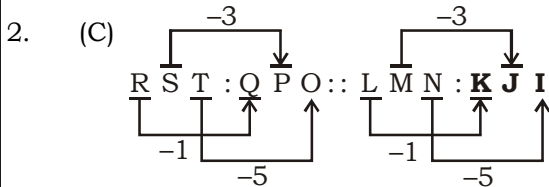


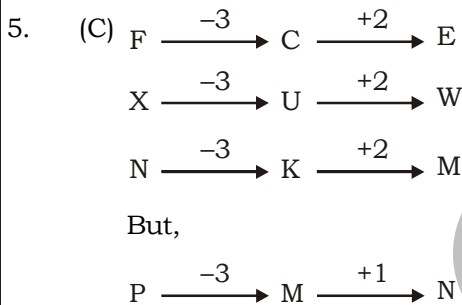
**SSC MOCK TEST - 288 (SOLUTION)**

1. (D) Food is eaten in the Restaurant, while Exercising in the Gym.



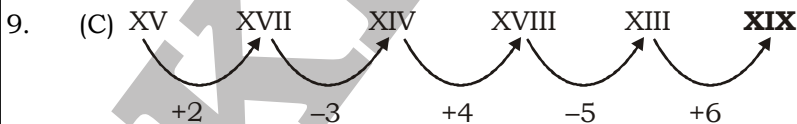
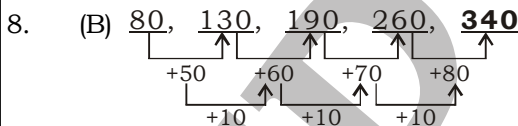
3. (D) As,  
 $7 \times 8 = 56$   
 $8 \times 9 = 72$   
 Similarly,  $9 \times 10 = 90$   
 $10 \times 11 = 110$

4. (D)  $848 \Rightarrow 8 + 4 + 8 = 20$   
 $992 \Rightarrow 9 + 9 + 2 = 20$   
 $749 \Rightarrow 7 + 4 + 9 = 20$   
 $777 \Rightarrow 7 + 7 + 7 = 21 \neq 20$



6. (A) Except football, all are indoor games.

7. (C) 4. Callow  $\rightarrow$  1. Chronicle  $\rightarrow$  3. Create  $\rightarrow$  5. Creator  $\rightarrow$  2. Crop



10. (B)  $7 \times 13 = 91$   
 $12 \times 18 = 216$   
 $24 \times 3 = 72$

11. (B) As,  
 $N (14) + D (4) \Rightarrow R (18)$   
 $B (2) + V (22) \Rightarrow X (24)$   
 $L (12) + F (6) \Rightarrow R (18)$

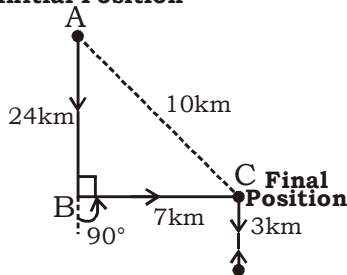
12. (B) As,

E	L	E	P	H	A	N	T
+1↓	+1↓	+1↓	+1↓	+1↓	+1↓	+1↓	+1↓
F	M	F	Q	I	B	O	U
↓ Reverse							
U O B I Q F M F							

Similarly,

S	A	C	R	I	F	I	C	E
+1↓	+1↓	+1↓	+1↓	+1↓	+1↓	+1↓	+1↓	+1↓
T	B	D	S	J	G	J	D	F
↓ Reverse								
F D J G J S D B T								

13. (B) **Initial Position**



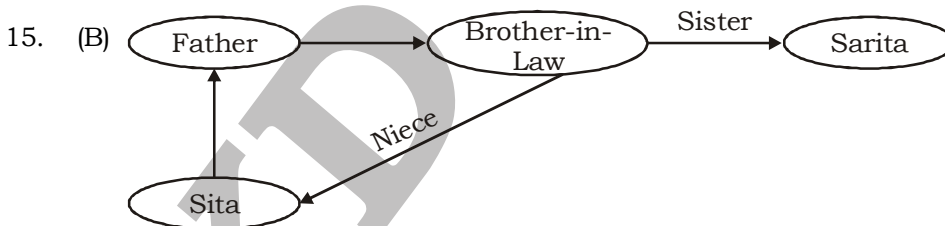
In  $\Delta ABC$ ,

$$AC = \sqrt{24^2 + 7^2}$$

$$AC = 25\text{m}$$

$\therefore$  Required distance = 25 m

14. (A)



Hence, Sita is the niece of brother of Sarita.

16. (C) 343 L 7 P 6 V 94 M 11

After changing the signs as per the given detail,

$$343 \div 7 \times 6 - 94 + 11$$

$$= 49 \times 6 - 94 + 11$$

$$= 294 - 94 + 11 = \mathbf{211}$$

17. (C) Raghav > Amit > Ram > Nirbhay

.....(i)

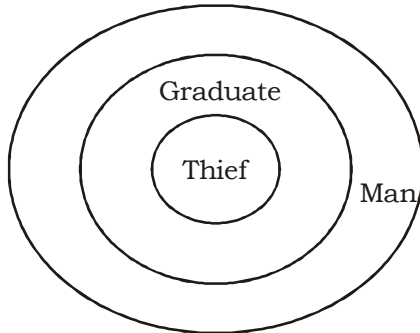
Arpit > Ram

.....(ii)

$\therefore$  Ram got 4<sup>th</sup> rank out of five.

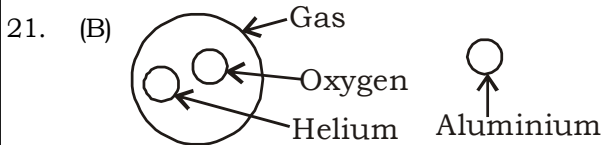
18. (B) Days between 5 January 2011 and 1 January 2013 =  $365 + 362 = 727$   
 $\therefore$  Required day = Thursday + 727  
 = Thursday +  $7 \times 103 + 6$  = Wednesday

19. (D)



I. True                      II. True  
 Hence, Both I and II follows

20. (A)



22. (A)      23. (B)    24. (D)    25. (C)

26. (C) Constitution Day, also known as Samvidhan Divas or National Law Day, is celebrated in India on November 26 every year.
27. (A) Aruna Asaf Ali ( Ganguly ) (16 July 1909 - 29 July 1996 ) was an Indian educator, political activist, and publisher. An active participant in the Indian independence movement, she is widely remembered for hoisting the Indian National flag at the Gowalia Tank maidan, Bombay during a Quit India Movement in 1942.
31. (A) Galvanisation or galvanization (or galvanizing as it is most commonly called) is the process of applying a protective zinc coating to iron or steel, to prevent rusting. The most common method is hot dip galvanizing, in which steel sections are submerged in a bath of molten zinc.
34. (B) Atrial natriuretic peptide (ANP) or atrial natriuretic factor (ANF) is a natriuretic peptide hormone secreted from the cardiac atria that in humans is encoded by the NPPA gene. Natriuretic peptides (ANP, BNP, and CNP) are a family of hormone/paracrine factors that are structurally related.
35. (C) Bhatiali or bhatiyali is a form of folk music in both Bangladesh and West Bengal.
36. (B) Most atmospheric ozone is concentrated in a layer in the stratosphere, about 9 to 18 miles (15 to 30 km) above the Earth's surface (see the figure below).
38. (B) The services sector is the largest sector in India. The services sector accounts for 53.66% of total India's GVA of Rs. 137.51 lakh crore. The industrial sector is at the second spot and contributing around 31% of the Indian GDP.
39. (C) Thallophyta are the simplest of plants that do not have a well-differentiated body design. Algae do not have leaves, stems or roots. Bryophyta are often called amphibians of the plant kingdom.
43. (D) Lazy eye (amblyopia) is reduced vision in one eye caused by abnormal visual development early in life. The weaker - or lazy - eye often wanders inward or outward.

45. (D) The river originates from the Kailash ranges of Himalayas at an elevation of 5300 M. After flowing through Tibet it enters India through Arunachal Pradesh and flows through Assam and Bangladesh before it joins Bay of Bengal. The catchments area of Brahmaputra in Tibet is 2, 93,000 Sq.
46. (C) Waddham, a reserve forest, is a well-known fossils site where a full-fledged skeleton of a dinosaur was found near the Godavari basin bordering Telangana in 1959.
47. (D) Most people have four parathyroid glands, with two parathyroid glands lying behind each 'wing' of the thyroid gland.
48. (A) The Bengal Sati Regulation, or Regulation XVII, in India under East India Company rule, by the Governor-General Lord William Bentinck, which made the practice of sati or suttee illegal in all jurisdictions of India and subject to prosecution.
49. (A) India shares borders with several sovereign countries; it shares land borders with China, Bhutan, Nepal, and Pakistan in the north or north-west, and with Bangladesh and Myanmar in the east.

51. (A)  $2^{61} + 2^{62} + 2^{63} + 2^{64}$   
 $= 2^{61} (1 + 2^1 + 2^2 + 2^3)$   
 $= 2^{61} \times 15$   
 $= 2^{61} \times 3 \times 5$ , which is exactly divisible by 10.

52. (C) Let the numbers be  $x$  and  $x + 5$ .

We know that,

Product of two numbers = LCM  $\times$  HCF

$$x(x + 5) = 36$$

$$x^2 + 5x = 36$$

$$x^2 + 5x - 36 = 0$$

$$x^2 + 9x - 4x - 36 = 0$$

$$x(x + 9) - 4(x + 9) = 0$$

$$(x - 4)(x + 9) = 0$$

$$x = 4, -9$$

( $\because -9$  is not possible)

$\therefore$  Numbers are 4 and 9.

53. (D)  $3\frac{1}{4} - \frac{4}{5}$  of  $\frac{5}{6}$   
 $4\frac{1}{3} \div \frac{1}{5} - \left(\frac{3}{10} + 21\frac{1}{5}\right)$

$$= \frac{13}{4} - \frac{2}{3}$$

$$= \frac{13}{3} \div \frac{1}{5} - \left(\frac{3}{10} + \frac{106}{5}\right)$$

$$= \frac{39 - 8}{12}$$

$$= \frac{13}{3} \div \frac{1}{5} - \left(\frac{3 + 212}{10}\right)$$

$$= \frac{31}{12} \times \frac{5}{1} - \frac{215}{10} = \frac{31}{12} - \frac{43}{2}$$

$$= \frac{31}{12} \times \frac{30}{5} - \frac{215}{10} = \frac{31}{2} - \frac{43}{2} = \frac{31 - 43}{2} = -\frac{12}{2} = -6$$

$$= \frac{31}{12} \times \frac{30}{5} = \frac{31}{2} = 15\frac{1}{2}$$

54. (B)  $a + b + c = 3 \times 45 = 135$  .....(i)

$$a = \frac{b+c}{2} + 9$$

$$2a - b - c = 18 \quad \text{.....(ii)}$$

$$\text{and } \frac{b+c}{2} = b + 2$$

$$b + c = 2b + 4$$

$$c - b = 4 \quad \text{.....(iii)}$$

Adding equation (i) and (ii),

$$a + b + c + 2a - b - c = 135 + 18$$

$$3a = 153$$

$$a = 51$$

Adding equation (i) and (iii),

$$a + b + c + c - b = 135 + 4$$

$$a + 2c = 139$$

$$51 + 2c = 139 \quad (\because a = 51)$$

$$2c = 139 - 51$$

$$c = \frac{88}{2} = 44$$

$$\therefore a - c = 51 - 44 = 7$$

55. (A) Let the price of third variety of sugar per kg = ₹ x

ATQ,

$$136 \times 2 + 156 \times 2 + 3x = 175 \times 7$$

$$272 + 312 + 3x = 1225$$

$$3x = 1225 - 584$$

$$3x = 641$$

$$x = \frac{641}{3} = ₹ 213 \frac{2}{3}$$

56. (C)  $p^2 + q^2 + r^2 = 2(p - q - r) - 3$

$$p^2 + q^2 + r^2 = 2p - 2q - 2r - 3$$

$$p^2 + q^2 + r^2 - 2p + 2q + 2r + 3 = 0$$

$$p^2 + 1 - 2p + q^2 + 1 + 2q + r^2 + 1 + 2r = 0$$

$$(p - 1)^2 + (q + 1)^2 + (r + 1)^2 = 0$$

$$(p - 1)^2 = 0, (q + 1)^2 = 0, (r + 1)^2 = 0$$

$$p = 1, q = -1, r = -1$$

$$\therefore 4p - 3q + 5r$$

$$= 4 \times 1 - 3(-1) + 5 \times (-1)$$

$$= 4 + 3 - 5 = 2$$

57. (C)  $\sin\theta + \sin^2\theta = 1$

$$\sin\theta = 1 - \sin^2\theta$$

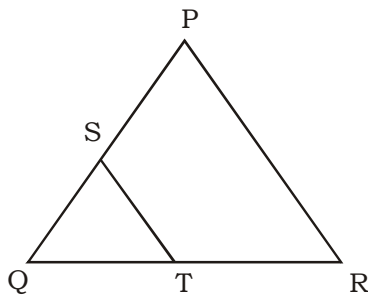
$$\sin\theta = \cos^2\theta$$

$$\therefore \cos^2\theta + \cos^4\theta$$

$$= \cos^2\theta + (\cos^2\theta)^2$$

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

58. (A)



$$ST \parallel PR$$

$$\Delta PQR \sim \Delta QST,$$

$$\frac{PQ}{QS} = \frac{QR}{QT}$$

$$\frac{PQ}{QS} - 1 = \frac{QR}{QT} - 1$$

$$\frac{PQ - QS}{QS} = \frac{QR - QT}{QT}$$

$$\frac{PS}{QS} = \frac{RT}{QT}$$

$$\frac{4}{PQ - PS} = \frac{RT}{QT}$$

$$\frac{4}{10 - 4} = \frac{RT}{QT}$$

$$\frac{4}{6} = \frac{RT}{QT}$$

$$\frac{2}{3} = \frac{RT}{QT}$$

$$\therefore QT : RT = 3 : 2$$

59. (B) Volume of water drawn off cylinder =  $\pi r^2 h$

$$= \frac{22}{7} \times \frac{42}{2} \times \frac{42}{2} \times h$$

ATQ,

$$\frac{22}{7} \times 21 \times 21 \times h = 22 \times 1000$$

$$h = \frac{22 \times 1000 \times 7}{22 \times 21 \times 21} = 15 \frac{55}{63} \text{ cm}$$

60. (A) In  $\Delta ORS$ ,  $OR = OS = \text{Radii}$

$$\angle ORS = y^\circ$$

$$\angle POR = y^\circ + y^\circ = 2y^\circ$$

[external angle property]

In  $\Delta POR$ ,

$$\angle OPR + \angle POR + \angle PRO = 180^\circ$$

$$x^\circ + 2y^\circ + 90^\circ = 180^\circ$$

$$x^\circ + 2y^\circ = 90^\circ$$

61. (C) 25% (stolen) + 10% (Dropped)

$$35\% = \frac{7}{20} \text{ and } 50\% = \frac{1}{2}$$

Sum - Remain

$$\begin{array}{r} 20 \quad - \quad 13 \\ \underline{2 \quad - \quad 1} \\ 40 \quad - \quad 13 \\ \downarrow \times 130 \quad \downarrow \times 130 \\ 5200 \quad 1690 \end{array}$$

62. (C)  $\frac{M_1 D_1 T_1}{W_1} = \frac{M_2 D_2 T_2}{W_2}$

$$\frac{16 \times 6 \times 25}{150 \times 20 \times 12} = \frac{12 \times 8 \times D_2}{800 \times 15 \times 6}$$

$$D_2 = 50 \text{ days}$$

63. (D) Principal = ₹ 8100

Rate = 10% P.a.

20% for every two years

$$A = \left[ 1 + \frac{2}{100} \right]^3 \times 8100$$

$$= \frac{12 \times 12 \times 12}{10 \times 10 \times 10} \times 8100 = ₹ 13996.8$$

64. (A) 
$$\begin{array}{l} A \rightarrow 60 \begin{array}{l} \nearrow 120 \\ \searrow 2 \end{array} \\ B \rightarrow 40 \begin{array}{l} \nearrow 120 \\ \searrow 3 \end{array} \end{array}$$

Let the time be  $x$

ATQ,

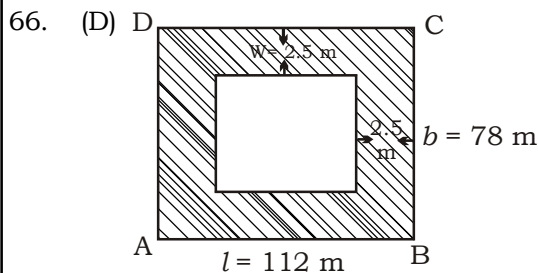
$$\frac{x}{2} \times 3 + \frac{x}{2} \times 5 = 120$$

$$\frac{3x}{2} + \frac{5x}{2} = 120$$

$$4x = 120$$

$$x = 30$$

65. (A) Circle has the largest area.



Let ABCD be a rectangular grass plot with graved path of width ( $W$ ) = 2.5 m

Length of plot =  $l = 112$  m

breadth of plot =  $b = 78$  m

Here the path is inside the rectangular plot.

Using the formula =  $2 W (l + b - 2w)$

$$= 2 \times 2.5 (112 + 78 - 2 \times 2.5) = 925 \text{ m}^2$$

Now, cost of constructing the path =  $925 \times 3.40 = ₹ 3145$

67. (D) If equations have no solution,

$$\text{then, } \frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$$

$$\frac{2}{6} = \frac{-k}{-12} \neq \frac{15}{15}$$

$$6k = 24$$

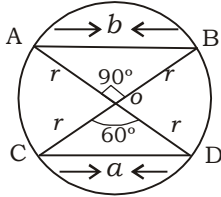
$$k = 4$$

68. (C) Required time =  $\frac{4 \times \frac{165}{60}}{16.5}$  hours

$$= \frac{4 \times 165}{16.5 \times 60} \times 60 \text{ minutes} = 40 \text{ minutes}$$



69. (B)



$\Delta COD$  is an equilateral triangle.

$$a = r$$

$\Delta AOB$  is an isosceles triangle.

So,  $\angle OBA = 45^\circ$

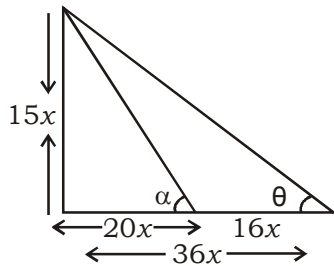
$$\sin 45^\circ = \frac{r}{b}$$

$$\frac{1}{\sqrt{2}} = \frac{r}{b}$$

$$b = \sqrt{2} r \text{ or } \sqrt{2} a$$

70. (B) Arithmetic mean of first  $n$  natural number =  $\frac{n+1}{2}$

71. (A)



Given:

$$\left. \begin{aligned} \tan \theta &= \frac{5_{\times 3}}{12_{\times 3}} \\ \tan \alpha &= \frac{3_{\times 5}}{4_{\times 5}} \end{aligned} \right\} \begin{array}{l} \frac{15}{36} \\ \frac{15}{20} \end{array} \text{ Height same}$$

$$\text{Then, } 16x = 240$$

$$x = 15$$

$$\text{Length} = 15 \times 15 = 225 \text{ m}$$

72. (C) Expenditure on Education =  $\frac{8000}{60} \times 30 = ₹ 4000$

73. (B) Required ratio =  $120 : 60 = 2 : 1$

74. (A) Expenditure for the whole month =  $\frac{8000}{60} \times 300 = ₹ 40000$

75. (C) Expenditure on Food =  $\frac{8000}{60} \times 120 = ₹ 16000$

$$\text{Expenditure on Housing} = \frac{8000}{60} \times 105 = ₹ 14000$$

$$\therefore \text{ Required difference} = 16000 - 14000 = ₹ 2000$$

**MEANINGS IN ALPHABETICAL ORDER**

Catharsis	the process of releasing, and thereby providing relief from, strong or repressed emotions	साफ हो जाना
Catwalk	a narrow walkway or open bridge, especially in an industrial installation	पुल पर बड़े-बड़े इंजनों के बीच का तंग रास्ता
Climax	the most intense, exciting, or important point of something; a culmination or apex	उत्कर्ष
Dearth	a scarcity or lack of something	अकाल
Decease	a person who has died	मृतक
Deceive	(of a person) cause (someone) to believe something that is not true, typically in order to gain some personal advantage	धोखा
Decency	behavior that conforms to accepted standards of morality or respectability	शिष्टता
Deficiency	a lack or shortage	कमी
Diverge	(of a road, route, or line) separate from another route, especially a main one, and go in a different direction	हट जाना
Flee	run away from a place or situation of danger	भागना
Fling	throw or hurl forcefully	हाथ बढ़ाना
Glitch	a sudden, usually temporary malfunction or irregularity of equipment	गड़बड़
Humble	having or showing a modest or low estimate of one's own importance	विनीत
Lofty	of imposing height	बुलंद
Midget	an extremely or unusually small person	बौना
Militant	combative and aggressive in support of a political or social cause, and typically favoring extreme, violent, or confrontational methods	उग्रवादी
Nemesis	the inescapable agent of someone's or something's downfall	बदला
Paradox	a seemingly absurd or self-contradictory statement or proposition that when investigated or explained may prove to be well founded or true	विरोधाभास
Poke	jab or prod (someone or something), especially with one's finger	प्रहार
Shove	push (someone or something) roughly	धक्का
Snag	an unexpected or hidden obstacle or drawback	रोड़ा
Stray	move away aimlessly from a group or from the right course or place	भटका हुआ
Stroll	walk in a leisurely way	चहलकदमी
Wander	walk or move in a leisurely, casual, or aimless way	विचलन

**SSC MOCK TEST - 288 (ANSWER KEY)**

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

76. (C) While comparing two individuals/things than is followed by the pronoun 'that'.
77. (C) 'Where' replace with 'which'.
90. (B) The correct spelling of 'Migrent' is 'Migrant'.
91. (D) The correct spelling of 'Decieve' is 'Deceive'.