\uparrow\_\uparrow}$

   T S V U   Z A B Y
   $\underset{-1\quad +3\quad -1}{\llcorner\_\uparrow\uparrow\_\uparrow\uparrow\_\uparrow}$ $\underset{+1\quad +1\quad -3}{\llcorner\_\uparrow\uparrow\_\uparrow\uparrow\_\uparrow}$

7. (D) All others except **Brass** are metals whereas Brass is an alloy.

8. (B) $E \xrightarrow{+3} H \xrightarrow{+1} I \xrightarrow{+2} K$
   $L \xrightarrow{+2} N \xrightarrow{+1} O \xrightarrow{+2} Q$
   $T \xrightarrow{+3} W \xrightarrow{+1} X \xrightarrow{+2} Z$
   $A \xrightarrow{+3} D \xrightarrow{+1} E \xrightarrow{+2} G$

9. (C) Except **Eraser**, all other articles are used for writing or colouring. Eraser is used to clear the marks made by pencil.

10. (B) $14 \times 2 = 28$
    $28 - 8 = 20$
    $20 \times 2 = 40$
    $40 - 8 = 32$
    $32 \times 2 = 64$
    $64 - 8 =$ **56**

11. (A) $2 + 1.5 = 3.5$
    $3.5 + 1.5 = 5$
    $5 + 1.5 = 6.5$
    $6.5 + 1.5 = 8$
    $8 + 1.5 =$ **9.5**

12. (D) As, M U S T A R D
    13 21 19 20 1 18 4
    So, P R O F U S E
    16 18 15 6 21 19 5

13. (A) There is no 'O' letter in 'SUPERINTENDENT'. So, '**DOCTOR**' cannot be formed.

14. (A)
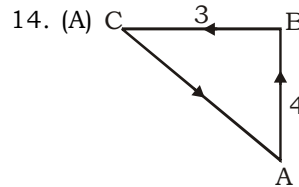
    Required distance
    $= AC = \sqrt{AB^2 + BC^2} = \sqrt{4^2 + 3^2} = 5$ km
    $\therefore$ Total distance covered $= 3 + 4 + 5 =$ **12 km**

15. (D) $2 \rightarrow 1 \rightarrow 4 \rightarrow 3$

16. (D) From the given data,
    $X = Y + 4$ ...(i)
    $Y = 2Z$ ...(ii)
    $X + Y + Z = 34$ ...(iii)
    By solving (i), (ii) and (iii) we get,
    $Y = 12$
    Therefore, $X = Y + 4 = 12 + 4 = 16$.
    Thus, X is **16 years** old.

17. (C) $8 = \sqrt[2]{16} + \sqrt[3]{64} = 4 + 4$
    $12 = \sqrt[2]{81} + \sqrt[3]{27} = 9 + 3$
    11 $= \sqrt[2]{25} + \sqrt[3]{216} = 5 + 6$

18. (A) $(16 + 12)(16 - 12) = 28 \times 4 = 112$
    $(16 + 9)(16 - 9) = 25 \times 7 = 175$
    $(12 + 9)(12 - 9) = 21 \times 3 =$ **63**

19. (B) I $\Rightarrow \times$, You $\Rightarrow \div$, We $\Rightarrow -$, He $\Rightarrow +$
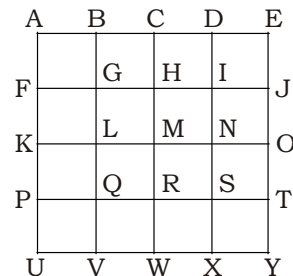   8 I 12 He 16 You 2 We 10 = ?
    $\Rightarrow ? = 8 \times 12 + 16 \div 2 - 10$
    $\Rightarrow ? = 96 + 8 - 10 =$ **94**

20. (A) Total number of girls in the row
    $= 11 + 11 - 1 =$ **21**

23. (B) The figure may be labelled as shown.

    Simple squares are ABGF, BCHG, CDIH, DEJI, FGLK, GHML, HINM, IJON, KLQP, LMRQ, MNSR, NOTS, PQVU, QRWV, RSXW and STYX i.e. 16 in number.
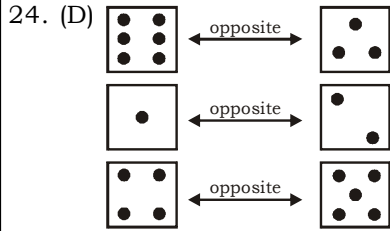   Squares composed of four components each are ACMK, BDNL, CEOM, FHRP, GISQ,
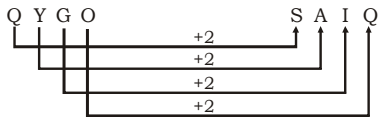
HJTR, KMWU, LNXV and MOYW i.e. 9 in number.

Squares composed of nine components each are ADSP, BETQ, FIXU and GJYV i.e. 4 in number.

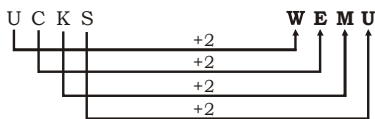There is one square AEYU composed of sixteen components.

There are 16 + 9 + 4 + 1 = **30 squares** in the given figure.

24. (D)

26. (B) As,

Similarly,

27. (B) Scissors are used to cut cloth. Similarly, razor is used to shave.

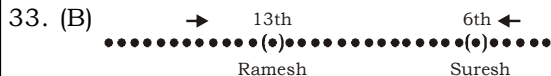28. (C) The body of fish remains covered with scales externally. Similarly the body of bear remain covered with fur.

29. (C) $8 \times 3 = 24$ & $\dfrac{24}{2} = 12$

$9 \times 2 = 18$ & $\dfrac{18}{2} = $ **9**

30. (B) In all other pairs, lack of first causes the second.

31. (D) Kiwi is the only flightless bird in the group.

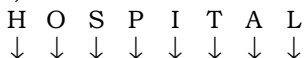32. (B) All except Radio waves are short wavelength radiations.

33. (B)

Therefore, required number of students between Ramesh and Suresh

= 33 – (13 + 6) = 14
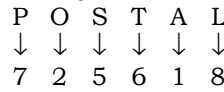
34. (A) The sequence given is:

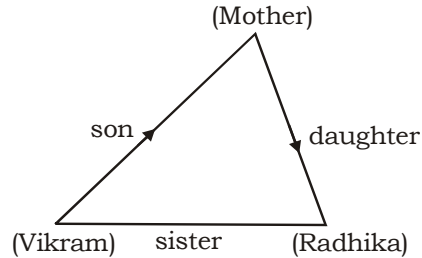a **b** ca/ **a** bca/ a **b** b **c** a/ **a** bbc **a**
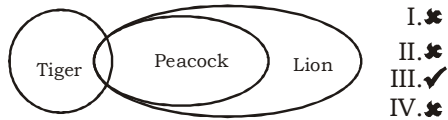
35. (B) As,

H O S P I T A L
↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓

3 2 5 7 4 6 1 8

Similarly,

P O S T A L
↓ ↓ ↓ ↓ ↓ ↓
7 2 5 6 1 8

36. (D)

Thus, Radhika is Vikram's sister.

37. (A)
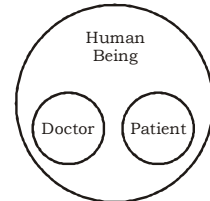

I. ✖
II. ✖
III. ✔
IV. ✖

38. (D)

'Neither conclusion I nor II follows.

40. (D) There is no 'U' letter in the Keyword.
There is no 'M' letter in the Keyword.

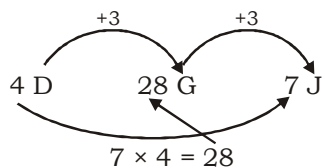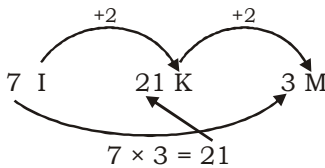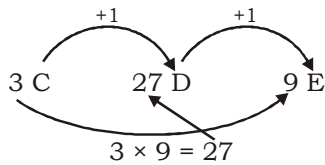41. (B) Doctor is different from Patient. But both are human beings.

42. (D) $Z \xrightarrow{-6} T \xrightarrow{-6} N \xrightarrow{-6}$ **H**

$X \xrightarrow{-6} R \xrightarrow{-6} L \xrightarrow{-6}$ **F**

$V \xrightarrow{-6} P \xrightarrow{-6} J \xrightarrow{-6}$ **D**

43. (B)

$$3\ C \xrightarrow{+1} 27\ D \xrightarrow{+1} 9\ E$$

$$3 \times 9 = 27$$

$$7\ I \xrightarrow{+2} 21\ K \xrightarrow{+2} 3\ M$$

$$7 \times 3 = 21$$

$$4\ D \xrightarrow{+3} 28\ G \xrightarrow{+3} 7\ J$$

$$7 \times 4 = 28$$

44. (C) The pattern followed is:
$(27 \div 3) + (16 \div 4) = 13$
$(42 \div 7) + (65 \div 13) = 11$
So, missing number $= (27 \div 9) + (72 \div 8)$
$= (3 + 9) = 12$

45. (A) We have: $(466 - 341) \times 2 = 250$
So, missing number $= (398 - 282) \times 2$
$= (116 \times 2) = 232$

47. (B) The answer figure B is exactly the mirror image of the given figure.

48. (B) After counting the number of triangles in the figure, we find that the number of triangles is 13.
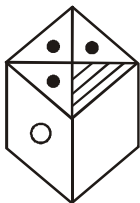
49. (A) A $= 51 \times 14 = 714$
B $= 61 \times 15 = 915$
C $= 71 \times 16 = 1136$
Similarly,
D $= 81 \times 17 = 1377$

50. (D)

74. (D) The retina contains two types of photorecepters, rods and cones. Rods cells are more sensitive than cones. The rod system has very low spatial resolution but is extremely sensitive to light. The cone system has very high spatial resolution but is relatively insensitive to light. The properties of the cone system also allow us to see colour.

76. (B) Mariyappan Thangavelu has won India's first gold medal in the men's high jump T-42 event with jump of 1.89 metres at the 2016 Rio Paralympics. With this, Thangavelu became the first Indian high jumper to win Paralympics gold. His compatriot Varun Singh Bhati clinched the bronze medal in the same event. Thangavelu is also the 3rd Indian to win gold at Paralympics after Murlikant Petkar, who won in swimming, at Heidelberg 1972 and Devendra Jhajharia who won at Athens 2004 in javelin throw.

78. (D) Article 1 of the Constitution declares that India shall be a Union of States. The States and the territories thereof shall be as specified in the First Schedule and the territory of India shall comprise the territories of the States, the Union territories specified in the First Schedule and such other territories may be acquired.

79. (D) The great scholars in the Court of Kanishka I were Asvaghosa (the Buddhist poet), Nagarjuna (the philosopher), Samgharaksha (the chaplain), Mathara (the politician), Vasumitra (the Buddhist scholar), Charaka (the physician) and Agisala (the engineer).

85. (A) Preservatives prevent food from bacteria, rancidity, mould growth. They are of two types
Class I : Natural
Class II : Unnatural/man-made

87. (A) Proteins are large biological molecules consisting of one or more chains of amino acids which are essential nutrients for the human body. They are one of the building blocks of body tissue and can also serve as a fuel source. As fuel, proteins contain 4 kcal per gram, just like carbohydrates and unlike liquids, which contain 9 kcal per gram.

88. (B) All true crabs have 10 legs that are arranged in pairs. The front most is modified into pincers and other four pairs are used for locomotion. For some swimming crabs, the hindmost pair of legs is flattened to form paddles.

89. (B) India's first Laser Interferometer Gravitational-Wave Observatory (LIGO) laboratory will be set up in Aundh in Hingoli district of Maharashtra. LIGO-India will bring wide opportunities in cutting edge technology for Indian industries as they will be engaged in the construction of 8 km-long beam tube at ultra- high vaccuum on a

levelled terrain. It will be 3rd such laboratory in the world and first outside the United States. The existing laboratories are located in Hanford, Washington and in Livingston, Louisiana.

90. (B) Investment expenditure refers to the creation of new assets i.e. an addition to the stock of existing capital assets. According to Keynes, investment demand depends upon two factors -
(a) Expected rate of profit - It is also called as Marginal Efficiency of Capital (MEC). Investment demand increases with the increase in the expected rate of profit.
(b) The rate of interest (IR):- Investment demand decreases with the increase in the rate of interest.

92. (B) The book "Six Machine: I Don't Like Cricket … I Love It" is the autobiography of Chris Gayle, a Jamaican cricketer who plays international cricket for the West Indies. The book chronicles how a shy, skinny kid from a tin-roofed shack in the back streets of Kingston became one of the most well-known stars in the global cricketing arena. The story tells of more than just sporting genius; it is a compelling narrative of Chris' struggle, of battling prejudices and still emerging unscathed with a broad smile on his face.

93. (B) The Odisha government has recently launched the pension scheme for construction workers, which will benefit 25 lakh beneficiaries in phased manner. As per the scheme, the construction workers above 60 years of age will get pension of Rs 300 per month while workers above 80 years of age will get pension of Rs 500 per month. The widow and disabled construction workers are also eligible to get the benefit of the pension scheme. This is the 3rd scheme has been launched by the state government within a month after the Mahaprayan scheme for taking bodies from hospital to the deceased's house and Biju Kanya Ratna scheme that aims to improve child sex ratio.

95. (C) In HTML, The Bold <B></B> element specifies that the enclosed text should be displayed in boldface. The Underlined <U></U> element specifies that the enclosed text should be displayed underlined. The Italic <I></I> element specifies that the enclosed text should be italicized.

96. (C) Solid carbon dioxide is used as a refrigerant (coolant).

98. (A) Henry Moseley gave Modern periodic table. He said physical and chemical properties of element are periodic function of Atomic number of element.

100. (B) A starfish lacks a centralized brain, it has a complex nervous system with a nerve ring around the mouth and a radial nerve running along the ambulacral region of each arm parallel to the radial canal.

112. (D) Area of field = 33600 m²
on map taking area = 0.07 × 0.12 m
= 0.0084 m²
∵ 0.0084 m² = 33600 m²
1m² = 4000000 m²
Square root of
1 = 2000 m
R.F = 1:2000

116. (B) RB = N87°w
W.C.B = 360°− 87° = 273°

117. (B) f = 25 cm or 0:25 m
i = 15 cm or 0.15 m
f + i = 0.25 + 0.15 = 0.40

133. (D) Z = 5.4
x = 6.8
y = 2.6

$$P = \frac{x-z}{z-y} = \frac{6.8-5.4}{5.4-2.6}$$

$$= \frac{1.4}{2.8} \times 100 \simeq 50\%$$

141. (C) $a_t = \dfrac{\pi d^2}{4} = \dfrac{3.14 \times 8^2}{4} = 50.25$

$A_{st} = \dfrac{0.15 \times 115 \times 1000}{100} = 172.5$

$S = \dfrac{at \times 1000}{A_{st}} = \dfrac{50.25 \times 1000}{172.5} = 291.30$

142. (B) Pitch of Lateral ties
= 16 ϕ = 16 × 12
= 192 mm

146. (D) Specific relantion of the sand
= 50% − 30%
= 20%

154. (B) Reduced level of the sight rail at B
= 205.75 + 1.00
= 206.75

169. $T_V = \dfrac{\pi}{4}\left(\dfrac{U\%}{100}\right)^2$

$= \dfrac{22}{7 \times 4}(0.50)^2$

= 0.1964
; 0.20m

192. (A) Total annual cost of highway

$= \dfrac{B}{(C \times N)}$ $= \dfrac{40000}{200 \times 100} = 2$