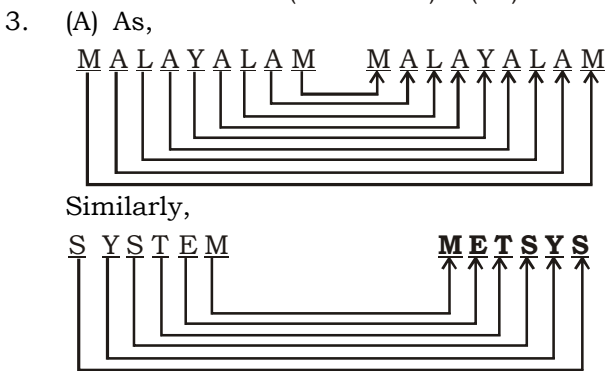
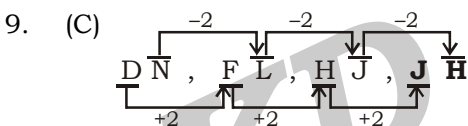
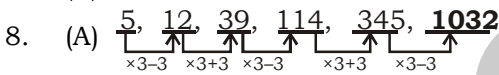


**SSC MOCK TEST – 189 (SOLUTION)**

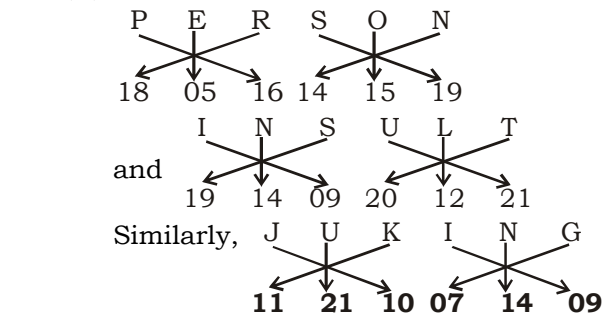
1. (C) As,  
 $19 : 180 \rightarrow (1 + 9) \times 19 - (1 + 9) = 180$   
 Similarly,  
 $24 : 138 \rightarrow (2 + 4) \times 24 - (2 + 4) = \mathbf{138}$
2. (C) As,  
 CAT : 576  $\rightarrow$  C A T  
 $(3 + 1 + 20) = (24)^2 = 576$   
 Similarly,  
 DOG : 676  $\rightarrow$  D O G  
 $(4 + 15 + 7) = (26)^2 = \mathbf{676}$



4. (C) Except 'Monkey', others are birds.  
 5. (C) Except '49 - 81', others are combination of square of prime numbers.  
 6. (D) Except **Olr**, others have two vowels  
 7. (A) **4213**



10. (A) **Jyoti** > Vineet > Raman > Deepak > Sumit.  
 11. (B) Required position of Kirti =  $74 - (27 + 6) = 74 - 33 = \mathbf{41}$   
 12. (C) Word '**NATURE**' cannot be formed by using the letters of ANTEPENULTIMATE.

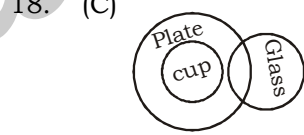


14. (B)  $49 \Omega 24 \gamma 4 \alpha 13 \beta 18$   
 After interchanging the signs as per given details,  
 $49 - 24 \div 4 \times 13 + 18$   
 $= 49 - 6 \times 13 + 18$

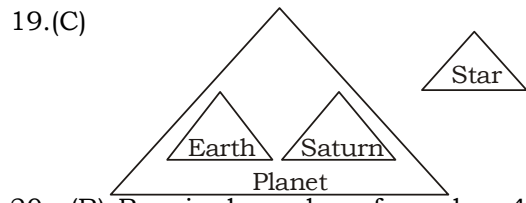
$= -78 + 67$   
 $= \mathbf{-11}$

15. (C) As,  
 $14^2 + 8^2 + 3^2 = 123 \Rightarrow 196 - 64 - 9 = 123$   
 and,  $16^2 + 8^2 + 9^2 = 111 \Rightarrow 256 - 64 - 81 = 111$   
 Similarly,  
 $19^2 + 11^2 + 5^2 = 215 \Rightarrow 361 - 121 - 25 = \mathbf{215}$
16. (B) As,  
 $(6 \times 8 \times 4) - (6 + 8 + 4) = 174,$   
 $(9 \times 4 \times 6) - (9 + 4 + 6) = 197$  and  
 $(7 \times 11 \times 3) - (7 + 11 + 3) = 210$   
 Similarly,  
 Let the missing number be x  
 A.T.Q.,  
 $(7 \times x \times 5) - (7 + x + 5) = 192$   
 $\Rightarrow 35x - (12 + x) = 192$   
 $\Rightarrow 34x = 204$   
 $\Rightarrow x = \mathbf{6}$

17. (B)  
 I.  $25 \times 5 < 19 + 28 + 11$   
 $\Rightarrow 125 < 58$  (False)  
 II.  $\mathbf{25 - 5 + 19 = 28 + 11}$   
 $\Rightarrow \mathbf{39 = 39}$  (True)  
 III.  $25 + 5 - 19 = 28 - 11$   
 $\Rightarrow 11 = 17$  (False)  
 IV.  $25 \times 5 < 19 + 28 - 11$   
 $\Rightarrow 125 < 36$  (False)  
 $\therefore$  Expression become correct by putting mathematical operators of option (B).



- I.  $\times$   
 II.  $\times$   
 Hence, **Neither conclusion I nor conclusion II follows.**



20. (B) Required number of people =  $473 + 894 + 972 = \mathbf{2339}$

21. (C)  
 22. (B)  
 23. (A)  
 24. (B)  
 25. (C) R U S T  
 $\downarrow \downarrow \downarrow \downarrow$   
 $\mathbf{32, 95, 33, 87}$
27. (C) The United Nations Security Council is one of the six principal organs of the United Nations, charged with the

- maintenance of international peace and security as well as accepting new members to the United Nations and approving any changes to its United Nations Charter.  
Headquarters: New York City, New York, United States  
Founded: 24 October, 1945
28. (A) The Dan David Prize grants annually three prizes of US\$1 million each for outstanding achievement. Fields are chosen for Past, Present and Future. Awarded for: outstanding contribution in the fields of science, technology and culture or social welfare  
First awarded: 2002  
Presented by: The Dan David Foundation
30. (C) The Rajya Sabha or Council of States is the upper house of the Parliament of India. Membership of Rajya Sabha is limited by the Constitution to a maximum of 250 members and current laws have provision for 245 members. Chairman (Vice President of India): Venkaiah Naidu  
Founder: Constituent Assembly of India  
Deputy Chairman: Harivansh Narayan Singh,
31. (C) Article 61 : Procedure for impeachment of the President.  
Article 69 : Oath or affirmation by Vice President.  
Article 71 : Matter related to the election of President and Vice President.  
Article 75 : Other provisions as to Ministers.
32. (C) The Richter scale is a scale of numbers used to tell the strength of earthquakes. Charles Richter developed the Richter Scale in 1935. His scale was based on the seismogram measured by a particular type of seismometer at a distance of 100 kilometres (62 mi) from the earthquake.
36. (C) The Prime Minister of India is the Chairman of Planning Commission. Formed on 15<sup>th</sup> March, 1950, dissolved on 17<sup>th</sup> August, 2014 and replaced by a new Institution named as NITI Aayog. Headquarters: Yojana Bhawan, New Delhi
38. (D) The International Monetary Fund (IMF) is an international organization headquartered in Washington, D.C., consisting of "189 countries working to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty around the world."  
Founded: 27 December 1945, Bretton Woods, Carroll, New Hampshire, United States.
43. (C) The Ghadar Party was an Indian revolutionary organisation primarily founded by Indians. The party was multi-ethnic and had Sikh, Hindu and Muslim leaders. The party was headquartered in San Francisco, United States.  
Managing Director : Christine Lagarde  
President: Sohan Singh Bhakna  
Founders: Har Dayal, Sohan Singh Bhakna, Santokh Singh, Sant Baba Wasakha Singh Dadehar, Baba Jawala Singh, Rash Bihari Bosh , and Gulab Singh.  
Founded: 1913
44. (B) Bauxite is primary source of Aluminum. Chemical Formula :  $Al_2O_3 \cdot nH_2O$
45. (B) Backward bending supply curve shows how changes in real wage rates might affect the number of hours worked by the employees.
46. (A) Cannabis, also known as Marijuana among other names, is a psychoactive drug from the Cannabis plant used for medical or recreational purposes. The main psychoactive part of cannabis is tetrahydrocannabinol, one of 483 known compounds in the plant, including at least 65 other cannabinoids.
47. (D) Sri Aurobindo was an Indian philosopher, yogi, guru, poet, and nationalist. His some other books are The Life of Divine, Synthesis of Yoga, The Mother, The National Value of Art, Bande Mataram, A System of National Education and India's Rebirth.  
Discovery of India - Jawahar Lal Nehru  
The Hindu View of Life - Sarvepalli Radha Krishan  
Yogeshastra - Bhagwan Kulkarni
51. (A) Ratio of efficiency  

$$= \frac{20 \times 5 \times 15}{3} : \frac{25 \times 8 \times 10}{9}$$

$$\therefore \text{Required ratio} \Rightarrow \mathbf{9 : 4}$$
52. (C) As,  $\frac{3}{5} = 60\%$   
 $\therefore$  Total % Manisha spend = 60% + 15% + 18% = 93%  
 Now, amount left for shopping, 7% = 2100  
 $\Rightarrow 100\% = \frac{2100}{7} \times 100 = 30,000$   
 Now, 5 units = 30,000  
 $\Rightarrow 4 \text{ units} = \frac{30,000}{5} \times 4 = 24000$   
 $\therefore$  Pandey's salary = ₹ **24,000**
53. (D)  $16^{\sin\theta} \times 8^{\cos\theta} \Rightarrow 2^{4\sin\theta} \times 2^{3\cos\theta}$   
 Now, Maximum value of  $4\sin\theta + 3\cos\theta$   
 $= \sqrt{4^2 + 3^2} = \sqrt{25} = 5$  maximum value  
 $= 2^5 = \mathbf{32}$ .

54. (A)  $\frac{3}{4}x + \frac{4}{3x} = 2$

$\Rightarrow 9x^2 + 16 = 24x$

$\Rightarrow 9x^2 - 24x + 16 = 0$

$\Rightarrow 9x^2 - 12x - 12x + 16 = 0$

$\Rightarrow 3x(3x - 4) - 4(3x - 4) = 0$

$\Rightarrow (3x - 4)(3x - 4)$

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

Required value =  $\sqrt{3\left(\frac{4}{3}\right)^4 + 2\left(\frac{4}{3}\right)^5}$

=  $\sqrt{\frac{256}{27} + \frac{2048}{243}}$

=  $\frac{16}{9}\sqrt{\frac{17}{3}}$

55. (D)  $555\frac{1}{5} + 555\frac{2}{5} + 555\frac{3}{5} + 555\frac{4}{5}$

$\Rightarrow (555 \times 4) + \left(\frac{1}{5} + \frac{2}{5} + \frac{3}{5} + \frac{4}{5}\right)$

$\Rightarrow 2220 + \left(\frac{10}{5}\right)$

$\Rightarrow 2220 + 2 \Rightarrow \mathbf{2222}$

56. (D)  $\frac{12-x}{13-x} = \frac{21-x}{23-x}$

From option (D),

$\frac{12-3}{13-3} = \frac{21-3}{23-3}$

$\Rightarrow \frac{9}{10} = \frac{18}{20}$

$\Rightarrow \frac{9}{10} = \frac{9}{10}$

$\therefore x = 3$  is the right answer.

57. (A) ATQ,

$\Rightarrow 40\% - 30\% = 5 + 10$

$\Rightarrow 10\% = 15$

$\Rightarrow 30\% = 45$

$\therefore$  Required marks =  $45 + 5 = \mathbf{50}$

58. (A) Let the co-ordinates of C be (x, y)  
co-ordinates of centroid

$3 = \frac{8+0+x}{3} \Rightarrow x=1$

$4 = \frac{7+0+y}{3} \Rightarrow y=5$

$\therefore$  Required co-ordinates = **(1, 5)**.

59. (A)  $1 \times 3 + 3 \times 5 + 5 \times 7 + 7 \times 9 + \dots$  upto 30 terms

=  $(2-1)(2+1) + (4-1)(4+1) + (6+1) + (8-1)$

$(8+1) + \dots + (60-1)(60+1)$

=  $2^2-1 + 4^2-1 + 6^2-1 + 8^2-1 + \dots + 60^2-1$

$\Rightarrow 2^2 + 4^2 + 6^2 + 8^2 + \dots + 60^2 - 30$

$\Rightarrow 2^2(1^2 + 2^2 + 3^2 + 4^2 + \dots + 30^2) - 30^2$

$2^2 \times \frac{(30)(30+1)(60+1)}{6} - 30$

$\Rightarrow 2 \times 10 \times 31 \times 61 - 30$

$\Rightarrow 37820 - 30 = \mathbf{37790}$

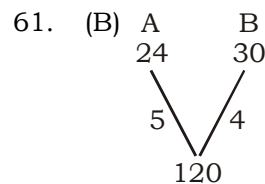
60. (C)  $13\frac{1}{3} + 5\frac{5}{6} - 2\frac{2}{3} - 1\frac{4}{7}$

$\Rightarrow (13 + 5 - 2 - 1) + \frac{1}{3} + \frac{5}{6} - \frac{2}{3} - \frac{4}{7}$

$\Rightarrow 15 + \left(\frac{1}{3} + \frac{5}{6} - \frac{2}{3} - \frac{4}{7}\right)$

$\Rightarrow 15 + \left(\frac{14 + 35 - 28 - 24}{42}\right)$

$\Rightarrow 15 - \frac{3}{42} \Rightarrow 15 - \frac{1}{14} \Rightarrow \mathbf{14\frac{13}{14}}$



Work done by pipe B in 15 minutes =  $15 \times 4 = 60$  units

Remaining work =  $120 - 60 = 60$  units

$\therefore$  Time taken by A =  $\frac{60}{5} = 12$  min.

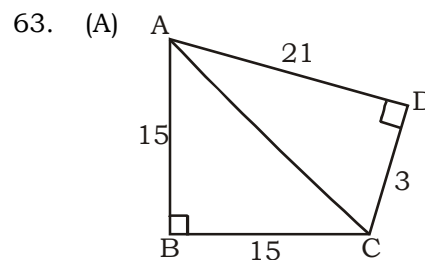
$\therefore$  Required time =  $15 - 12 = \mathbf{3}$  min.

62. (A) Since, profit remains same.

5% of CP = ₹20

$\therefore$  CP = 400

$\therefore$  Selling price =  $\frac{162.5}{100} \times 400 = \mathbf{₹ 650}$



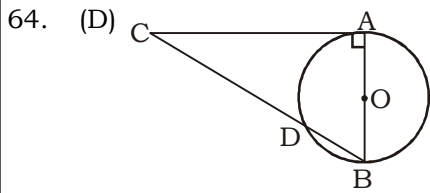
Area of ABCD = Area of  $\Delta ABC$  + Area of  $\Delta ADC$

$\therefore$  Area of  $\Delta ABC = \frac{1}{2} \times 15 \times 15 = \frac{225}{2}$  unit<sup>2</sup>

& Area of  $\Delta ADC = \frac{1}{2} \times 3 \times 21 = \frac{63}{2}$  unit<sup>2</sup>

$\therefore$  Area of ABCD

=  $\frac{225}{2} + \frac{63}{2} = \frac{288}{2} = \mathbf{144}$  unit<sup>2</sup>



By Pythagoras theorem,  
 $AC^2 + AB^2 = BC^2$   
 &  $AC^2 = BC \times CD$   
 From equation (i) and (ii),  
 $BC \times CD + AB^2 = BC^2$   
 $\Rightarrow AB^2 = BC^2 - BC \times CD$   
 $\Rightarrow AB^2 = BC(BC - CD)$   
 $\Rightarrow 14^2 = BC \times BD$   
 $\Rightarrow BC \times BD = \mathbf{196 \text{ cm}}$

65. (B)  $\frac{b-c}{a} + \frac{a+c}{b} + \frac{a-b}{c} = 1$   
 $\Rightarrow \text{Let } a = b$   
 $\Rightarrow \frac{a-c}{a} + \frac{b+c}{b} + \frac{b-b}{c} = 1$

$\Rightarrow 1 - \frac{c}{a} + 1 + \frac{c}{b} + 0 = 1$

$\Rightarrow 1 = \frac{c}{a} - \frac{c}{b}$

$\Rightarrow \frac{1}{c} = \frac{1}{a} - \frac{1}{b} \Rightarrow \frac{1}{a} = \frac{1}{c} + \frac{1}{b}$

66. (B)  $\theta + r = 90^\circ$  &  $\frac{\cot \theta}{\cot r} + \cos^2 \theta + \cos^2 r$

$\Rightarrow \frac{\cot \theta}{\cot(90 - \theta)} + \cos^2 \theta + \cos^2(90 - \theta)$

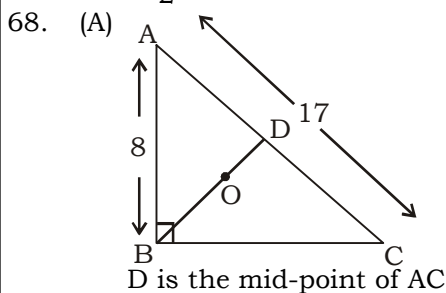
$\Rightarrow \frac{\cot \theta}{\tan \theta} + \cos^2 \theta + \sin^2 \theta$

$\Rightarrow \cot^2 \theta + 1 = \mathbf{\text{cosec}^2 \theta}$

67. (C) Area of  $\Delta ABC = \frac{1}{2} [x_1(y_2 - y_3) + x_2(y_3 - y_1) + x_3(y_1 - y_2)]$

$= \frac{1}{2} [3(2 + 2) + (-5)(-2 - 4) + (5)(4 - 2)]$

$= \frac{1}{2} [12 + 30 + 10] = \mathbf{26 \text{ sq. unit.}}$

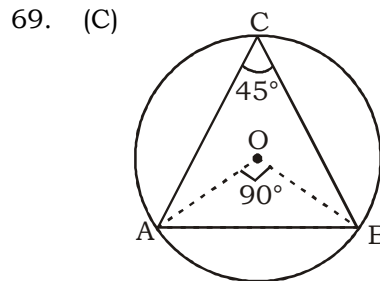


$BD = AD = \frac{17}{2} \text{ cm}$

Now, O is the centroid of  $\Delta ABC$

$\therefore OB = \frac{2}{3} \times BD$

$= \frac{2}{3} \times \frac{17}{2} = \mathbf{\frac{17}{3} \text{ cm}}$



Let the centre of circle is 'O'

$\therefore \angle AOB = 90^\circ$

OA = OB radius of circle

$\therefore \sqrt{2} r = 5\sqrt{2}$

$\Rightarrow r = 5 \text{ cm}$

$\therefore \text{Area of circle} = \pi r^2 = \mathbf{25\pi \text{ cm}^2}$

70. (C) Volume of large cube =  $3^3 + 4^3 + 5^3 = 27 + 64 + 125 = 216 \text{ cm}^3$

Let  $a$  be the side of larger cube

$\therefore a^3 = 216$

$\Rightarrow a = 6$

$\therefore \text{Total surface area of larger cube} = 6a^2 = 216 \text{ cm}^2$

Total surface area of smaller cube

$= 6 \times (3)^2 + 6(4)^2 + 6(5)^2$

$= 6 \times 9 + 6 \times 16 + 6 \times 25 = 300 \text{ cm}^2$

$\therefore \text{Required ratio} = 300 : 216 \Rightarrow \mathbf{25 : 18}$

71. (B) Let the speed of boat in still water be  $x$  and the speed of stream be  $y$

A.T.Q.,

$\frac{D}{x+y} = t$  — (i) and,  $\frac{D}{x-y} = 3t$  — (ii)

By comparing equation (i) and equation (ii),  
 $(x+y)t = 3t(x-y)$

$\Rightarrow 4y = 2x$

$\therefore \frac{x}{y} = \mathbf{\frac{2}{1}}$

72. (C) Required percentage

$= \frac{810 - 720}{720} \times 100 = \mathbf{12.5\%}$

73. (B) Required percentage

$= \frac{720 + 740 + 800}{730 + 770 + 810} \times 100 = \frac{2260}{2310} \times 100$   
 $\approx \mathbf{98\%}$

74. (B) Required percentage

$= \frac{720 + 800}{2000} \times 100 = \frac{1520}{20} = \mathbf{76\%}$

75. (A) Required difference

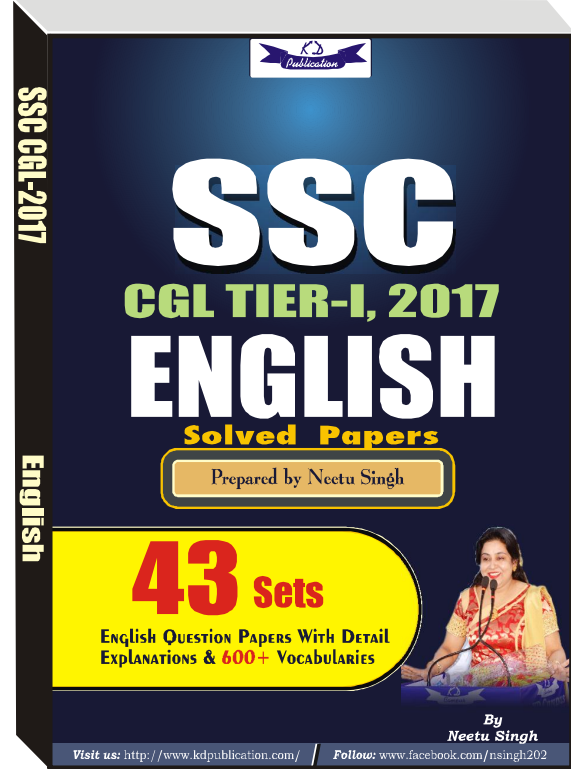
$= (770 + 740 + 800) - (720 + 730 + 810) = \mathbf{50}$

**MEANINGS IN ALPHABETICAL ORDER**

Word	Meaning in English	Meaning in Hindi
Verbatim	in the exact words	अक्षरशः
Virtually	very nearly, almost entirely	लगभग
Loosely	not tightly fastened, attached, or held	ढीला
Virtuous	morally good, having or showing virtue	सद्गुण
Nauseous	feeling like you are about to vomit	उल्टी जैसा
Immoral	not morally good or right, morally evil or wrong	अनैतिक
Remnant	a usually small part, or trace remaining	शेष
Despise	to feel scorn and dislike for	घृणा करना
Sneer	to express dislike and a lack of respect for someone or something in a very open way	उपहास करना
Scurrilous	said or done unfairly to make people have a bad opinion of someone	अपमानजनक
Sophisticated	having or showing a lot of experience and knowledge about the world and about culture, art, literature, etc.	विवेकी
Coarse	crude or unrefined in taste, manners, or language	बेअदब, भद्दा
Insolent	rude or impolite	उदड़
Complimentary	expressing praise or admiration for someone or something	प्रशंसासूचक
Desert	to leave and stop helping or supporting	त्यागना
Drought	a long period of time during which there is very little or no rain	अकाल, सूखा
Famine	an extreme scarcity of food	अकाल
Equipage	a set of small articles	सामग्री
Lineage	the ancestors from whom a person is descended	वंशावली
Itinerant	traveling from place to place, staying in a place for only a short amount of time	यात्रा करने वाला
Indispensable	extremely important and necessary	अतिआवश्यक
Redundant	repeating something else and therefore unnecessary, superfluous	व्यर्थ
Peripheral	not relating to the main or most important part	दूसरे दर्जे का
Ripple	to move in small waves	छोटी लहर
Relentless	continuing without becoming weaker, less severe, etc	अनवरत, कठोर
harsh	unpleasant and difficult to accept or experience	कड़ा, रूखा
stringent	very strict or severe	संख्त
depriving	to take something away from or keep from having something	वंचित

**SSC MOCK TEST - 189 (ANSWER KEY)**

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



76. (C) Change 'cheers' into 'jeers'. 'But' (after applause) 'indicates that opposite of applause' should be used in the sentence. Jeer means a mocking and insulting remark.
77. (C) Change 'from' into 'of'. (not) make head or tail of something means to not be able to understand something at all.
78. (D) No error
79. (D) 'relies' is the correct option. 'Rely' takes preposition 'on'.
- Rely on- to trust in or depend on (भरोसा करना)
80. (A) 'Up' is the correct option.
- Put up with - to tolerate, to bear (बर्दाश्त करना)
81. (D) 'be admired' is the correct option. This part of sentence should be in Passive Voice.
- Put on - to cloth, to tease or deceive for fun (कपड़ा पहनना, मौज के लिए छेड़ना, धोखा देना)
  - Put off - to postpone, to delay, to avoid (स्थगित करना)
  - Put out - to extinguish (बुझा देना)
89. (C) 'Felt like a fish out of water' is the correct option.
- Feel like a fish out of water (बेचैन होना, असहज महसूस करना)

**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**