

**SSC MOCK TEST - 218 (SOLUTION)**

1. (D) Ammeter is used to measure current whereas Anemometer is used to measure **wind**.

2. (C) As,  $5^3 + 5 = 130$   
 Similarly,  $6^3 + 6 = \mathbf{222}$

3. (B) As,

B	P	T	W
+1↓	+1↓	+1↓	+1↓
C	Q	U	X

Similarly,

C	H	N	S
+1↓	+1↓	+1↓	+1↓
D	I	O	T

4. (C) Except 'Credible : Deceptive', all other pairs are synonym to each other.

5. (B)

C  $\xrightarrow{+1}$  D  
 P  $\xrightarrow{+2}$  R  
 S  $\xrightarrow{+1}$  T  
 W  $\xrightarrow{+1}$  X

6. (B)  $2 + 3 + 4 = 9$   
 $\mathbf{3 + 4 + 5 = 12}$   
 $2 + 4 + 3 = 9$   
 $4 + 3 + 2 = 9$

7. (D) Interview - Job - Probation - Confirmation - Promotion

8. (B)

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    W
    |
    P ← Sister → Q ← Wife → S
    |               |
    Mother         Daughter-in-law
    |               |
    R               M → Son → V
    |               |
    |               Brother
    
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9. (B) 4, 12, 16  
 $4 + 12 = 16$   
 Similarly,  
 64, 36, 100  
 $\Rightarrow \mathbf{64 + 36 = 100}$

10. (A)

F	I	M	P	T	W
	↑	↑	↑	↑	↑
	+3	+4	+3	+4	+3

11. (C)

5	12	26	54	110
	↑	↑	↑	↑
	$\times 2 + 2$	$\times 2 + 2$	$\times 2 + 2$	$\times 2 + 2$

12. (C) M : S  
 Present  $\rightarrow 4x : 7x$

$$(7x + 5) - (4x + 5) = 18$$

$$\Rightarrow 3x = 18$$

$$\Rightarrow x = 6$$

Sum of Mitali and Shabnam age's  
 $= 11x$   
 $= \mathbf{66}$

13. (C) Study is related to knowledge.  
 Similarly,  
 Work is related to **experience**.

14. (A) As,

S	T	R	O	K	E
+1	+1	+1	+1	+1	+1
F	L	P	S	U	T

Similarly,

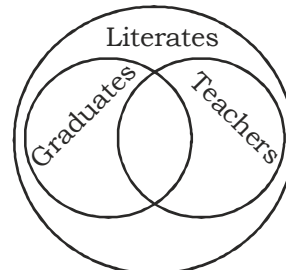
B	R	I	G	H	T
+1	+1	+1	+1	+1	+1
U	I	H	J	S	C

15. (B)  $15 + 5 - 10 \times 6 \div 12 = 6$   
 From option B  
 $\Rightarrow 15 + 5 \div 10 \times 6 - 12$   
 $\Rightarrow 15 + 5 \div 10 \times 6 - 12$   
 $\Rightarrow 15 + 3 - 12 = 6$

16. (B)  $3 \rightarrow 4, 1$   
 $3 \rightarrow 2, 6$

If 4 is on the bottom then 2 is at the top.

17. (A)



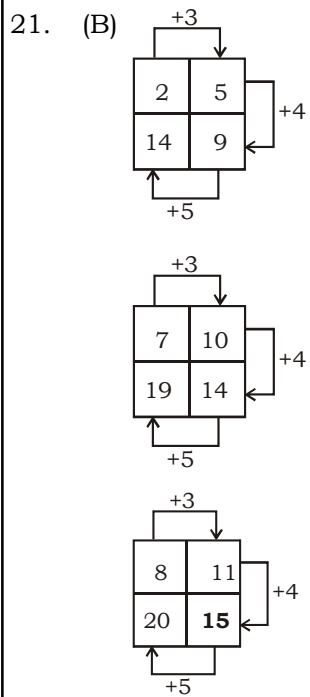
18. (C)

roads	streets	lanes
○	○	○

Either conclusion I or II follows.

19. (A)

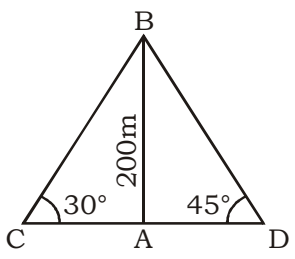
20. (B)



22. (C)  
 23. (D)  
 24. (B)  
 25. (D) S      T      A      R  
           ↓      ↓      ↓      ↓  
           **30, 21, 77, 44**
27. (A) Anjaneri-1280 m  
 Salher-1,567 m  
 Taramati-1431 m  
 Kalsubai-1646 m
31. (C) **Men's Singles**      **Women's Singles**  
 Shi Yuqi                  Chen Yufei
33. (C) Parenchyma the cellular tissue, typically soft and succulent are found chiefly in the softer parts of leaves, pulp of fruits, bark and pith of stems, etc.  
 The basic function of xylem is to transport water from roots to stems and leaves, but it also transports nutrients. Sclerenchyma-Strengthening tissue in a plant, formed from cells with thickened, typically lignified, walls.
37. (B) A budget deficit occurs when expenses exceed revenue and indicate the financial health of a country.  
 Primary deficit refers to difference between fiscal deficit of the current year and interest payments on the previous borrowings.

- A revenue deficit occurs when realized net income is less than the projected net income. This happens when the actual amount of revenue and/or the actual amount of expenditures do not correspond with budgeted revenue and expenditures.
40. (B) Article 152 - unless the context otherwise, requires, the expression State does not include the State of Jammu and Kashmir CHAPTER II THE EXECUTIVE The Governor.  
 Article 151-Audit reports  
 Article 154-Governors of States There shall be Governor for each State: Provided that nothing in this article shall prevent the appointment of the same person as Governor for two or more States.
42. (C) The Third Anglo-Maratha War (1817-1818) was the final and decisive conflict between the British East India Company (EIC) and the Maratha Empire in India.
43. (C) Marsupials are any members of the mammalian infraclass Marsupialia. All existing marsupials are endemic to Australasia and the Americas. A distinctive characteristic common to these species is that most of the young are carried in a pouch.
44. (A) 1. Brazil - 768.68 million tons  
 2. India - 348.45 million tons  
 3. China - 122.66 million tons  
 4. Thailand - 87.47 million tons
49. (C) INTERPOL was launched in 1923, Headquartered - Lyon, France. Its motto is connecting place for a safer world. President - Kim Jong Yana (South 88th General Assembly has been held in Santiago, Chile on 15 October, 2019.
51. (B) Let the speeds of the two train be  $x$  m/sec and  $y$  m/sec respectively.  
 Then, length of the first train =  $27x$  metres,  
 and length of the second train =  $17y$  metres.  
 $\therefore \frac{27x + 17y}{x + y} = 23$   
 $\Rightarrow 27x + 17y = 23x + 27y$   
 $\Rightarrow 4x = 6y$   
 $\Rightarrow \frac{x}{y} = \frac{3}{2}$

52. (C) Let AB be the lighthouse C and D be the positions of the ships.



Then,  $AB = 200\text{m}$ ,  $\angle ACB = 30^\circ$  and  $\angle ADB = 45^\circ$

$$\therefore \frac{AB}{AC} = \tan 30^\circ = \frac{1}{\sqrt{3}}$$

$$\Rightarrow AC = AB \times \sqrt{3} = 200\sqrt{3} \text{ m.}$$

and,  $\frac{AB}{AD} = \tan 45^\circ = 1$

$$\Rightarrow AD = AB = 100\text{m.}$$

$$\therefore CD = (AC + AD) = (200\sqrt{3} + 200)\text{m}$$

$$= 200(\sqrt{3} + 1)$$

$$= (200 \times 2.73)\text{m}$$

$$= 546\text{m.}$$

53. (B) Let the initial quantity of liquid P and Q =  $7x$  and  $4x$   
ATQ,

$$\frac{7x - \frac{22}{11x} \times 7x}{4x - \frac{22}{11x} \times 4x + 15} = \frac{4}{3}$$

$$\Rightarrow x = 14$$

Hence, the quantity of liquid P =  $14 \times 7$   
= 98 litres

54. (B) Let C.P = ₹100  
Then profit = ₹320, S.P = ₹420  
New C.P = 125% of ₹100 = ₹125  
New S.P = ₹420  
Profit = ₹(420 - 125) = ₹295

$$\therefore \text{Required percentage} = \left( \frac{295}{420} \times 100 \right) \%$$

$$= \frac{1475}{21} \% = 70\% \text{ (approximately)}$$

55. (C) Clearly, the numbers which have 1 or 9 in the unit's digit, have squares that end

in the digit 1. Such numbers from 1 to 70 are 1, 9, 11, 19, 21, 29, 31, 39, 41, 49, 51, 59, 61, 69.

Number of such number = 14

$$\therefore \text{Required percentage} = \left( \frac{14}{70} \times 100 \right) \%$$

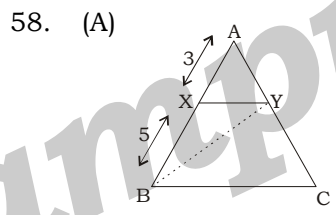
$$= 20\%$$

56. (B) Required average =  $\left( \frac{67 \times 2 + 35 \times 2 + 6 \times 3}{2 + 2 + 3} \right)$

$$= \left( \frac{134 + 70 + 18}{7} \right)$$

$$= \frac{222}{7} = 31\frac{5}{7} \text{ years}$$

57. (B) ATQ.,  
Putting  $x = 1$  and  $y = 2$  then  $789x531y$  is divisible by 9.  
Then,  $(6x - 4y)$   
=  $6(1) - 4(2)$   
=  $-2$



ATQ,  
 $\Delta AXY \sim \Delta ABC$

then,  $\frac{\text{area of } \Delta AXY}{\text{area of } \Delta ABC} = \left( \frac{AX}{AB} \right)^2$

$$\Rightarrow \frac{\text{area of } \Delta AXY}{16} = \left( \frac{3}{8} \right)^2 = \frac{9}{64}$$

$$\text{area of } \Delta AXY = \frac{9}{64} \times 16 = 2.25\text{cm}^2$$

$$\therefore \text{area of trapezium BCYX} = 16 - \frac{9}{4} = \frac{55}{4} \text{ cm}^2$$

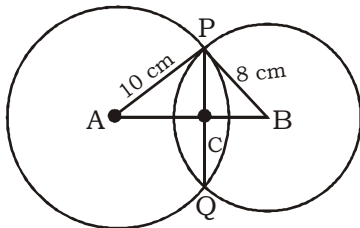
then,  $\frac{\text{area of } \Delta BXY}{\text{area of } \Delta BYC} = \frac{\frac{1}{2} \times h \times XY}{\frac{1}{2} \times h \times BC} = \frac{3}{8}$

$$\therefore \text{area of } \Delta BXY = \frac{55}{4} \times \frac{3}{11} = \frac{15}{4} = 3.75 \text{ cm}^2$$

59. (C)  $x^3 + y^3 + z^3 - 3xyz = (x + y + z)$   
 $(x^2 + y^2 + z^2 - xy - yz - zx)$   
 $= 19 [(x + y + z)^2 - 2(xy + yz + zx) - (xy + yz + zx)]$   
 $= 19 [19^2 - 3 \times 114]$   
 $= 19 \times 19$   
 $= 361$

$\therefore \sqrt{x^3 + y^3 + z^3 - 3xyz} = \sqrt{361} = 19$

60. (C)



AB = x cm and PQ = 12 cm. AB always bisects PQ in PC = CQ = 6 cm

$AC = \sqrt{10^2 - 6^2} = \sqrt{100 - 36} = 8$

$BC = \sqrt{8^2 - 6^2} = \sqrt{64 - 36} = \sqrt{28} = 5.25$

$\therefore x = AB = AC + BC = 8 + 5.29 = 13.29 \approx 13.3$  cm

61. (D) Let rate (for annually) = 2r  
 then, rate (for half yearly) = r  
 ATQ,

$1000 \left(1 + \frac{r}{100}\right)^3 = 1331$

$\Rightarrow \left(1 + \frac{r}{100}\right)^3 = \frac{1331}{1000} = \left(\frac{11}{10}\right)^3$

$\Rightarrow r = 10$   
 Hence, the rate =  $2 \times 10 = 20\%$

62. (C) ATQ.,

$\frac{23 - x}{39 - x} = \frac{32 - x}{56 - x}$

$\Rightarrow 23 \times 56 - 79x + x^2 = 39 \times 32 - 71x + x^2$

$\Rightarrow 8x = 23 \times 56 - 39 \times 32$

$\Rightarrow x = 23 \times 7 - 39 \times 4$

$\Rightarrow x = 161 - 156$

$\Rightarrow x = 5$

Mean proportion

$= \sqrt{(x+4)(3x+1)}$

$= \sqrt{9 \times 16} = 12$

63. (D)  $2\frac{7}{8} \div \left(3\frac{5}{6} \div \frac{2}{7} \text{ of } 2\frac{1}{3}\right) \times \left[\left(2\frac{6}{7} \text{ of } 4\frac{1}{5} \div \frac{2}{3}\right) \times \frac{5}{9}\right]$

$= \frac{23}{8} \div \left(\frac{23}{6} \div \frac{2}{7} \times \frac{7}{3}\right) \times \left[\left(\frac{20}{7} \times \frac{21}{5} \times \frac{3}{2}\right) \times \frac{5}{9}\right]$

$= \frac{23}{8} \div \frac{23}{4} \times \left[12 \times \frac{3}{2} \times \frac{5}{9}\right]$

$= \frac{1}{2} \times 10 = 5$

64. (A) Total work =  $16 \times 35 = 560$

Work done by A and B  $\times 28 = 336$

Time taken by C to do remaining work

$= (560 - 336) = \frac{224}{4}$

$= 56$  days

65. (D)  $x^2 - 6x + k = 0 \Rightarrow \alpha + \beta = 6$  and  $\alpha\beta = k$   
 solving by this  $\alpha + \beta = 6$  and  $3\alpha + 2\beta = 20$

$\Rightarrow \alpha = 8, \beta = -2$  (Putting these values in  $\alpha\beta = k$ )

$8 \times (-2) = k \Rightarrow k = -16$

66. (C)  $x \cos \theta = y \cos \left(\theta + \frac{2\pi}{3}\right) = z \cos \left(\theta + \frac{4\pi}{3}\right)$

$= k$

$\frac{k}{x} + \frac{k}{y} + \frac{k}{z} = \cos \theta + \cos \left(\theta + \frac{2\pi}{3}\right) + \cos$

$\left(\theta + \frac{4\pi}{3}\right)$

$= \cos \theta + \cos \theta \cos \left(\frac{2\pi}{3}\right) - \sin \theta \sin \left(\frac{2\pi}{3}\right) +$

$\cos \theta \cos \left(\frac{4\pi}{3}\right) - \sin \theta \sin \left(\frac{4\pi}{3}\right)$

$= \cos \theta - \frac{\cos \theta}{2} - \frac{\sqrt{3}}{2} \sin \theta + \frac{1}{2} \cos \theta + \frac{\sqrt{3}}{2}$

$\sin \theta = \frac{1}{x} + \frac{1}{y} + \frac{1}{z} = 0$

67. (C) Let the profit be  $x$   
 As, 5% is for charity, so rest 95% is divided between A and B in the ratio 3 : 2

$$\text{A's profit} = 0.95x \times \frac{3}{5}$$

ATQ,

$$0.95x \times \frac{3}{5} = 855$$

$$\Rightarrow x = \frac{855 \times 5}{0.95 \times 3} = 1500$$

$\therefore$  Total Profit = ₹1500

68. (A) ATQ.,

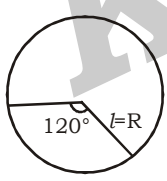
$$r = \frac{7}{2} \text{ cm, } h = 40 \text{ cm.}$$

$$\begin{aligned} \therefore \text{Volume} &= \pi r^2 h = \frac{22}{7} \times \frac{7}{2} \times \frac{7}{2} \times 40 \\ &= 1540 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} \therefore \text{Curve surface area} \\ &= 2 \times \frac{22}{7} \times \frac{7}{2} \times 40 = 880 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} \therefore \text{Total surface area} &= 2\pi rh + 2\pi r^2 \\ &= 2 \times \frac{22}{7} \times \frac{7}{2} \times \left( \frac{7}{2} + 40 \right) = 957 \text{ cm}^2 \end{aligned}$$

69. (D) Radius of cone = slant height of cone = 15 cm



$\therefore$  length of sector = perimeter of cone

$$\frac{120^\circ}{360^\circ} \times 2\pi(15) = 2\pi r \text{ (where } r \text{ is the radius of cone)}$$

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

$$\begin{aligned} h &= \sqrt{l^2 - r^2} = \sqrt{(15)^2 - (5)^2} = \sqrt{200} \\ &= 10\sqrt{2} \end{aligned}$$

$$\therefore \text{Volume} = \frac{1}{3} \pi r^2 h$$

$$= \frac{1}{3} \times \pi \times 5 \times 5 \times 10\sqrt{2}$$

$$= \left[ \frac{(250\sqrt{2})\pi}{3} \right] \text{ cm}^3$$

70. (D) Total surface area of B  
 = total surface area of A + 300% of total surface area of A

$$= 4 \times \text{total surface area of A}$$

Let, radius of A is  $x$  and radius of B is  $y$

$$4\pi y^2 = 4 \times 4\pi x^2$$

$$y = 2x$$

$$\text{Volume of A} = \frac{4}{3} \pi x^3$$

$$\text{Volume of B} = \frac{4}{3} \pi x^3 = \frac{4}{3} \pi (2x)^3$$

$$= \frac{4}{3} \pi 8x^3$$

Volume percentage of A is less than of volume percentage of B =

$$\begin{aligned} &= \frac{\frac{4}{3} \pi 8x^3 - \frac{4}{3} \pi x^3}{\frac{4}{3} \pi 8x^3} \times 100 \end{aligned}$$

$$= \frac{7}{8} \times 100 = 87.5\%$$

$$\therefore k = 87.5$$

71. (B) Percentage increase in percent profit =  $(24 - 15)/15 \times 100\%$

$$= 60\%$$

Percentage increase in expenditure =  $(100 - 50)/50 \times 100\%$

$$= 100\%$$

$\therefore$  Required ratio = 60:100

$$= 3 : 5$$

72. (A) Required income

$$= \frac{\text{Expenditure} \times (100 + \text{Profit})\%}{100}$$

$$= 80/100 \times 112 = ₹89.6 \text{ crore}$$

73. (D) Income of the company

$$\text{in 2014} = \frac{50 \times 115}{100} = ₹57.5 \text{ crore}$$

$$\text{in 2015} = \frac{80 \times 112}{100} = ₹89.6 \text{ crore}$$

$$\text{in 2016} = \frac{40 \times 110}{100} = ₹44 \text{ crore}$$

$$\text{in 2017} = \frac{75 \times 118}{100} = ₹88.5 \text{ crore}$$

$$\text{in 2018} = \frac{100 \times 124}{100} = ₹124 \text{ crore}$$

Hence, income of the company is maximum in the year 2018.

74. (B) Income of company in 2018 = ₹124 crore

Income of company in 2016 = ₹44 crore

Required percentage (more)

$$= \frac{124-44}{44} \times 100\% = \frac{80}{44} \times 100\%$$

$$= 181.81\%$$

75. (B) Ratio of per cent profit to expenditure

$$\text{in 2014} = \frac{15}{50} = 0.3$$

$$\text{in 2015} = \frac{12}{80} = 0.15$$

$$\text{in 2016} = \frac{10}{40} = 0.25$$

$$\text{in 2017} = \frac{18}{75} = 0.24$$

$$\text{in 2018} = \frac{24}{100} = 0.24$$

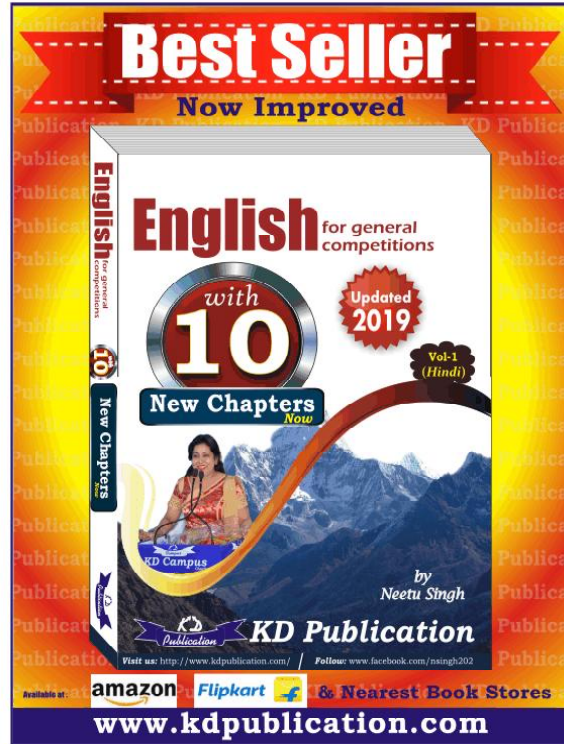
## MEANINGS IN ALPHABETICAL ORDER

Word	Meaning in English	Meaning in Hindi
Alibi	an excuse intended to avoid blame	बहाना
Anonymous	not named or identified	गुमनाम
Bewilder	to confuse (someone) very much	उलझन में डाल देना
Bibliophile	a person who loves or collects books	किताबी कीड़ा
Defer	put off, delay	टाल देना
Despair	the feeling of no longer having any hope	मायूसी
Dread	a person or thing that causes fear	डरावना
Meagre	very small or too small in amount	अल्प
Pedophile	a person who is sexually attracted to children	बालकामुक
Scanty	very small in size or amount	अल्प
Vanity	arrogance	घमंड
Xenophile	one attracted to foreign things (such as styles or people)	विदेशी शैली या व्यक्ति की ओर आकर्षण



**SSC MOCK TEST - 218 (ANSWER KEY)**

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



76. (A) Use 'much' instead of 'many'. 'Many' is used for countable noun while 'Much' is used for uncountable noun.
77. (A) If plural noun is used as a singular unit, singular verb is used.
86. (D) While comparing things, rather is always followed by 'than'.
87. (C) Each is singular, so it will take singular verb.



**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**