

**SSC MOCK TEST - 368 (SOLUTION)**

1. (A) Depression is related to Mood, while Insomnia is related to Sleep.

2. (B) As,  $12 : 60 \rightarrow 12 \times [(12 \div 2) - 1] = 12 \times [6 - 1] = 12 \times 5 = 60$

Similarly,  $16 : ? \rightarrow 16 \times [(16 \div 2) - 1] = 16 \times [8 - 1] = 16 \times 7 = 112$

3. (B) (A)  $97 - 61 = 36 \Rightarrow$  Square root number

(B)  $136 - 56 = 80 \Rightarrow$  Not a square root number

(C)  $127 - 78 = 49 \Rightarrow$  Square root number

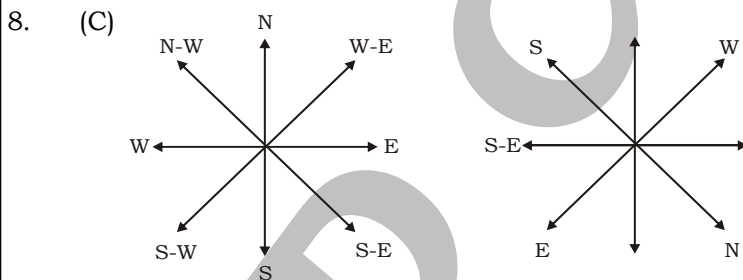
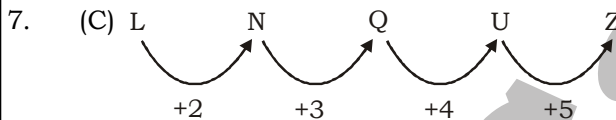
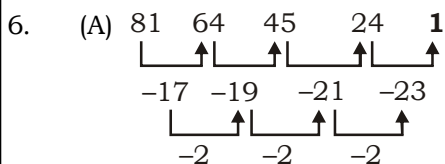
(D)  $89 - 25 = 64 \Rightarrow$  Square root number

4. (A) Except Chicken, others live both land and water.

5. (A) As,  $(12)^2 - 8 = 136$

And,  $(14)^2 - 8 = 188$

Similarly,  $(24)^2 - 8 = 568$



It is clear from diagram, that new name of West will becomes South-East.

9. (A) As,  $9 \times 2 + 3 = 21$

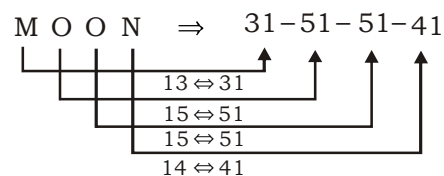
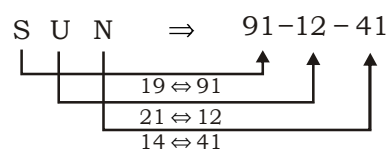
$21 \times 6 - 2 = 124$

Similarly,  $17 \times 2 + 3 = 37$

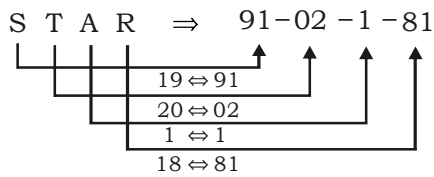
$37 \times 6 - 2 = 220$

10. (C) As,

And,

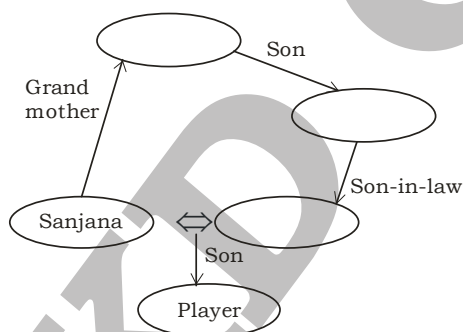


Similarly,



11. (D) 4 ← opposite → 6  
 2 ← opposite → 1  
 5 ← opposite → 3
12. (A) **In the first column,**  
 $2 \times 3 - 4 = 2$   
**In the second column,**  
 $5 \times 6 - 7 = 23$   
**In the third row,**  
 $8 \times 9 - 10 = 62$
13. (C)  $14 \times 3 \div 27 + 54 - 9 = 21$   
 Change the signs  $\div$  and  $-$  to each other,  
 $14 \times 3 - 27 + 54 \div 9 = 21$   
 $14 \times 3 - 27 + 6 = 21$   
 $42 + 6 - 27 = 21$   
 $48 - 27 = 21$   
 $21 = 21$
14. (D) 4. Root → 3. Stem → 1. Leaf → 5. Flower → 2. Fruit

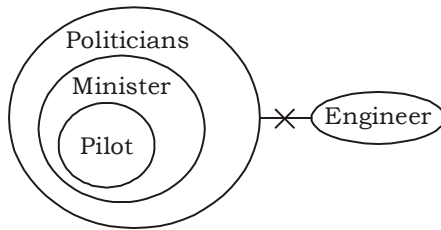
15. (D)



Player's father is the husband of Sanjana.

16. (B) 60 students participated in one or more of the three competitions, i. e. Quiz, Extempore and Debate.  
 A total of 22 students participated either in Quiz only or in Extempore only.  
 4 students participated in all three competitions.  
 A total of 14 students participated in any of the two competitions only.  
 Number of students who participated in Debate only =  $60 - (22 + 4 + 14) = 60 - 40 = 20$   
 Hence, 20 students participated in debate only.

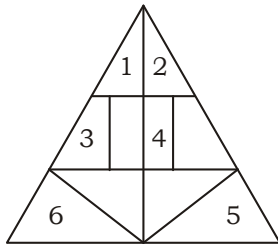
17. (D)



All the conclusions follow.

18. (C)

19. (D)



Triangle made from number 1 and 2 = 3

Triangle made from number (1 + 3) and (2 + 4) = 3

Triangle made from number (1 + 3 + 6), (2 + 4 + 5) = 3

Triangle made from number 5, 6 = 2

∴ Total triangle = 3 + 3 + 3 + 2 = 11

20. (C) As,

Similarly,



21. (D)  $dq \underline{t} pln / \underline{d} qt \underline{p} ln / d \underline{q} t pl \underline{n} / dq \underline{t} p \underline{l} n$

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

26. (C) Union Tourism Minister G Kishan Reddy inaugurated the 'Manipur Sangai Festival 2022' at the Sangai Ethnic Park.
28. (D) The Baghmara Pitcher Plant Sanctuary (BPPS) is the only Sanctuary in Meghalaya where in-situ conservation of Pitcher Plant is being carried out.
30. (B) The 4th edition of Indo-Pacific Regional Dialogue (IPRD) has been inaugurated in New Delhi on the theme of "Operationalising the Indo-Pacific Oceans Initiative".
31. (B) Unique Transaction Reference (UTR) number is a 22 character code used to uniquely identify a transaction in RTGS system.
32. (B) Charan Singh replaced Morarji Desai as the Prime Minister of India in 1979.
33. (D) Akbarnama, written by a learned courtier of Akbar, Abul Fazl, describes the increase of literature during the reign of Akbar. Abul Fazl served as the court chronicler at the Mughal court and also a personal confidant of Akbar.
34. (A) The Ministry of Youth Affairs and Sports started a flagship program called Target Olympic Podium Scheme (TOPS) in 2014.
35. (C) The Raman Effect deals with scattering of light by molecules of a medium when they are excited to vibrational energy levels.
36. (A) Purnima Devi Barman, an Assam-based wildlife biologist, was awarded the 'Champions of the Earth' award this year.

38. (B) It is 40 km<sup>2</sup> (15.4 sq mi) in area, the only floating park in the world, located in North East India, and an integral part of Loktak Lake.
39. (B) Article 265 of the Constitution of India says that "No tax shall be levied or collected except by authority of law".
40. (C) Kakori Conspiracy, also called Kakori Conspiracy Case or Kakori Train Robbery, armed robbery on August 9, 1925, of a train in what is now central Uttar Pradesh state, north-central India, and the subsequent court trial instituted by the government of British India against more than two dozen men accused of involvement.
41. (B) Rickets is a condition that affects bone development in children. It causes bone pain, poor growth and soft, weak bones that can lead to bone deformities. Adults can experience a similar condition, which is known as osteomalacia or soft bones.
42. (B) Capillary action, or capillarity, is a phenomenon where liquid spontaneously rises in a narrow space such as a thin tube, or in porous materials such as paper or in some non-porous materials such as liquified carbon fibre. This effect can cause liquids to flow against the force of gravity or the magnetic field induction, in blotting of ink, spread of water drop on a cotton cloth and the rising of water from the roots of a plant to its foliage.
43. (B) Bhikaji Cama unfurled the first version of the Indian national flag-a tricolour of green, saffron, and red stripes-at the International Socialist Congress held at Stuttgart, Germany, in 1907. India will wake up to its 75th Independence Day on Sunday
44. (C) Common global water-related diseases caused by parasites include Guinea worm, schistosomiasis, amebiasis, cryptosporidiosis (Crypto), and giardiasis. People become infected with these diseases when they swallow or have contact with water that has been contaminated by certain parasites
45. (B) Krishnadeva Raya composed a work on statecraft known as the Amuktamalyada in. Kannada.
47. (A) The halogen elements have seven valence electrons in their outermost electron shell. Therefore, when these elements can receive an electron from another atom, they form very stable compounds since their outermost shell is full.
49. (D) A major new collection of essays by Ramachandra Guha, Democrats and Dissenters is a work of rigorous scholarship on topics of compelling contemporary interest, written with Nnd wit.
50. (D) Vitamin A, D, E and K are fat soluble vitamins. Whereas, vitamin B and C are water soluble.
51. (D) Height of pole = 15 metre  
Speed of climbing = 5 metre/min  
Speed of sliding = 3 metre/min  
Distance climbed by monkey in 11 min =  $5 \times 6 - 3 \times 5 = 15$  m  
 $\therefore$  Required time = 11 minutes
52. (A) The four prime numbers are 5, 7, 11, 13  
As,  $5 \times 7 \times 11 = 385$   
 $7 \times 11 \times 13 = 1001$   
Hence, the first prime number is 5.
53. (B) Let the present ages be  $x$  and  $y$  years.  
Then,  
 $x - y = 20$  ..... (i)  
And  
 $(x - 5) = 5(y - 5)$  .....(ii)  
From equations (i) and (ii),  
 $20 + y - 5 = 5y - 25$   
 $y = 10$  years and  $x = 30$  years

54. (D)  $\sqrt{25} \div 5 - 16 \div (-64 \div 8) + \sqrt{2601} \div \sqrt{(200 + 89)} + 2^8 \div 64$

$$= \sqrt{25} \div 5 - 16 \div -8 + 51 \div 17 + 256 \div 64$$

$$= 5 \div 5 - 16 \div -8 + 3 + 4$$

$$= 1 + 2 + 3 + 4 = 10$$

55. (B)  $P(x) = 2 \times 3 \times x^2 (x - y) (x^2 + xy + y)$   
 $Q(x) = 2 \times 3 \times 3x \times y^2 (x - y) (x^2 + y^2 - 2xy)$   
 $R(x) = 2 \times 2 \times 3 \times x \times y(x - y)^3$   
 HCF =  $6x(x - y)$

56. (A) Original price of 250 chairs =  $250 \times 50 = ₹ 12500$

$$\text{Price after discount} = 12500 \times \frac{80}{100} \times \frac{85}{100} \times \frac{95}{100} = ₹ 8075$$

57. (D) SP = ₹ 17,940  
 Discount = 8%

$$\text{MP} = \frac{17940}{0.92} = ₹ 19500$$

Gain = 19.6%

$$\text{CP} = \frac{17940}{1.196} = ₹ 15000$$

New SP without discount = ₹ 19500

Gain =  $(19500 - 15000) = ₹ 4500$

$$\therefore \text{Gain percent} = \left( \frac{4500}{15000} \times 100 \right) \% = 30\%$$

58. (B)  $\text{SI} = \frac{p \times r \times t}{100}$

$$r = \frac{\text{S. I.} \times 100}{p \times t} = \frac{620 \times 100}{2000 \times 5} = 6.2\%$$

If  $r = 6.2 + 3 = 9.2\%$

$$\text{Then, SI} = \frac{p \times r \times t}{100} = 2000 \times \frac{9.2 \times 5}{10 \times 100} = ₹ 920$$

$\therefore$  Amount = ₹ 2000 + ₹ 920 = ₹ 2920

59. (D) Let the required score be  $x$ .  
 According to the question,

$$\frac{80 \times 99 + x}{80} = 100$$

$$7920 + x = 8000$$

$$x = 80$$

60. (A) Distance between Arun and Bhaskar at 7 : 30 am =  $8 \times 1\frac{1}{2} = 12$  km

Time taken by Bhaskar to cover a distance of 12 km =  $\frac{12}{(12 - 8)} = 3$  hours

$\therefore$  Required time = 10:30 am

61. (D) Let cost price = ₹ 100  
Marked price = 100 + 40 = ₹ 140  
Let required discount be  $x\%$ .

ATQ,

$$140 \times \left( \frac{100 - x}{100} \right) = 100$$

$$100 - x = \frac{100 \times 100}{140}$$

$$x = 100 - \frac{100 \times 100}{140}$$

$$= \frac{40 \times 100}{140} = 28.5\% \text{ (approx)}$$

62. (C)  $\sin \theta + \operatorname{cosec} \theta = 2$

$$\sin \theta + \frac{1}{\sin \theta} = 2$$

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

$$(\sin^2 \theta - 2 \sin \theta + 1) = 0$$

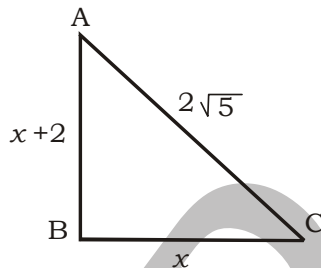
$$(\sin \theta - 1)^2 = 0$$

$$\sin \theta = 1 = \sin 90^\circ$$

$$\theta = 90^\circ$$

$$\text{So, } \sin^7 \theta + \operatorname{cosec}^7 \theta = 1 + 1 = 2$$

63. (D)



In  $\Delta ABC$ ,

$$(x + 2)^2 + x^2 = (2\sqrt{5})^2$$

$$x^2 + 4 + 4x + x^2 = 20$$

$$2x^2 + 4x - 16 = 0$$

$$x^2 + 2x - 8 = 0$$

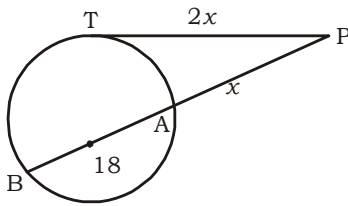
$$(x - 2)(x + 4) = 0$$

$$x = 2$$

Now,  $AB = 4$  and  $BC = 2$

$$\therefore \cos^2 A - \cos^2 C = \left( \frac{4}{2\sqrt{5}} \right)^2 - \left( \frac{2}{2\sqrt{5}} \right)^2 = \frac{3}{5}$$

64. (C) From figure,



$$PT^2 = PA \times PB$$

$$(2x)^2 = x(18 + x)$$

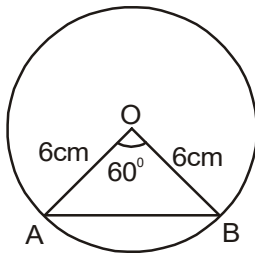
$$4x^2 = x(18 + x)$$

$$4x = 18 + x$$

$$x = 6$$

$$\therefore PT = 2 \times 6 = 12 \text{ units}$$

65. (C)



$$\text{Area of minor segment} = \text{Sector area OABO} - \text{area of } \triangle AOB = \frac{\pi r^2 \theta}{360^\circ} - \frac{\sqrt{3}}{4} (\text{side})^2$$

$$= \pi \times \frac{6 \times 6 \times 60}{360} - \frac{\sqrt{3}}{4} \times 6 \times 6 = 6\pi - 9\sqrt{3} = 3(2\pi - 3\sqrt{3}) \text{ sq. cm.}$$

66. (D) When B works normally then days taken by B to complete the work =  $\frac{20 \times 12}{20 - 12} = 30$  days

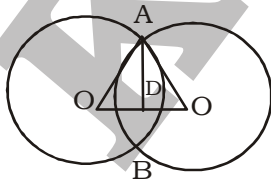
Now, If B does the work only half a day daily

B will take twice the total days to complete the whole work alone.

Now Number of days taken by B =  $(30 \times 2) = 60$  days

So, Now days taken by (A + B) together to do the whole work =  $\frac{20 \times 60}{20 + 60} = 15$  days

67. (B)



$$OD = \sqrt{15^2 - 12^2} = \sqrt{225 - 144} = \sqrt{81} = 9$$

$$O'D = \sqrt{13^2 - 12^2} = \sqrt{169 - 144} = \sqrt{25} = 5$$

$$\therefore OO' = 9 + 5 = 14 \text{ cm}$$

68. (A)  $(x)^{\frac{1}{2}} = (y)^{\frac{1}{3}}$

$$(x)^{\frac{1}{1/3}} = (y)^{\frac{1}{1/2}}$$

$$(x)^3 = (y)^2$$

69. (C) Required average age of 2 persons =  $\frac{30 + 34 + (8 \times 3)}{2} = 44$  years

70. (A) C.P. of each book sold by publisher =  $\frac{\text{₹ } 70,000}{2000 - 400} = \text{₹ } 43.75$

S.P. of each book sold by publisher =  $(100 - 30)\%$  of ₹ 75 = ₹ 52.5

So, gain% =  $\left(\frac{52.5 - 43.75}{43.75} \times 100\right)\%$  ( $\because$  S.P. > C.P)

= 20% gain

71. (B) Required average =  $\frac{1}{5} \times (36 \times 500 + 42 \times 750 + 24 \times 350 + 22 \times 400 + 26 \times 600)$

$$= \frac{1}{5} \times 82,300 = 16,460$$

72. (A) Total number of voters from Bihar and Delhi of age group (20 - 25) years

$$= \frac{24}{100} \times 50000 + \frac{20}{100} \times 35000 = 19000$$

Total number of voters from UP and Rajasthan of age group (20 - 25) years

$$= \frac{30}{100} \times 75000 + \frac{28}{100} \times 40000 = 33700$$

$$\therefore \text{Required percentage} = \left(\frac{33700 - 19000}{33700} \times 100\right)\% \approx 44\%$$

73. (D) Required answer =  $(40 \times 500 + 28 \times 750 + 56 \times 350 + 50 \times 400 + 20 \times 600) = 92,600$

74. (C) Required ratio =  $\frac{42 \times 750 + 22 \times 400}{24 \times 350 + 26 \times 600} = \frac{40300}{24000} = \frac{403}{240} = 403 : 240$

75. (B) Required answer =  $\frac{80}{100} \times (50000 + 75000 + 35000 + 40000 + 60000) = 2,08,000 = 2.08 \text{ lac}$



**MEANINGS IN ALPHABETICAL ORDER**

Boastful	showing excessive pride and self-satisfaction in one's achievements, possessions, or abilities	घमंडी
Derogatory	showing a critical or disrespectful attitude	अपमानजनक
Devious	showing a skilful use of underhanded tactics to achieve goals	चालाक
Diligent	having or showing care and conscientiousness in one's work or duties	परिश्रमी
Distinctive	characteristic of one person or thing, and so serving to distinguish it from others	विशेष
Hereditary	(of a title, office, or right) conferred by or based on inheritance	अनुवांशिक
Misdemeanour	a minor wrongdoing	कुख्यात
Notorious	famous or well known, typically for some bad quality or deed	दुष्कर्म
Paucity	the presence of something only in small or insufficient quantities or amounts; scarcity	कमी
Surplus	an amount of something left over when requirements have been met; an excess of production or supply over demand	आधिक्य
Tedious	too long, slow, or dull; tiresome or monotonous	दिलचस्प

**SSC MOCK TEST - 368 (ANSWER KEY)**

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

76. (B) Wh- (When, What, Why) pronoun के पहले किसी भी conjunction (that) का इस्तेमाल नहीं होता है।  
77. (A) 'ate' के स्थान पर 'has eaten' का इस्तेमाल होगा क्योंकि वाक्य में since + point of time का इस्तेमाल हुआ है।