

**SSC MOCK TEST – 137 (SOLUTION)**

1. (A) Magazine is related to editor and drama is related to director.

2. (C) As, ACEG IKMO  
 $\xrightarrow{+8}$

Similarly, OSUW YACE  
 $\xrightarrow{+8}$

3. (A)  $12 \Rightarrow (12 + 1) \times 3 = 39$   
 $15 \Rightarrow (15 + 1) \times 3 = 48$

4. (B) Except 'Battery', others are used for lightening purpose.

5. (D)  $CA \Rightarrow 3 - 1 = 2$   
 $FD \Rightarrow 6 - 4 = 2$   
 $KI \Rightarrow 11 - 9 = 2$

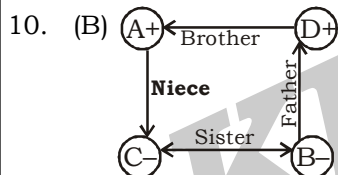
**TQ  $\Rightarrow 20 - 17 = 3$**

6. (D)  $\begin{matrix} 73 & 61 & 57 & 69 & 47 & 59 & 42 & 29 \\ \xrightarrow{12} & \xrightarrow{12} & \xrightarrow{12} & \xrightarrow{12} & \xrightarrow{12} & \xrightarrow{12} & \xrightarrow{13} & \end{matrix}$

7. (D) Scarf  $\rightarrow$  Scene  $\rightarrow$  Shell  $\rightarrow$  Stream  $\rightarrow$  Survey.

8. (A) DCB HGF LKJ PON  
 $\xrightarrow{+4}$   $\xrightarrow{+4}$   $\xrightarrow{+4}$

9. (A)  $\begin{matrix} 4 & 9 & 16 & 25 & 36 & 49 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 2^2 & 3^2 & 4^2 & 5^2 & 6^2 & 7^2 \end{matrix}$



11. (A) N R **O** P M

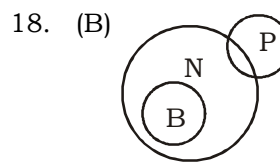
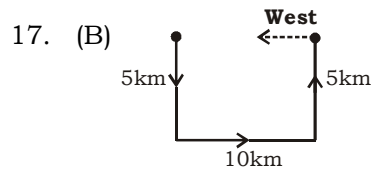
12. (C) S A L U T E

13. (A) SUN =  $19 + 21 + 14 = 54$   
 CAKE =  $3 + 1 + 11 + 5 = 20$   
 MISTAKE =  $13 + 9 + 19 + 20 + 1 + 11 + 5 = 78$

14. (C)  $128 + 9 - 16 \times 4$   
 After changing the signs as per the given details,  
 $128 \times 9 + 16 \div 4 = 128 \times 9 + 4$   
 $= 1152 + 4$   
 $= 1156$

15. (D) As,  $6 \times 2 \times 9 \Rightarrow 269$ ,  
 a b c bac  
 $8 \times 7 \times 1 \Rightarrow 781$   
 a b c bac  
 Similarly,  $4 \times 1 \times 3 \Rightarrow 143$   
 a b c **bac**

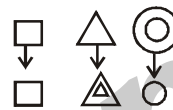
16. (C)  $9 \times 3 \times 3 = 81$   
 $11 \times 4 \times 4 = 176$   
 $13 \times 7 \times 5 = 455$



I.  $\times$   
 II.  $\checkmark$

$\therefore$  Only conclusion II follows.

19. (B) From figure (i) and (iii), we have,



$\therefore$  The face opposite to "O" is

20. (B)

21. (B)

22. (B)

23. (A)

24. (C)

25. (B) S E N T

22 32 65 78

26. (C) A **geographic information system (GIS)** is a system designed to capture, store, manipulate, analyze, manage, and present spatial or geographic data.

27. (C) **Swami Niranjanananda Saraswati** was born in 1960 in Rajnandgaon in the state of **Chhattisgarh**. He was given the third-highest civilian award of the country, **Padma Bhushan**, in 2017 for distinguished service of high order.

28. (C) Mars is the **fourth planet** from the Sun and the second-smallest planet in the Solar System after Mercury. The terrestrial planets, Mars, Earth, Venus, and Mercury only have three moons between them (**Mars has two**, Phobos and Deimos, and the **Earth has one**).

29. (C) **Leila Seth** (20 October 1930 – 5 May 2017) was the first woman judge on the Delhi High Court and she became the **first woman** to become Chief Justice of a state High Court on 5 August 1991.
30. (D) **Napoleon Bonaparte** is also known as the “**The Little Corporal**”. 1769–1821, Emperor of the French (1804–15). He came to power as the result of a coup in 1799 and established an extensive European empire.
32. (D) **Aravalli Range**, also spelled Aravali Range is a hill system of northern India, running northeasterly for 350 miles through Rajasthan state. Isolated rocky offshoots continue to just south of Delhi. It gives rise to several rivers, including the **Banas, Luni, Sakhi, and Sabarmati**.
- The origin of Tapti River is at the **Satpura range** of Betul district in the central Indian state of **Madhya Pradesh**.
35. (D) Major problems faced by the small scale industries are:
- Lack of marketing support: Small Scale Industries lack market knowledge with regard to competitors, consumer preferences, market trends. Since their production volume is small and cannot meet demand for large quantities their market is very restricted.
  - Raw material shortages: Raw materials are not available at the required quantity and quality. Since demand for raw materials is more than the supply, the prices of raw materials are quite high which pushes up the cost. Scarcity of raw materials results in idle capacity, low production, inability to meet demand and loss of customers.
  - Problems of the market: Products of these enterprises in spite of their originality are not often standardized and therefore, are not exposed to advertisement. There is a gap of information between the producer and the prospective buyers.
36. (D) Five rivers are part of the “Punjab Rivers”. The state of Punjab, situated in the northwest part of India, is at once recognized as the land of five rivers. They are the Jhelum, Chenab, Ravi, Beas, and Sutlej.
38. (C) Angel Falls in Venezuela is the highest waterfall in the world. The falls are 3230 feet in height, with an uninterrupted drop of 2647 feet. Angel Falls is located on a tributary of the Rio Caroni.
39. (A) Metal rings expand when heated. Length, surface area and volume will increase with temperature. The degree of thermal expansion varies with different types of metal. Thermal expansion occurs because heat increases the vibrations of the atoms in the metal.
42. (D)
- Jellyfish are animals of the phylum Cnidaria.
  - The starfish (commonly as a sea star) is generally found with 5 arms that are attached to a central disc.
  - Cuttlefish, any of several marine cephalopods of the order Sepioidea, related to the octopus and squid and characterized by a thick internal calcified shell called the cuttlebone.
44. (B) A binary digit, or bit, is the smallest unit of information in a computer. It is used for storing information and has a value of true/false, or on/off.
45. (D) A run batted in (RBI), plural runs batted in, is a statistic in baseball and softball that credits a batter for making a play that allows a run to be scored.
46. (D) The Moti Masjid in Agra was built by Shah Jahan. During the rule of Shah Jahan the Mughal emperor, numerous architectural wonders were built. Most famous of them being the Taj Mahal.
47. (D) This phenomenon is called genetic linkage. When genes are linked, genetic crosses involving those genes will lead to ratios of gametes (egg and sperm) and offspring types that are not what we'd predict from Mendel's law of independent assortment.



63.(D)  $25 \times \text{C.P.} = 20 \times \text{S.P.}$

$$\Rightarrow \frac{\text{CP}}{\text{SP}} = \frac{20}{25}$$

$$\text{Required Profit} = \frac{5}{20} \times 100 = 25\%$$

64.(A)  $\text{Rate} = \frac{280 \times 100}{400 \times 10} = 7\%$

65.(B)  $a + b = 2c$

$$\Rightarrow b - c = c - a \quad \dots(i)$$

$$\therefore \frac{a}{a-c} + \frac{c}{b-c}$$

$$= \frac{a}{a-c} + \frac{c}{c-a} \quad [\text{From equation (i)}]$$

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

66.(D) We know that the circumcentre of the triangle lying on equidistant from the vertices of the triangle.

$\therefore$  P is the circumcentre of  $\Delta$

67. (A)  $\sin\theta + \cos\theta = 1$

$$\Rightarrow (\sin\theta + \cos\theta)^2 = 1^2$$

$$\Rightarrow \sin^2\theta + \cos^2\theta + 2\sin\theta \cos\theta = 1$$

$$\Rightarrow 1 + 2\sin\theta \cos\theta = 1$$

$$\Rightarrow 2\sin\theta \cos\theta = 0$$

$$\therefore \sin\theta \cos\theta = 0$$

68.(C)  $\frac{a^2}{b+c} = \frac{b^2}{c+a} = \frac{c^2}{a+b} = 1$

$$a^2 = b+c$$

Adding 'a' both sides,

$$a + a^2 = a + b + c$$

$$\Rightarrow a(a+1) = a + b + c$$

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

Similarly,

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

and,  $c + 1 = \frac{a+b+c}{c}$

Put the value of  $(a+1)$ ,  $(b+1)$ , and  $(c+1)$ ,

$$\frac{2}{1+a} + \frac{2}{1+b} + \frac{2}{1+c}$$

$$= \frac{2a}{a+b+c} + \frac{2b}{a+b+c} + \frac{2c}{a+b+c}$$

$$= \frac{2(a+b+c)}{a+b+c} = 2$$

69.(D)  $2x + \frac{2}{x} = 3$

$$\Rightarrow x + \frac{1}{x} = \frac{3}{2}$$

Taking cube on both sides,

$$x^3 + \frac{1}{x^3} + 3 \times x \times \frac{1}{x} \times \frac{3}{2} = \frac{27}{8}$$

$$\Rightarrow x^3 + \frac{1}{x^3} = \frac{27}{8} - \frac{9}{2} = -\frac{9}{8}$$

Adding '2' both sides,

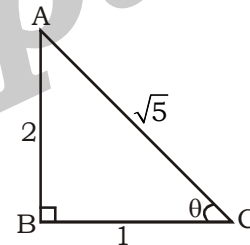
$$x^3 + \frac{1}{x^3} + 2 = 2 - \frac{9}{8} \Rightarrow = \frac{7}{8}$$

70.(D)  $\frac{\sin\theta + \cos\theta}{\sin\theta - \cos\theta} = \frac{3}{1}$

Apply componendo and dividendo Rule,

$$\Rightarrow \frac{\sin\theta + \cos\theta + \sin\theta - \cos\theta}{\sin\theta + \cos\theta - \sin\theta + \cos\theta} = \frac{3+1}{3-1}$$

$$\Rightarrow \frac{2\sin\theta}{2\cos\theta} = \frac{4}{2} \Rightarrow \tan\theta = 2$$

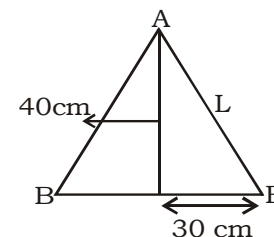


Now,  $\sin^4\theta - \cos^4\theta = (\sin^2\theta + \cos^2\theta)(\sin^2\theta - \cos^2\theta)$

$$\Rightarrow \sin^2\theta - \cos^2\theta = \left(\frac{2}{\sqrt{5}}\right)^2 - \left(\frac{1}{\sqrt{5}}\right)^2$$

$$\Rightarrow \frac{4}{5} - \frac{1}{5} = \frac{3}{5}$$

71.(C)



$$L = \sqrt{30^2 + 40^2}$$

$$\Rightarrow L = 50 \text{ cm}$$

A.T.Q,

$$\Rightarrow 4\pi r^2 = \pi \times 30 \times 50$$

$$\Rightarrow 4r^2 = 30 \times 50$$

$$\Rightarrow r = 5\sqrt{15} \text{ cm}$$

72.(B) Number of students who failed in maths  
= 15

73.(D) Total number of students in the class  
= 15 + 20 + 40 + 50 + 10 = 135

74.(D) Number of students who passed  
= 135 - 15 = 120

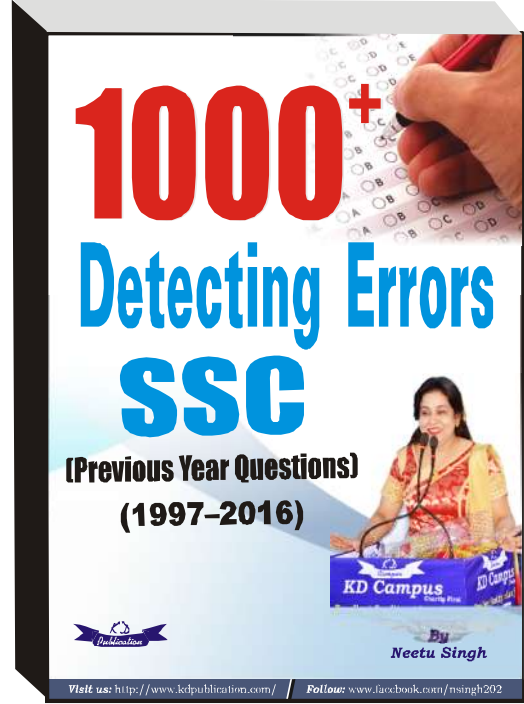
$$\text{Required Percentage} = \frac{120}{135} \times 100$$

$$= \frac{2400}{27}$$

$$= \frac{800}{9} = 88\frac{8}{9}$$

75.(A) 90% marks of 50 = 45

The number of students who have got A<sup>+</sup>  
= 10

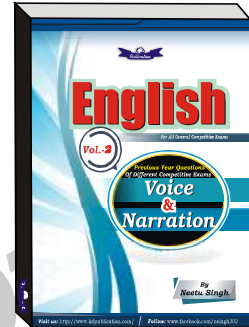
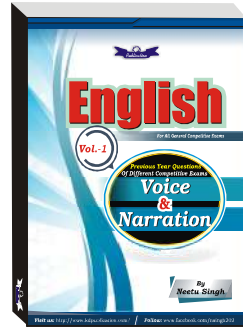
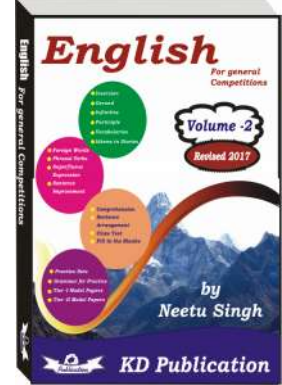
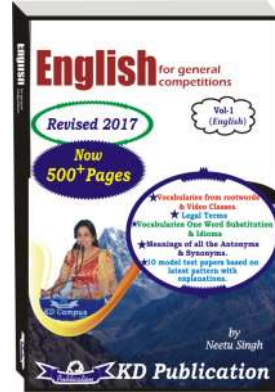


## MEANINGS IN ALPHABETICAL ORDER

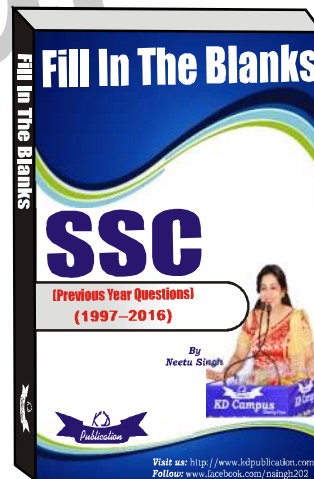
Word	Meaning in English	Meaning in Hindi
Asphyxiate	kill (someone) by depriving them of air	गला घोंट कर मारना
Commensurable	Measurable by the same standard	सम्मेय
Console	to comfort in the time of grief	सांत्वना देना
Credulous	easily fooled or cheated	भोला-भाला
Defiance	a refusal to obey something or someone	अवज्ञा
Euthanasia	the act of permitting the death of hopelessly sick or injured individuals in a relatively painless way for reasons of mercy	इच्छामृत्यु, सुखमृत्यु
Gullible	easily duped or cheated	भोला-भाला
Illustration	a visual representation that is used to make subject more easier to understand	चित्रण
Immolate	kill or offer as a sacrifice, especially by burning	बलिदान करना (आग में)
Inflammable	easily inflamed, excited or angered	उत्तेजनीय
Inflammatory	tending to excite anger, disorder, or tumult	उत्तेजक, भड़कानेवाला
Inflation	a continual increase in the price of goods and services	महंगाई
Inflationary	relating to inflation	महंगाई से संबंधित
Reassure	to make (someone) feel less afraid, upset, or doubtful	साहस दिलाना, तसल्ली देना
Silly	foolish	मूर्ख, बेवकूफी भरा
Skit	a satirical sketch	व्यंगात्मक चित्र

**SSC MOCK TEST - 137 (ANSWER KEY)**

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



79. (C) Here the subject (a variety) is singular hence it will agree with singular verb (distracts). Replace 'distract' with 'distracts'.
80. (C) 'Cyclone' leaves 'a trail of misery' not 'trial of misery'. Hence replace 'trial' with 'trail'. 'Trail' means 'a series of objects left behind by the passage of someone or something'.
82. (A) For 'university' article 'a' is used. 'An' is used with word that starts with vowel sound. 'University' starts with 'yu' sound.
91. (C) Adverb is used to qualify an adjective. Hence replace adjective (real) with adverb (really).
95. (D) If all three persons or two out of three persons come in a singular sentence. The order is 231 or 23 or 31. (2-second person, 3-third person, 1-first person)



**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**