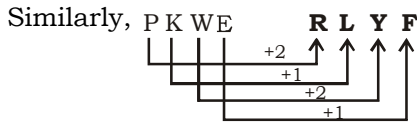
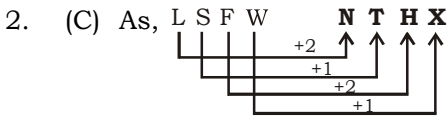


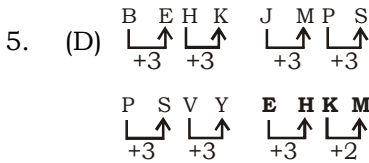
**SSC MOCK TEST – 223 (SOLUTION)**

1. (B) As, Medicine is necessary for Patient.  
 Similarly, Education is necessary for **Student**.



3. (C) As,  $14 \times 2 - 6 = 22$   
 Similarly,  $17 \times 2 - 6 = \mathbf{28}$

4. (C) Except **Accessory**, all others are Synonyms.



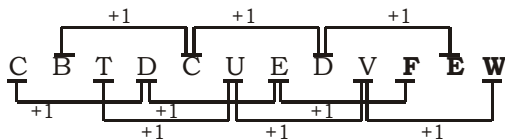
6. (C)  $47 - 59 = -12$   
 $57 - 69 = -12$   
 **$71 - 84 = -13$**   
 $91 - 103 = -12$

7. (C) Ambiguity → Ambiguous → Ambitions →  
 Animal → Animation.

8. (C) **CANCEL**

9. (D) As,  $(15 - 7) \times 2 = 16$   
 and  $(9 - 5) \times 2 = 8$   
 Similarly,  $(\mathbf{28} - 10) \times 2 = 36$

10. (C) ATQ.,

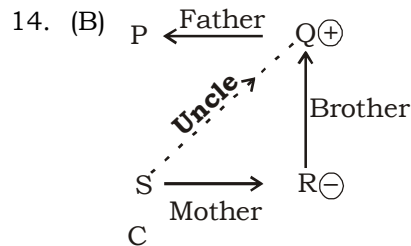


11. (A) 2.2      14.8      40      90.4      **191.2**

12. (A) According to Sumit  
 After 15<sup>th</sup> May → 16<sup>th</sup> May, 17<sup>th</sup> May  
 ← Before 18<sup>th</sup> May -----(i)

But According to Deepak  
 after 16<sup>th</sup> May → 17<sup>th</sup> -----20<sup>th</sup> May ← Before  
 21<sup>st</sup> May -----(ii)  
 from equation (i) and (ii),  
 Hence, Examination was held on **17th May**.

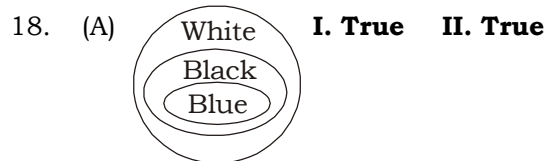
13. (D) **Jagrati** > Uma > Atulika > Amit > Aman



15. (B)  $6^2 + 4^2 - (6 + 4) = 42$   
 $5^2 + 7^2 - (5 + 7) = 62$   
 $8^2 + 9^2 - (8 + 9) = \mathbf{128}$

16. (B) Given,  
 $12 \times 6 \div 5 + 4$   
 After changing signs as per details given  
 in question,  
 $12 \div 6 - 5 \times 4$   
 $= 2 - 20 = \mathbf{-18}$

17. (A) As,  $(9 + 11) \times 3 = 60$   
 and  $(13 + 17) \times 4 = 120$   
 Similarly,  $(40 + 41) \times 5 = \mathbf{405}$



19. (B)

∴ Required number of boys =  $4 + 12 = \mathbf{16}$

20. (A)  
 21. (B)  
 22. (B)  
 23. (A)  
 24. (A)

25. (C)
27. (C) F1 - Brings up a Help Window in many applications including browsers, Microsoft office and others.  
 F6 - In many applications, it is used to send email like microsoft outlook; Siebel CRM.  
 Ctrl + F9 and Alt+F9 are used to built mail merge document in microsoft word.
28. (D) Sardar Patel stadium, Ahmedabad is a cricket stadium. It is commonly known as Motera Stadium.
30. (D) S.K Mitra was known for his work on the Ionosphere. He was awarded Padma Bhushan in 1962.
36. (C) June 4 – International Day of Innocent Children Victims of Aggression  
 September 23 – International Day for Sign Language.  
 March 1 – Zero Discremination Day
38. (C) **State** **Dam**  
 Madhya Pradesh Indira Sagar, Bargi, Bansagar, Gandhi Sagar, Mandi Kheda and Tawa  
 Rajasthan Bisalpur, Mahi Bajaj Sagar, Rana Pratap Sagar, Meja and Jawai
40. (C) Gurmeet singh - Athlete  
 H.S. Prannoy - Badminton  
 Chetan Anand - Badminton
42. (D) A cell wall is a semi-permeable protective layer in some cell types. This outer covering is positioned next to the cell membrane (plasma-membrane) in most plant cell fungi, bacteria, algae, and some archaea. Animal cells however, do not have a cell wall. The cell wall has many important functions in a cell including protection, structure and support.
46. (C) 1. On May 20, 1498 Vasco da Gama reached Calicut.  
 2. The Mughal Empire was founded in 1526.  
 3. Indian Mutiny also called Sepoy Mutiny, got widespread but was unsuccessful rebellion against British rule in India in 1857–58.
48. (D) **Fat-Soluble Vitamins**-Vitamin A (Retinal), Vitamin D (Cholecalciferol) and Vitamin K (Phylloquinone)  
**Water-soluble Vitamins** -Vitamin C (Ascorbic acid), Vitamin B<sub>1</sub> (Riboflavin), Vitamin B<sub>5</sub> (Niacin), Vitamin B<sub>6</sub> (Pyridoxine), Vitamin B<sub>3</sub> (Pantothenic Acid), Vitamin B<sub>7</sub> (Biotin) and Vitamin B<sub>12</sub> (Cobalamin).
51. (B) ATQ.,  
 Let number is N  
 $N = K [LCM (12, 16, 18, 20, 25) + 4]$   
 $N = 3600K + 4$   
 $N = 3598K + 2K + 4$   
 Put  $K = 5$   
 $N = 18004$   
 Hence, Thousand place is 8
52. (D) ATQ.,  
 20% — ₹ 30.80  
 $100\% \text{ — } ₹ \frac{30.80 \times 100\%}{20\%} = ₹ 154$   
 Hence, cost price is ₹ 154
53. (A) ATQ.,  
 Let, the total distance D and total time t  
 $\frac{D}{60} = t \Rightarrow D = 60t$   
 $\Rightarrow \frac{60t \times 40}{100} = 24t$   
 $\Rightarrow \frac{24t}{U} = \frac{3}{5}t \Rightarrow U = 40 \text{ km/hr.}$   
 Hence, he travel at speed 40 km/hr.
54. (B) ATQ,  
 Using effective rate concept  
 1<sup>st</sup> yr 10%  
 2<sup>nd</sup> yr 11% } 10% of 10%  
 3<sup>rd</sup> yr 12.1% } 10% of 11%  
 4<sup>th</sup> yr 13.31% } 10% of 12.1%
- Difference between 4<sup>th</sup> year and 3<sup>rd</sup> year.  
 Effective rate = 1.21%  
 Total interest =  $\frac{1.21}{100} \times ₹ 18000$   
 = ₹ 217.80

55. (D) ATQ.,

$$\begin{aligned}
 &= \frac{(1 + \cos \theta)^2 + \sin^2 \theta}{(\operatorname{cosec}^2 \theta - 1) \sin^2 \theta} \\
 &= \frac{1 + \cos^2 \theta + 2 \cos \theta + \sin^2 \theta}{\left(\frac{1}{\sin^2 \theta} - 1\right) \sin^2 \theta} \\
 &= \frac{2 + 2 \cos \theta}{\frac{\cos^2 \theta}{\sin^2 \theta} \times \sin^2 \theta} \\
 &= \frac{2(\sec \theta + 1)}{\sec \theta \frac{1}{\sec^2 \theta}} \\
 &= 2 \sec \theta (\sec \theta + 1)
 \end{aligned}$$

56. (C) ATQ.,

$$80\% = \frac{4 \text{ Spend}}{5 \text{ Income}}$$

Income	Expenditure	Saving
500	400	100
↓ +12%	↓	↓ -10%
560	470	90

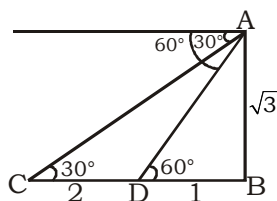
Percentage increase in his expenditure

$$= \frac{70}{400} \times 100 = 17.5\%$$

57. (A) ATQ.,

$$\begin{aligned}
 h &= 7 \text{ cm} \\
 2\pi rh &= 352 \\
 \Rightarrow 2\pi r \times 7 &= 352 \\
 \Rightarrow r &= 8 \text{ cm} \\
 \text{Volume of cylinder} &= \pi r^2 h \\
 &= \frac{22}{7} \times 8 \times 8 \times 7 \\
 &= 1408 \text{ cm}^3
 \end{aligned}$$

58. (C)



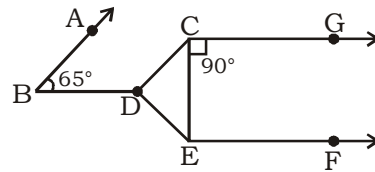
$$2 \text{ units} \longrightarrow 400\sqrt{3} \text{ metres}$$

$$\sqrt{3} \text{ units} \longrightarrow \frac{400\sqrt{3} \times \sqrt{3}}{2}$$

$$= 600 \text{ metres}$$

Hence, height of tower is 600 metres

59. (B) ATQ.,



$$\angle ABD + \angle BDC = 180^\circ$$

$$\Rightarrow \angle BDC = 180^\circ - 65^\circ = 115^\circ$$

$$\text{and } \angle DCG + \angle BDE = 115^\circ$$

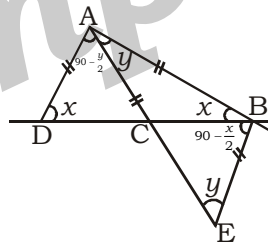
Alternate interior angle

$$\text{Now, } \angle DCG = \angle DCE + \angle ECG$$

$$\Rightarrow \angle DCE = 115^\circ - 90^\circ = 25^\circ$$

$$\angle DEC = \angle DCE = 25^\circ$$

60. (B)



In  $\triangle ADB$

$$2x + 90 - \frac{y}{2} + y = 180^\circ$$

$$4x + y = 180^\circ \dots (i)$$

In  $\triangle ABE$

$$2y + 90 - \frac{x}{2} + x = 180^\circ$$

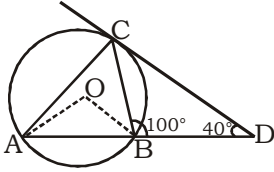
$$4y + x = 180^\circ \dots (ii)$$

From equation (i) & (ii)

$$y = 36^\circ, x = 36^\circ$$

$$\therefore \angle ACB = 180 - (36 + 36) = 180 - 72 = 108^\circ$$

61. (C)



In  $\triangle BCD$

$$\angle BCD = 180^\circ - 140^\circ = 40^\circ$$

$\angle BCD = \angle BAC = 40^\circ$  (Internal segment thousand)

and

$$\angle ABC + \angle CBD = 180^\circ$$

$$\text{So, } \angle ABC = 180^\circ - 100^\circ = 80^\circ$$

In  $\triangle ABC$

$$\angle ACB = 180^\circ - (80^\circ + 40^\circ)$$

$$= 60^\circ$$

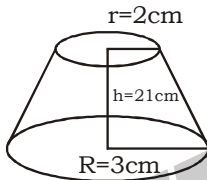
$$\angle AOB = 2\angle ACB$$

$$= 2 \times 60^\circ = 120^\circ$$

62. (B) Decrement in actual marks =  $[(82 + 46) - (28 + 64)] = 36$  marks

$$\begin{aligned} \text{Actual average marks} &= 66 + \frac{36}{45} \\ &= 66.8 \end{aligned}$$

63. (D)



$$\text{Volume of frustum} = \frac{\pi h}{3} (R^2 + rR + r^2)$$

$$= \frac{22}{7} \times \frac{21}{3} [(3)^2 + 3 \times 2 + (2)^2]$$

$$= 22 [9 + 6 + 4]$$

$$= 22 \times 19 = 418 \text{ cm}^3$$

64. (D) Given,  $\frac{a}{b} = \frac{5}{3}$

$$\frac{8a - 5b}{8a + 5b} = \frac{b \left[ 8 \left( \frac{a}{b} \right) - 5 \right]}{b \left[ 8 \left( \frac{a}{b} \right) + 5 \right]}$$

$$= \frac{8 \times \frac{5}{3} - 5}{8 \times \frac{5}{3} + 5} = \frac{40 - 15}{3} \times \frac{3}{40 + 15}$$

$$= \frac{25}{55} = \frac{5}{11}$$

$$\Rightarrow (8a - 5b) : (8a + 5b) = 5 : 11$$

65. (B)  $7.2 + (8.4 \div 0.12 \times 0.2) - 5 \times 3 \div 0.05 + 3$

$$\Rightarrow 7.2 + (70 \times 0.2) - 5 \times 60 + 3$$

$$\Rightarrow 7.2 + 14 - 300 + 3$$

$$\Rightarrow 24.2 - 300$$

$$\Rightarrow -275.8$$

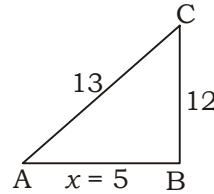
66. (D) ATQ,

$$\frac{1}{3} \pi \times 24 \times 6 \times 6 = \frac{4}{3} \pi \times r^3$$

$$\Rightarrow r = 6$$

Hence, the radius of sphere = 6cm

67. (D)



$$\operatorname{cosec} \theta = \frac{13}{12}$$

by Pythagoras theorem

$$(13)^2 = (12)^2 + x^2$$

$$x = \sqrt{169 - 144}$$

$$x = 5$$

$$\sin \theta + \cos \theta - \tan \theta$$

$$\frac{12}{13} + \frac{5}{13} - \frac{12}{5}$$

$$\frac{17}{13} - \frac{12}{5} = \frac{85 - 156}{65}$$

$$= \frac{-71}{65}$$

68. (D)  $a^3 + b^3 + c^3 - 3abc$

$$= (a + b + c) (a^2 + b^2 + c^2 - ab - bc - ca)$$

$$= 6[(a + b + c)^2 - 3(ab + bc + ca)]$$

$$= 6[36 - 3 \times 4]$$

$$= 6[24]$$

$$= 144$$

69. (B) ATQ,

$$\text{Required Quantity} = \frac{112}{8} \times (31 + 28)$$

$$= 826 \text{ kgs}$$

70. (C) ATQ,  
This is a triplet of right angle triangle  
i.e.  $60^2 + 11^2 = 61^2$

$$\text{Hence, Required Area} = 2 \times \frac{1}{2} \times 60 \times 11 \\ = 660 \text{ cm}^2$$

71. (C) ATQ,  
 $8x + 5x = 6x + 35$   
 $\Rightarrow 7x = 35$   
 $\Rightarrow x = 5$

Hence, the smallest number =  $5 \times 5 = 25$

72. (D) ATQ,  
Maximum Profit = ₹4500

73. (B) ATQ,  
Total loss =  $1500 + 1000 = ₹2500$

74. (C) ATQ,  
**Max. Profit : Min. Loss**  
4500 : 1000  
9 : 2

Hence, Required ratio = 9 : 2

75. (C) ATQ,  
 $x = \frac{2500}{12500} \times 100 = 20$

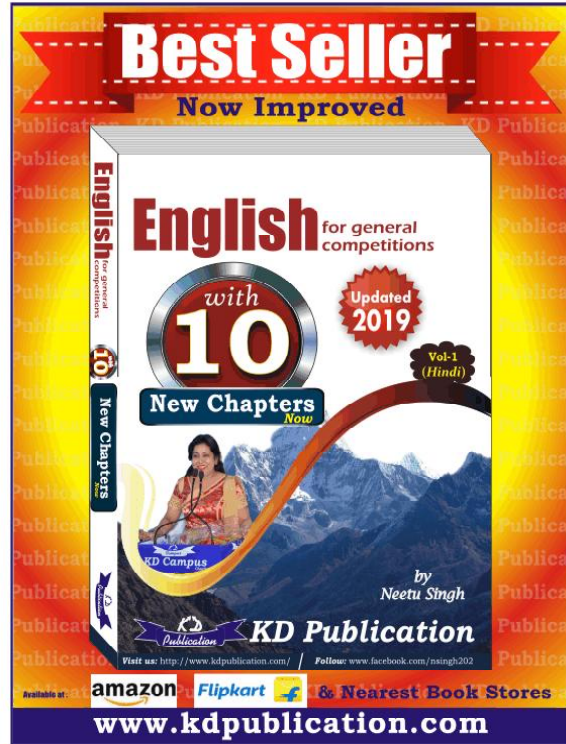
$\Rightarrow x = 20\%$   
Hence, Required value = 20%

## MEANINGS IN ALPHABETICAL ORDER

Word	Meaning in English	Meaning in Hindi
Churl	a rude ill-bred person	असभ्य
Epistle	a formal or elegant letter	पत्र, पत्रकाव्य
Epitaph	words written on a gravestone	स्मृति लेख
Impetuous	marked by violent force	अविवेकी
Insubstantial	lacking substance or material nature	असाध्य
Jejune	lacking nutritive value	रसहीन, तत्वहीन
Lamentable	deserving to be criticized or regretted	दुखद
Lout	an awkward brutish person	गंवार
Lumbering	to log and saw the timber of	लकड़ी काटने के काम
Malfeasance	wrongdoing or misconduct	दुराचार
Palling	to be or become pals	मित्र बनना
Pantomime	the art or genre of conveying a story by bodily movements only	मूकाभिनय
Parsimonious	very unwilling to spend money	मितव्ययी, कंजूस
Pellicle	a thin skin or film	पतली झिल्ली
Perpetrate	to commit	करना (अपराध)
Perpetuate	make (something) continue indefinitely	लगातार बनाये रखना
Philanthropic	seeking to promote the welfare of others	परोपकारी
Pilgrimage	a journey to a holy place	तीर्थ यात्रा
Portrait	a detailed description of something or someone	आकृति
Rebate	a refund of some fraction of the amount paid	छूट
Riveting	having the power to fix the attention	दिलचस्प
Skunk	an obnoxious or disliked person	असभ्य या घृणित व्यक्ति
Slob	a slovenly or boorish person	मूर्ख व्यक्ति
Tepid	moderately warm	थोड़े थोड़े गरम

**SSC MOCK TEST - 223 (ANSWER KEY)**

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



76. (B) Change 'get' off into 'get over'.  
**Get over:** to return to your usual state of health, happiness after a shock.  
Hence 'to get over' should be used.
77. (B) Use preposition 'by' with 'baffled'.
78. (B) Replace 'with' by 'on' or 'over' because with "keep watch", on/over is used.



**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**