

SSC MOCK TEST – 186 (SOLUTION)

1. (D) The baby of horse is foal and baby of swan is **cygnet**.

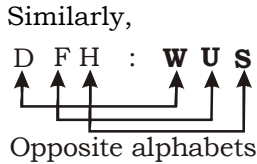
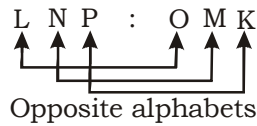
2. (C) As,

$$\begin{array}{ccc} 87 & : & 113 \\ \downarrow & & \downarrow \\ 100-13 & : & 100+13 \end{array}$$

Similarly,

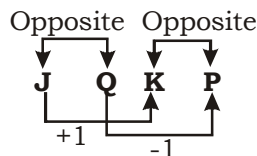
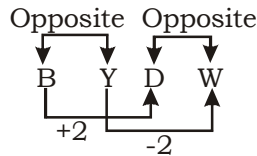
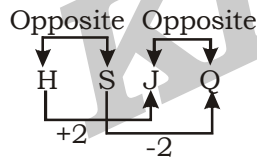
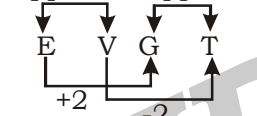
$$\begin{array}{ccc} 97 & : & 103 \\ \downarrow & & \downarrow \\ 100-3 & : & 100+3 \end{array}$$

3. (B) As,



4. (D)  $12-1740 \Rightarrow (12)^3 + 12 \Rightarrow 1728 + 12 = 1740$   
 $9 - 738 \Rightarrow (9)^3 + 9 = 729 + 9 = 738$   
 $13 - 2210 \Rightarrow (13)^3 + 13 = 2197 + 13 = 2210$   
**15 - 3380  $\Rightarrow (15)^3 + 15 = 3375 + 15 \neq 3380$**

5. (D) Opposite Opposite



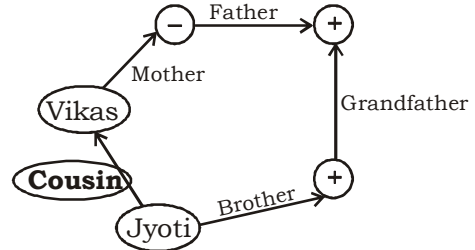
6. (C) Expect "**Iraq**", others are currency.

7. (A) **21453**

8. (A) a a **b** a b c a b c **d** a b c d e

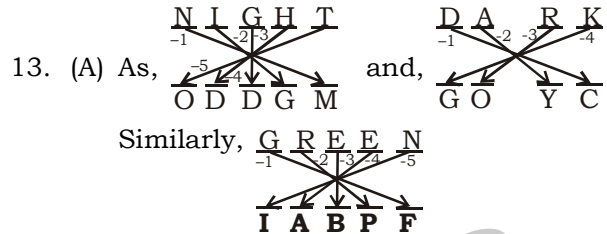
9. (C) 2, 3, 5, 9, 17, **33**

10. (D)



11. (B) Present age of A = 8 years  
 Age of B = 8 + 9 = 17 years  
 and, Age of D = 17 + 6 = **23 years**

12. (C) Word "**BANE**" cannot be formed.



13. (A) As,  $18 \times 13 \div 72 + 9 - 4$   
 After interchanging the signs as per given details,

$$18 - 13 + 72 \div 9 \times 4 = \mathbf{37}$$

15. (C) As,  $2 * 8 * 1 \Rightarrow (8+1)^2 = 9^2 = 81$   
 and,  $3 * 3 * 3 \Rightarrow (3+3)^3 = 6^3 = 216$   
 Similarly,  $4 * 1 * 4 \Rightarrow (1 + 4)^4 = 5^4 = \mathbf{625}$

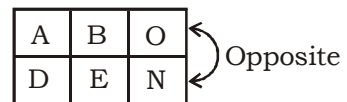
16. (B) As,  $7 \times 3 \times 9 + 1 = 190$   
 and  $31 \times 3 \times 3 + 1 = 280$   
 Similarly,  $3 \times 1 \times 4 + 1 = \mathbf{13}$

17. (C) **37 triangle**



(i) **True**  
 (ii) **False**  
 $\therefore$  Hence, **conclusion I follows**.

19. (B) From given figure,



$\therefore$  "**BO**" can be formed by folding the given figure.

20. (C)

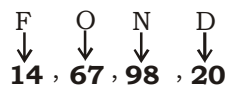
21. (A)

22. (B)

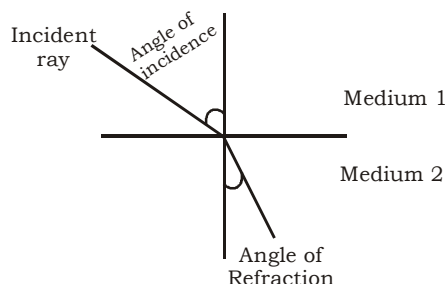
23. (A)

24. (A)

25. (A)



27. (D) Prime Meridian passes through – or (Greenwich) United Kingdom/France/Spain/Algeria/Mali/Burkina Faso/Togo/Ghana/Ashanti Land Peninsula and Queen Maud Land in Antarctica.
29. (C) The Bengal Nawab and Shah Alam II huge defeat against company, it was Shah Alam II, the Mughal Emperor appointed the East India Company the Diwan of Bengal in 26th August 1765, by signing the treaty of Allahabad by Shah Alam II and his son Alamgir and Robert Clive.
30. (A) **Australia**
1. Concurrent list
  2. Freedom of Trade
  3. Commerce and intercourse
- Ireland**
1. Directive Principles of State Policy
  2. Method of Election of the President
- United States of America:-**
1. Impeachment of President.
  2. Judicial Review and Removal of Supreme Court and High Court Judges.
33. (D) The Lorenz curve is graphical representation of the distribution of income or of wealth. It was developed by Max. O. Lorenz in 1905
34. (D) The primary greenhouse gases in Earth's atmosphere are water vapor, Carbon dioxide, Methane, Nitrous oxide and Ozone.
35. (B)  $O^-$  is the universal donor because there are absolutely no proteins on the RBCs, which means that anyone can receive that blood without suffering rejection.
36. (B) The brain is composed of the three parts
1. Brain stem
  2. Cerebellum
  3. Cerebrum
39. (A) Refraction is a change in the direction of the light when it passes from a medium to another one.



40. (A) Phenol is also known as carbolic acid, which is chemical formula as for as  $C_6H_6O$ .
41. (B) (Discovered by)
- Electron – J. J. Thomson  
Proton – Ernest Rutherford

- Neutron – J. Chadwick
43. (D) There are currently 20 members of IORA. Australia, Bangladesh, Comoros, India, Indonesia, Iran, Kenya, Malaysia, Madagascar, Mauritius, Mozambique, Oman, Seychelles, Singapore, South Africa, Sri Lanka, Tanzania, Thailand, UAE, Yemen.

45. (A) **Person**                      **Field/State**
- Ms. Sharda Sinha      –      Art–Music/Bihar
- Shri Arvind Parikh   –      Art-Music/  
Maharashtra
- Shri Ved Prakash   –      Literature &  
Nanda                      Educational/USA
46. (C) **UDAN-RCS:** Start date 27 April 2017 with the Aim Ude Desh Ka Aam Naagrik (Let the common citizen of the country fly). Under the Ministry of civil Aviation of India.
48. (A) There are five members of BRICS - (Brazil, Russia, India, China, South Africa)
49. (C) Amrita Sher-Gil was an eminent Hungarian-Indian Painter.
50. (B) 38<sup>th</sup> Parallel line between North Korea and South Korea as well as 49<sup>th</sup> Parallel line between US and Canada.
51. (C) Total passing marks for boys = 300 + 20 = 320 marks  
Now, 40% = 320 marks
- and, Total marks =  $\frac{320}{40} \times 100 = 800$  marks
- Passing marks for girls = 30% of 800 = 240 marks
- $\therefore$  More marks the girl require to pass = 240 – 150 = **90 marks**
52. (D) Let  $x$ ,  $y$  and  $z$  be the first, second and third number respectively.

$\therefore$  ATQ.,

$$\frac{4}{11}x = \frac{12}{100}y$$

$$\therefore \frac{x}{y} = \frac{33}{100}$$

and,  $\frac{1}{4}$  of  $z = y$  unit

$$\Rightarrow \frac{z}{4} = 100$$

$$\Rightarrow z = 400$$

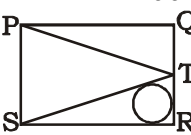
Now, 400 units = 2400

$$\Rightarrow 1 \text{ unit} = 6$$

$\therefore x = 33 \text{ units} = 33 \times 6 = 198$   
and, 40% of 198 = 79.2  $\approx$  **79**

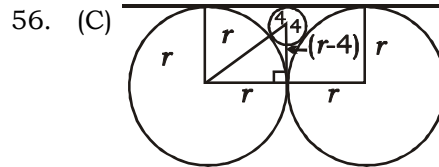
53. (A)  $x + y + xy = 3$   
 Adding 1 both sides,  
 $1 + x + y + xy = 4$   
 $\Rightarrow (1+x)(1+y) = 4 \dots(i)$   
 $y + z + yz = 8$   
 Adding 1 both sides,  
 $\Rightarrow 1 + y + z + yz = 9 \dots(ii)$   
 $x + z + xz = 15$   
 Adding 1 both sides,  
 $1 + x + z + xz = 16$   
 $\Rightarrow (1+x)(1+z) = 16 \dots(iii)$   
 Multiplying equation (i), (ii) and (iii),  
 $(1+x)^2(1+y)^2(1+z)^2 = 4 \times 9 \times 16$   
 $\Rightarrow (1+x)(1+y)(1+z) = \sqrt{4 \times 9 \times 16} = 24$   
 Now,  $(1+x) = \frac{(1+x)(1+y)(1+z)}{(1+y)(1+z)} = \frac{24}{9} = \frac{8}{3}$   
 $\therefore x = \frac{5}{3}$   
 and,  $(1+y) = \frac{(1+x)(1+y)(1+z)}{(1+x)(1+z)} = \frac{24}{16}$   
 $\Rightarrow 1+y = 1.5 \Rightarrow y = 0.5$   
 and,  $(1+z) = \frac{(1+x)(1+y)(1+z)}{(1+x)(1+y)} = \frac{24}{4}$   
 $\Rightarrow 1+z = 6 \Rightarrow z = 5$   
 $\therefore 6xyz = 6 \times \frac{5}{3} \times \frac{1}{2} \times 5 = 25$

54. (B) We know,  $35\% = \frac{7}{20}$ ,  $20\% = \frac{1}{5}$ ,  $18.18\%$   
 $= \frac{2}{11}$   
 $\therefore$  Let  $20x$  be the cost price of Article.  
 $\therefore$  SP of article for sonu =  $27x$   
 And, Monu spend ₹3780 and sold it to Ravi  
 $\therefore$  ATQ.,  
 $(27x + 3780) \times \frac{9}{11} = 27x \times \frac{6}{5}$   
 $\therefore x = 300$   
 $\therefore$  cost price of article =  $20x = 300 \times 20 = 6000$   
 $\therefore$  SP for sonu, if he sell it at 30% loss  
 $= 60000 \times \frac{70}{100} = \text{₹}4200$

55. (B)   
 From Pythagoras theorem.  
 $ST^2 = SR^2 + TR^2$   
 $\Rightarrow ST^2 = 6^2 + 3^2$   
 $\Rightarrow ST^2 = 36 + 9 = 45$   
 $\Rightarrow ST = 3\sqrt{5} \text{ cm}$

Inradius of  $\Delta SRT = \frac{\text{Area}}{\text{Semi-Perimeter}}$

$$\Rightarrow \frac{\frac{1}{2} \times 6 \times 3}{(9 + 3\sqrt{5})} \Rightarrow \frac{3 \times 3 \times 2}{3(3 + \sqrt{5})} = \frac{6}{3 + \sqrt{5}} \text{ cm}$$



From Pythagoras theorem,  
 $(r+4)^2 = r^2 + (r-4)^2$   
 $\Rightarrow r^2 + 16 + 8r = r^2 + r^2 + 16 - 8r$   
 $\Rightarrow r^2 - 16r = 0$   
 $\therefore r = 16 \text{ cm}$

57. (D)  $x + \frac{1}{x+6} = 0$

Adding "6" both sides,

$$(x+6) + \frac{1}{x+6} = 6$$

Let  $x+6 = m$

$$\therefore m + \frac{1}{m} = 6$$

$$\& m - \frac{1}{m} = \sqrt{(6)^2 - 4} = \sqrt{32} = 4\sqrt{2}$$

Putting the value of m, we get

$$(x+6) - \frac{1}{x+6} = 4\sqrt{2}$$

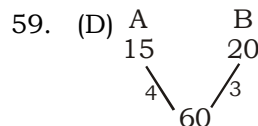
$$\therefore x - \frac{1}{x+6} = (4\sqrt{2} - 6)$$

58. (B)  $\sqrt{-\sqrt{3} + \sqrt{3 + 8\sqrt{7 + 4\sqrt{3}}}}$

$$\Rightarrow \sqrt{-\sqrt{3} + \sqrt{3 + 8(2 + \sqrt{3})}}$$

$$= \sqrt{-\sqrt{3} + \sqrt{16 + 3 + 2 \times 4 \times \sqrt{3}}}$$

$$\Rightarrow \sqrt{-\sqrt{3} + 4 + \sqrt{3}} = \sqrt{4} = 2$$



Total efficiency of A and B per hour = 7 units

When both work together,

$$\text{their efficiency} = \frac{60}{12} = 5 \text{ units per hour}$$

Difference between efficiencies =  $7 - 5 = 2$  units per hour

$$\text{Difference} = \frac{280}{2} = 140 \text{ units per hour.}$$

$$\therefore \text{Total number of bricks} = 60 \times 140 = \text{84,000 bricks}$$

60. (D) Question completed in half time =  $300 \times$

$$\frac{25}{100} = 75$$

Questions left =  $300 - 75 = 225$

Rate =  $\frac{75}{1.5} = 50$  questions per hour

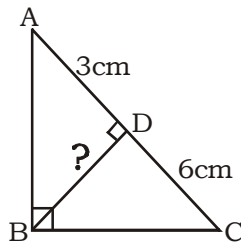
Rate required to complete test in given

time =  $\frac{225}{1.5} = 150$  question per hour.

Therefore percentage increase

$$= \frac{150 - 50}{50} \times 100 = \mathbf{200\%}$$

61. (A) From similar triangles ABD & ACB,



$$BD = \sqrt{AD \times CD}$$

$$\Rightarrow BD = \sqrt{3 \times 6}$$

$$\Rightarrow BD = \mathbf{3\sqrt{2} \text{ cm}}$$

62. (D)  $\cot\left(\frac{\pi}{18}\right) \times \cot\left(\frac{3\pi}{18}\right) \times \cot\left(\frac{4\pi}{18}\right) \times \cot$

$$\left(\frac{5\pi}{18}\right) \times \cot\left(\frac{8\pi}{18}\right)$$

$$\Rightarrow \cot(10^\circ) \times \cot(30^\circ) \times \cot(40^\circ) \cot(50^\circ) \times$$

$$\cot(80^\circ)$$

$$\Rightarrow \cot 30^\circ \times \cot 10^\circ \cdot \cot 40^\circ \cdot \cot 50^\circ \cdot \cot 80^\circ$$

$$\Rightarrow \sqrt{3} (\cot 10^\circ \times \cot 80^\circ) (\cot 40^\circ \cdot \cot 50^\circ)$$

$$= \sqrt{3} (1 \times 1)$$

$$\therefore [\text{since } \cot A \times \cot B = 1 \text{ for } A+B = 90^\circ]$$

$$= \sqrt{3}$$

63. (C) Sum of ages of 8 members =  $33 \times 8$

= 264 years

And, sum of age of 7 family members

(today)

$$= 7 \times 35 = 245$$

$$\therefore \text{Child age} = 264 \text{ years} - 245 \text{ years} =$$

$$\mathbf{19 \text{ years}}$$

64. (B)  $\frac{28^{10} + 2}{9} \Rightarrow \frac{(9 \times 3 + 1)^{10} + 2}{9} = \frac{(1)^{10} + 2}{9} = \frac{3}{9}$

$$\text{Remainder} = \mathbf{3}$$

65. (C)  $x^{x \times \sqrt[3]{x}} = (x \times \sqrt[3]{x})^x$

$$\Rightarrow x^{x^{\frac{4}{3}}} = x^{\frac{4}{3}x}$$

$$\therefore x^{\frac{4}{3}} = \frac{4}{3}x$$

$$\Rightarrow x \times x^{\frac{1}{3}} = \frac{4}{3} \times x$$

$$\Rightarrow x = \frac{\mathbf{64}}{\mathbf{27}}$$

66. (D) D is the distance  
ATQ.,

$$\Rightarrow \frac{D}{40} - \frac{D}{60} = \frac{40}{60}$$

$$\Rightarrow \frac{3D - 2D}{120} = \frac{40}{60}$$

$$\Rightarrow D = 40 \times 2 = \mathbf{80 \text{ km}}$$

67. (A) Diameter of roller = 84 cm = 0.84m

And, radius of roller = 0.42m.

Height of roller = 100 cm = 1m

Circumference of cylinder =  $2\pi r h$

$$= \frac{2 \times 22 \times 0.42 \times 1}{7} = 2.64 \text{ m}^2$$

$$\therefore \text{cost of leveling} = 2.64 \times 2 \times 500 = \mathbf{\text{₹ } 2640}$$

68. (B) Volume of cone =  $\frac{1}{3} \pi r^2 h = \frac{1}{3} \pi (15)^2 \times 15 =$

$$\frac{1}{3} \pi (15)^3 \text{ cm}^3$$

$$\text{Volume of sphere} = \frac{4}{3} \pi r^3 (15)^3$$

$$\therefore \text{Required percentage} = \frac{\frac{1}{3} \pi (15)^3}{\frac{4}{3} \pi (15)^3} \times 100$$

$$= \frac{1}{4} \times 100 \Rightarrow \mathbf{25\%}$$

69. (A) Relative speed =  $(40 - 20) \text{ km/hr} = 20 \text{ km/hr}$

$$\therefore \text{Length of the train} = 20 \times \frac{5}{18} \text{ m/s} \times 10 \text{ sec.}$$

$$= \mathbf{55 \frac{5}{9} \text{ meter}}$$

70. (D) **Usual : Now**

$$\text{Ratio of speed} \Rightarrow 4 : 3$$

$$\text{Ratio of time} \Rightarrow 3 : 4$$

$$\therefore 1 \text{ unit} = 20 \text{ min}$$

$$\therefore \text{Actual time take to cover the journey} = 3 \times 20 = 60 \text{ min.}$$

**Usual : Now**

$$\text{Ratio of speed} \Rightarrow 4 : 5$$

$$\text{Ratio of time} \Rightarrow 5 : 4$$

$$\text{Now, time taken} = \frac{60}{5} \times 4 = 48 \text{ min.}$$

$$\therefore \text{Now time taken to cover the journey}$$

$$\Rightarrow \text{Time difference} = 60 - 48 = \mathbf{12 \text{ min.}}$$

71. (D) Distance travelled along diameter = D

Distance travelled along the boundary =

$$\frac{\pi D}{2}$$

According to question,

$$\frac{\pi D}{2 \times 30} - \frac{D}{30} = \frac{30}{60}$$

$$\Rightarrow \frac{D}{30} \left( \frac{\pi}{2} - 1 \right) = \frac{1}{2}$$

$$\Rightarrow D \left[ \frac{11}{7} - 1 \right] = 15$$

$$\Rightarrow D = \frac{15 \times 7}{4} = \frac{105}{4} = 26.25$$

$$\therefore r = \mathbf{13.125 \text{ m}}$$

72. (B) Required ratio =  $200 \times \frac{120}{100} : 320$   
 =  $240 : 320$   
 =  $\mathbf{3 : 4}$

73. (D) Total number of people travelled by B on Monday and Tuesday  
 =  $200 + 170 = 370$   
 and, total number of people travelled by A on Saturday and Sunday =  $350 + 270 = 620$   
 $\therefore$  Required difference =  $620 - 370 = \mathbf{250}$

74. (C) Required average =  $\frac{240 + 210 + 140 + 230}{4}$   
 =  $\frac{820}{4} = \mathbf{205}$

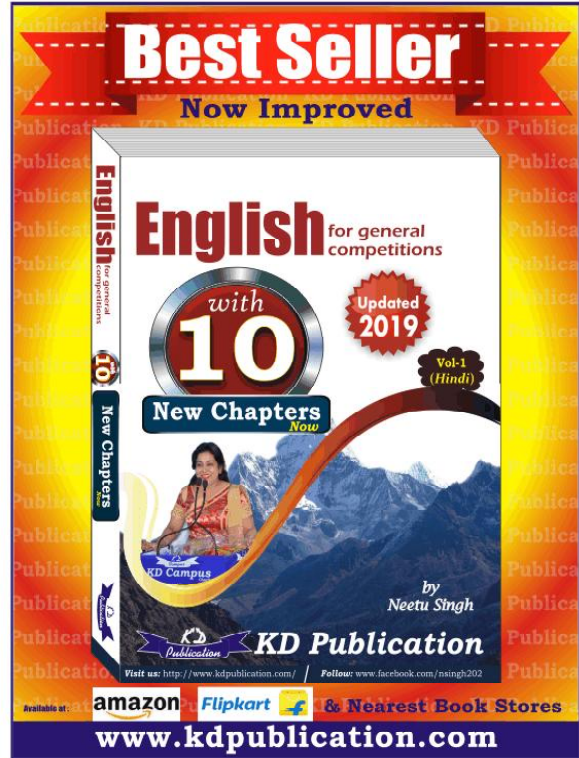
75. (B) Required Percentage =  $\left( \frac{350 - 210}{350} \times 100 \right) \%$   
 =  $\left( \frac{140}{350} \times 100 \right) \%$   
 =  $\mathbf{40\%}$

## MEANINGS IN ALPHABETICAL ORDER

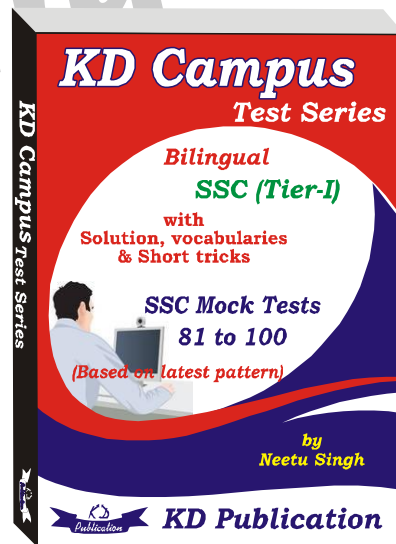
Word	Meaning in English	Meaning in Hindi
Naive	showing a lack of experience, or judgement.	अनुभवहीन
Exempt	free from an obligation	छूट देना
Inconspicuous	not clearly visible	छिपा हुआ
Lurid	unpleasantly bright in colour	भड़कीला
Probity	honesty	ईमानदारी
Gregarious	sociable	झुण्ड में रहने वाला
Diatribes	a forceful and bitter verbal attack against someone or something	दोषारोपण
Diction	the choice and use of words and phrases in speech or writing	उच्चारण
Dictate	state or order authoritatively	हुक्मनामा
Dichotomy	a division or contrast between two things	विरोधाभास
Inedible	not fit or suitable for eating	न खाने योग्य
Indent	start or position further from the margin than the main part of the text.	जगह छोड़ कर लिखना
Incendiary	designed to cause fire	आग लगानेवाला
Indelible	that cannot be removed or forgotten	अमिट या जो मिट न सके
Immaculate	perfectly clean, neat, or tidy	निर्मल
Impunity	free someone from punishment	दण्ड मुक्ति
Incessant	continuing without pause	निरंतर
Irreconcilable	impossible to find agreement between or with	परस्पर-विरोधी
Omnigenous	containing all varieties	सब प्रकार का
Omnipresent	present everywhere at the same time	सर्वव्यापी
Omnificent	unlimited in creative power	सर्वज्ञ
Omniscient	knowing everything	सर्व-ज्ञान
Deem	regard or consider in a specified way	विचार करना

**SSC MOCK TEST - 186 (ANSWER KEY)**

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



76. (C) Here the main point of confusion is given between 'objectivity' and 'naïve neutrality'. So the use of preposition 'to' is wrong. Use 'objectivity with naïve neutrality'.
77. (B) Subject in the sentence is plural. Use 'have' instead of 'has'.
78. (B) It is 'has managed to make' rather than 'has managed to made'.
88. (B) The correct use is 'important requirement'.
89. (C) In the sentence 'guaranteeing' is the right use.



**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**