

SSC MOCK TEST – 175 (SOLUTION)

1. (C) As, Oasis is a water pool amidst sand.
Similarly, Island is a piece of land amidst **water**.

2. (B) As, $16 : 10 \rightarrow \frac{16}{2} + 2 = 10$

Similarly, $32 \rightarrow \frac{32}{2} + 2 = 18$

3. (A) As, $\begin{matrix} \text{S} & \text{T} & \text{U} & \text{F} & \text{G} & \text{H} \\ \uparrow & \uparrow & \uparrow & \uparrow & \uparrow & \uparrow \\ \text{6} & \text{7} & \text{8} & & & \end{matrix} \Rightarrow 6 + 7 + 8 = 21$
opposite alphabet

Similarly, $\begin{matrix} \text{Q} & \text{R} & \text{W} & \text{D} & \text{I} & \text{J} \\ \uparrow & \uparrow & \uparrow & \uparrow & \uparrow & \uparrow \\ \text{4} & \text{9} & \text{10} & & & \end{matrix} \Rightarrow 4 + 9 + 10 = 23$
opposite alphabet

4. (D) $72 : 23 \rightarrow (7 \times 2) + (7 + 2) = 23$
 $46 : 34 \rightarrow (4 \times 6) + (4 + 6) = 34$
 $69 : 69 \rightarrow (6 \times 9) + (6 + 9) = 69$
 $58 : 50 \rightarrow (5 \times 8) + (5 + 8) \neq 50$

5. (D) $N : 13 \rightarrow N \xrightarrow{\text{opp.}} M(13)$
 $T : 7 \rightarrow T \xrightarrow{\text{opp.}} G(7)$
Q : 11 $\rightarrow Q \xrightarrow{\text{opp.}} K(11)$
 $V : 5 \rightarrow V \xrightarrow{\text{opp.}} E(5)$

6. (D) Except **operating system**, others are parts of operating system.

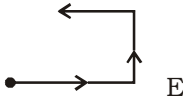
7. (A) **32541**

8. (B) c a c c a a c c c a a a c c c c a a a a

9. (C) $\begin{matrix} 80 & , & 81 & , & 77 & , & 86 & , & 70 & , & 95 \\ \uparrow & & \uparrow & & \uparrow & & \uparrow & & \uparrow & & \uparrow \\ +1^2 & & -(2)^2 & & +3^2 & & -(4)^2 & & +5^2 & & \end{matrix}$

10. (D) $\begin{matrix} C^- & = & G^+ & - & B^+ & & F^- & = & + \\ & & | & & & & | & & \\ & & E^- & = & D^+ & & & & \\ & & | & & & & & & \\ & & A^- & & & & & & \end{matrix}$

\therefore F is **Grand mother** of A.

11. (B) 

\therefore Now he is facing **west**.

12. (D) **SIGNATURE**

13. (C) As, $\begin{matrix} \text{N} & \text{A} & \text{T} & & \text{I} & \text{O} & \text{N} \\ \swarrow & \downarrow & \searrow & & \swarrow & \downarrow & \searrow \\ 20 & 1 & 14 & & 14 & 15 & 9 \end{matrix}$

and $\begin{matrix} \text{S} & \text{E} & \text{C} & \text{U} & \text{R} & \text{E} \\ \swarrow & \downarrow & \searrow & \swarrow & \downarrow & \searrow \\ 3 & 5 & 19 & 5 & 18 & 21 \end{matrix}$

Similarly, $\begin{matrix} \text{C} & \text{O} & \text{U} & \text{R} & \text{S} & \text{E} \\ \swarrow & \downarrow & \searrow & \swarrow & \downarrow & \searrow \\ 21 & 15 & 3 & 5 & 19 & 18 \end{matrix}$

14. (A) $14 \times 5 \div 84 - 7 + 32$
After interchanging signs as per given details.

$$14 + 5 \times 84 \div 7 - 32 = 42$$

15. (B) As, $8 \# 7 - 5 = 61 \rightarrow 8 \times 7 + 5 = 61$
and $6 \# 5 - 9 = 39 \rightarrow 6 \times 5 + 9 = 39$
Similarly, $A \# 14 - 5 = 89 \rightarrow A \times 14 + 5 = 89$

$$\Rightarrow A = \frac{84}{14} = 6$$

16. (C) As, $15 + 8 + 9 + 13 = 45 \rightarrow 54$
and $17 + 12 + 19 + 28 = 76 \rightarrow 67$
Similarly, $13 + 49 + 16 + 4 = 82 \rightarrow 28$

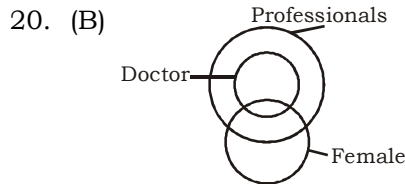
17. (A) **42 Squares**



I. True
II. True

\therefore **Both follows**

19. (C) Required number of boys = $23 + 23 - 1 = 45$

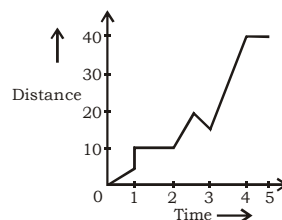


21. (A)
22. (C)
23. (B)
24. (C)
25. (D)

$\begin{matrix} \text{S} & \text{C} & \text{O} & \text{R} & \text{E} \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 96 & 11 & 87 & 02 & 55 \end{matrix}$

26. (B) October 15 is observed, respectively as International Day of Rural woman by the United National, and National women's farmer's Day (Rashtriya Mahila Kisan Diwas) is India.

27. (C) 'Sendai Seven' campaign is centered on the seven targets of the Sendai framework. 2016 saw the launch of the 'Sendai Seven' Campaign by UNISDR, centered on the seven targets of the Sendai framework, the first of which is reducing disaster mortality.
28. (A) The president of India, Shri Ram Nath Kovind, graced and addressed the vigilance Awareness week 2018 (October 29 to November 3) function organised by the central vigilance commission in New Delhi on October 31, 2018. The theme of this year's vigilance Awareness week is 'Eradicate corruption – Build a New India'.
29. (C) Unveiling the 182-meter statue of the man of India, world's tallest, on his 143rd birth anniversary, Prime Minister said Sardar Patel's statue will remind the world about the courage of the man who thwarted attempts to disintegrate India.
30. (C) Norwegian diplomat Geir Pedersen, who helped oversee talks leading to the Oslo peace accords, has been named as the next special envoy to Syria.
31. (C) The Union cabinet has approved renaming of Jharsuguda Airport, Odisha as "Veer Surendra Sai Airport", Jharsuguda. Veer Surendra Sai is a well known freedom fighter of Odisha.
35. (B) As part of this programme, the Prime Minister unveiled 12 key initiatives which will help the growth, expansion and facilitation of MSME's across the country.
36. (A) After a long gap, a flock of five greater flamingoes has been spotted along the coast of Hope Island, a part of the Coringa Wildlife Sanctuary in Andhra Pradesh.
37. (D) Indian women hockey captain Rani Rampal was the country's flag-bearer in the closing ceremony.
41. (B) The Agra Fort was built by Akbar. The Agra fort also known as the "Lal-Qila, "Fort Rouge" or "Qila-i-Akbari", is the highlight of the city of Agra, then capital of the Mughal Sultanate.
Some immortal list of Mughal Architecture and developers.
- Taj Mahal, Agra — Shahjahan
 - Humayun's Tomb Delhi — Hamida Banu Begum
 - Red Fort, Delhi — Shahjahan
 - Jama Masjid, Delhi — Shahjahan
 - Buland Darwaza Fatehpur Sikri — Akbar
 - Tomb of I'timad-ut-Daulah, Agra — Noor-Jahan
 - Bibi ka Maqbara, Aurangabad — Aurangzeb
42. (A) Some important Instruments and Inventors list
- | Instrument | Inventors |
|-------------------|--------------------------|
| Audio meter | : Alexander Graham bell |
| Barometer | : Evangelista Torricelli |
| Electrocardiogram | : Willem Einthoven |
| Fibroscope | : Hopkins |
| Fathometer | : Herbert Grove Dorsees |
| Transponder | : Mike Beigel |
43. (D) These are the countries member of BIMSTEC - Bangladesh, India, Myanmar, Sri Lanka, Thailand, Bhutan and Nepal.
44. (A) Division of the Northern Plains
- (1) The Panjab plains
 - (2) The Ganga plains
 - (3) The Brahmaputra Plains
- These are the major division of the Northern plains. The Panjab, the Ganga and the Brahmaputra plains are created with his territory rivers.
45. (A) Rust consists of Hydrated iron oxides (Fe_2O_3), the chemical equation of this process is—
 $4Fe + 3O_2 \rightarrow 2Fe_2O_3$
46. (B) **Marginal Product:** Marginal product also called marginal physical product, is the change in total output as one additional unit of its added to production.
Total Product: Obviously, it is beneficial for a firm to know the amount of resources that it will need for a coming period of time in order to manufacturing a give amount of goods.
Production function: The function relates the quantity of factor inputs used by a business to the amount of output that result.
Average Product: Measure output per-worker-employed or output-per-unit of capital.
47. (B) Lubricants: A Lubricant is a substance, usually organic introduced to reduce friction between surface in mutual contact, which ultimately reduces the heat generated when the surfaces move.
48. (D) **Non Uniform motion:** This type of motion is defined as the motion of an object in which the object travels with varied speed ant it does not cover same distance in equal time intervals, irrespective of the time interval duration. We know that with the help of graph.



49. (B) Central Pollution Control Board (CPCB) of India is a statutory organization under the ministry of environment, forest and climate change. It was established in 22 September 1974 under the water (Prevention and control of Pollution) Act 1974,

$$51. (C) \frac{1}{1+x^{b-a}+x^{c-a}} + \frac{1}{1+x^{c-b}+x^{a-b}} + \frac{1}{1+x^{a-c}+x^{b-c}}$$

$$= \frac{x^a+x^b+x^c}{x^a+x^b+x^c} = 1$$

52. (D) $2.\overline{47} + 3.\overline{53} + 0.\overline{05}$

Let, $x = 2.\overline{47}$, $y = 3.\overline{53}$ and $z = 0.\overline{05}$
 $\Rightarrow 100x = 247.$

$\Rightarrow x = \frac{245}{99}$

Similarly, $y = \frac{350}{99}$ and $z = \frac{5}{99}$

Now,

$$= \frac{245+350+5}{99}$$

$$= \frac{600}{99} = 6.\overline{06}$$

53. (C) $ATQ, 2.234 + 3.121 - 5.355 = 0$

Here $a + b + c = 0$

$$\therefore a^3 + b^3 + c^3 - 3abc = 0$$

54. (D) $(\tan^2(90^\circ - \theta) - \operatorname{cosec}^2\theta)$
 $= -(\operatorname{cosec}^2\theta - \cot^2\theta) = -1$

55. (D) $\sin 20^\circ \cdot \sin 40^\circ \cdot \sin 60^\circ \cdot \sin 80^\circ$

$$= \sin 20^\circ \cdot \sin 40^\circ \cdot \sin 80^\circ \cdot \frac{\sqrt{3}}{2}$$

$$= \sin 20^\circ \cdot \sin(60 - 20^\circ) \cdot \sin(60 + 20^\circ) \cdot \frac{\sqrt{3}}{2}$$

$$= \frac{1}{4} \sin(3 \times 20^\circ) \cdot \frac{\sqrt{3}}{2}$$

$$= \frac{1}{4} \times \frac{\sqrt{3}}{2} \times \frac{\sqrt{3}}{2} = \frac{3}{16}$$

56. (D) $\alpha + \alpha = -2(1 + k)$

$$2\alpha = -2(1 + k) \Rightarrow \alpha = -(1 + k)$$

$$\text{and } \alpha\alpha = k^2 \Rightarrow \alpha^2 = k^2$$

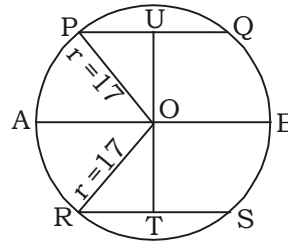
$$[-(1 + k)]^2 = k^2$$

$$\Rightarrow k^2 + 1 + 2k = k^2$$

$$\Rightarrow 2k = -1$$

$$\Rightarrow k = \frac{-1}{2}$$

57. (C)



In $\triangle ORT$

$$OR^2 = RT^2 + OT^2$$

$$\Rightarrow 17^2 = 8^2 + OT^2 \quad [RS = 16 \text{ cm}]$$

$$\Rightarrow OT = 15 \text{ cm}$$

In $\triangle OPU$

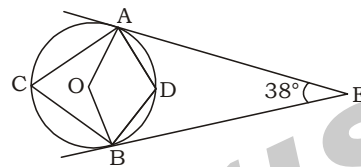
$$OP^2 = PU^2 + OU^2$$

$$\Rightarrow 17^2 = PU^2 + 8^2 \quad [OU = UT - OT]$$

$$PU = 15 \text{ cm}$$

So, length of other chord (PQ) = $2 \times PU = 2 \times 15 = 30 \text{ cm}$

58. (C)



In quadrilateral OAEB

$$\angle O + \angle A + \angle E + \angle B = 360^\circ$$

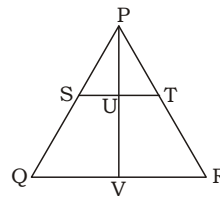
$$\Rightarrow \angle O = 360^\circ - (90^\circ + 90^\circ + 38^\circ)$$

$$\Rightarrow \angle O = 142^\circ$$

$$\therefore \angle ACB = \frac{1}{2} \angle AOB$$

$$\therefore \angle ACB = \frac{1}{2} \times 142^\circ = 71^\circ$$

59. (A)



Clearly $\frac{PS}{PQ} = \frac{PT}{PR}$

$$\therefore \triangle PST \sim \triangle PQR$$

$$\angle PST = \angle PQR$$

Now, in $\triangle PSU$ and $\triangle PQV$

$$\angle PSU = \angle PQV$$

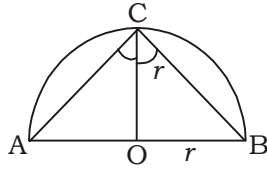
$$\angle SPU = \angle QPV \quad (\text{common})$$

$$\therefore \triangle PSU \sim \triangle PQV \quad [\text{By (AAA similarity)}]$$

$$\frac{PS}{PQ} = \frac{PU}{PV} = \frac{6}{10} = \frac{9}{PV}$$

$$PV = \frac{9 \times 10}{6} = 15 \text{ cm}$$

60. (A)



$$\begin{aligned} \text{Required Area} &= \frac{1}{2} \times AB \times OC \\ &= \frac{1}{2} \times 2r \times r = r^2 \end{aligned}$$

61. (A) Percentage of candidates who failed in one or two or both $52 + 42 - 17 = 77$
percentage of pass candidates = $100 - 77 = 23\%$

62. (A) ATQ,
 $m + m + 1 + m + 2 + m + 3 + m + 4 = 5n$
 $\Rightarrow 5m + 10 = 5n$
 $m + 2 = n$
Required Average
$$= \frac{m + 2 + m + 3 + m + 4 + m + 5 + m + 6 + m + 7}{6}$$

$$\Rightarrow \frac{6m + 27}{6} = \frac{2m + 9}{2} = \frac{2(n - 2) + 9}{2} = \frac{2n + 5}{2}$$

63. (C) Let the radius of base of second cylinder = R
 $\Rightarrow 2(\pi r^2 h) = \pi R^2 h$
 $\Rightarrow 2r^2 = R^2$
 $\Rightarrow R = r\sqrt{2}$

64. (C) $\frac{S_1}{S_2} = \sqrt{\frac{T_2}{T_1}} \Rightarrow \frac{25}{S_2} = \sqrt{\frac{4}{9}} \Rightarrow S_2 = 18.75 \text{ km/hr}$

65. (C) Let the number of children be n
ATQ,
 $n(n - 1) = 272$
 $\Rightarrow n^2 - n - 272 = 0$
 $\therefore n = 17$

66. (B)

	₹1	50P	25P
coins	2	3	4
Value	₹2	₹1.50	₹1

Total value = 4.50 units \rightarrow 216

$$1 \text{ unit} \rightarrow \frac{216}{4.5} = 48$$

\therefore Total number of 50 paise coins = $3 \rightarrow 48 \times 3 = 144$

67. (C) Let the distance be x km

$$\Rightarrow \frac{x}{24} - \frac{x}{30} = \frac{11}{60}$$

$$\Rightarrow \frac{10x - 8x}{240} = \frac{11}{60}$$

$$\Rightarrow 2x = 11 \times 4$$

$\Rightarrow x = 22 \text{ km}$
68. (C) $10 \quad 11 \quad 15 \quad 22$

$$\frac{-3}{7} \quad \frac{-4}{7} \quad \frac{-8}{7} \quad \frac{-15}{7}$$

LCM (10, 11, 15, 22) $-7 = 330n - 7$
For required no.

Let $n = 30$
Required number = $330 \times 30 - 7$
 $= 9900 - 7$
= 9893

69. (A) Amount = Principal + C.I.
 $= 32700 + 23805.5 = ₹56505.5$
ATQ,

$$56505.6 = 32700 \left(1 + \frac{R}{100}\right)^3$$

$$\Rightarrow \frac{56505.6}{32700} = \left(1 + \frac{R}{100}\right)^3$$

$$\Rightarrow \left(\frac{12}{10}\right)^3 = \left(1 + \frac{R}{100}\right)^3$$

$$\Rightarrow R = 20\%$$

$$\text{Now, S.I.} = \frac{32700 \times 3 \times 20}{100} = ₹19,620.$$

70. (B) C.P. for Mohit = $150 \times \frac{5}{4} = ₹187.5$

C.P for Aman = $220 \times \frac{10}{11} = ₹200$

Profit percentage for Mohit = $\left(\frac{200 - 187.5}{187.5}\right) \times 100 = 6.67\%$

71. (D) Rate of regular 1 h = $\frac{2000}{50} = ₹40$

Rate of additional hours = $1 \frac{1}{2} \times 40$

= 60

No. of additional hours

$$= \frac{2300 - 2000}{60} = 5 \text{ hours}$$

72. (D) Required percentage = $\frac{7.5}{17} \times 100 = 44.12\%$

73. (A) Required Ratio = $14.5 : 7.5 = 29 : 15$

74. (B) Required percentage = $\frac{8}{7.5} \times 100 = 106.66 \approx 107\%$

75. (A) Required percentage = $\frac{35}{(17 + 8 + 18)} \times 100 = 81.39 = 81.4\%$

MEANINGS IN ALPHABETICAL ORDER

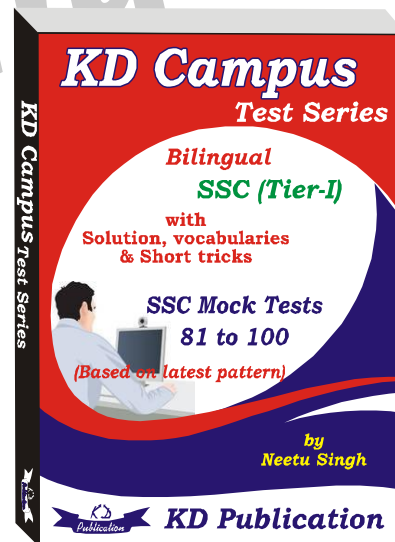
Word	Meaning in English	Meaning in Hindi
Elongate	to make something longer or to grow longer	बढ़ाना
Hydroplane	when a car goes out of control and skims along the surface of a wet road	हाइड्रोप्लेन
Reconnoiter	to go to a place or area in order to find out information about a military enemy	अन्वेषण
Precariously	not safe	जोखिम
Gingerly	very cautious or careful	सावधानी से
Wheedle	to persuade someone to do something or to give you something by saying nice things	खुशामद से मना लेना
Plead	to ask for something in a serious and emotional way	निवेदन करना
Wretched	very bad or unpleasant	घृणायोग्य
Nebulous	not clear, difficult to see, understand, describe, etc.	अस्पष्ट
Vertiginous	inclined to frequent and often pointless change inconstant	अस्थिर
Litigious	tending or likely to engage in lawsuits	विवादी
Lowly	in a humble or meek manner	नम्र
Cynomania	an abnormal love of dogs	कुत्तों के लिए प्यार
Atheist	a person who believes that God does not exist	नास्तिक
Pandemonium	a wild uproar	विप्लव
Parody	a piece of writing, music, etc., that imitates the style of someone or something else in an amusing way	हास्यानुकृति
Sonnet	a poem made up of 14 lines that rhyme in a fixed pattern	गाथा
Opprobrium	very strong disapproval or criticism of a person or thing especially by a large number of people	अपमान, तिरस्कार
Repentance	to feel or show that you are sorry for something bad or wrong that you did and that you want to do what is right	पछतावा

SSC MOCK TEST - 175 (ANSWER KEY)

- | | | | |
|---------|---------|---------|----------|
| 1. (C) | 26. (B) | 51. (C) | 76. (B) |
| 2. (B) | 27. (C) | 52. (D) | 77. (A) |
| 3. (A) | 28. (A) | 53. (C) | 78. (B) |
| 4. (D) | 29. (C) | 54. (D) | 79. (C) |
| 5. (D) | 30. (C) | 55. (D) | 80. (C) |
| 6. (D) | 31. (C) | 56. (D) | 81. (C) |
| 7. (A) | 32. (B) | 57. (C) | 82. (C) |
| 8. (B) | 33. (A) | 58. (C) | 83. (C) |
| 9. (C) | 34. (B) | 59. (A) | 84. (D) |
| 10. (D) | 35. (B) | 60. (A) | 85. (C) |
| 11. (B) | 36. (A) | 61. (A) | 86. (A) |
| 12. (D) | 37. (D) | 62. (A) | 87. (A) |
| 13. (C) | 38. (C) | 63. (C) | 88. (C) |
| 14. (A) | 39. (A) | 64. (C) | 89. (D) |
| 15. (B) | 40. (B) | 65. (C) | 90. (B) |
| 16. (C) | 41. (B) | 66. (B) | 91. (A) |
| 17. (A) | 42. (A) | 67. (C) | 92. (A) |
| 18. (B) | 43. (D) | 68. (C) | 93. (D) |
| 19. (C) | 44. (A) | 69. (A) | 94. (A) |
| 20. (B) | 45. (A) | 70. (B) | 95. (C) |
| 21. (A) | 46. (B) | 71. (B) | 96. (B) |
| 22. (C) | 47. (B) | 72. (D) | 97. (D) |
| 23. (B) | 48. (D) | 73. (A) | 98. (D) |
| 24. (C) | 49. (B) | 74. (B) | 99. (A) |
| 25. (D) | 50. (D) | 75. (A) | 100. (D) |



76. (B) Change 'send' into 'sent' because here 'get' and 'have' are used as causative verbs, so the main verb should be in V₃ form.
77. (A) Change 'of' into 'to' because 'assent' takes fixed preposition 'to' after it, which means to 'express approval'.
90. (B) 'Not only' will be used just before 'by' because 'not only... but also' is a conjunction pair where the subsequent part 'but also' has been used just before the preposition 'with'.
91. (A) Change 'will see' into 'see' because the sentence is in simple present tense.



Note:- If your opinion differs regarding any answer, please message the mock test and question number to 8860330003

Note:- Whatsapp with Mock Test No. and Question No. at 7053606571 for any of the doubts. Join the group and you may also share your suggestions and experience of Sunday Mock Test.

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