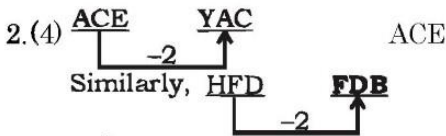


ANSWER SET - 09

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

EXPLANATION - 09

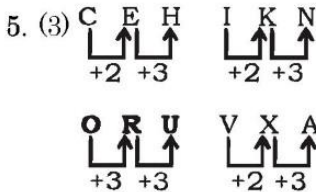
1. (4) As, Screw Driver is used for Screw. Similarly, **Hammer** is used for Nail.



3. (2) $10^3 = 1000$

Similarly, $17^3 = 4913$

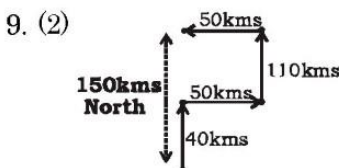
4. (2) Except **Umpire**, all others are the players of Cricket.



6. (2) Except **729**, all others are prime numbers OR **729** is a cubic number

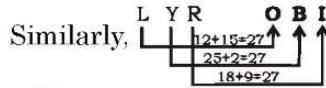
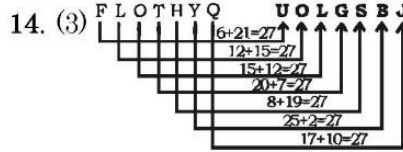
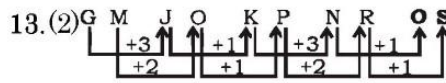
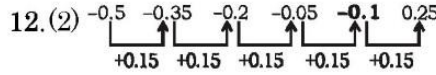
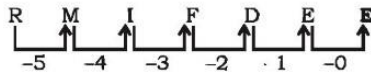
7. (3) Reciprocal \rightarrow Repentant \rightarrow Required \rightarrow Requirement.

8. (1) Difference between both dates = $2 + 30 + 31 + 31 + 30 + 9 = 19$ weeks So, the day on 9th October is **Monday**



10. (3) URINE

11. (4)



15. (1) $234 \times 9 - 12 + 4$ Changing the sign, as per given details, $234 \div 9 + 2 \times 4 = 26 + 48 = 74$ SSC MOCK TEST - 122 (SOLUTION)

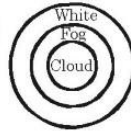
16. (1) $2 + 3 + 3 + 5 = 13$ $3 + 5 = 8$ $4 + 1 + 3 = 8$

17. (3) $28 \times 27 = 756$ $17 \times 23 = 391$

$16 \times 21 = 336$

18. (4)

19. (1)



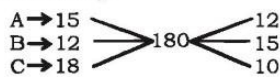
I True

II True

20. (3) 21. (3) 22. (3) 23. (1)

24. (3) 25. (3)

52. (2) ATQ,



Hence, Required days

$$= \frac{180 - 2(12 + 15 + 10)}{10} = 10 \frac{3}{5} \text{ days}$$

54. (4) ATQ,

$$\text{Total C.P} = 2 \times 500 + 1000 \times 3 = 4000$$

Total S.P

$$= 2 \times \frac{500 \times 70}{100} + \frac{3 \times 1000 \times 55}{100}$$

$$= 700 + 1650 = 2350$$

Hence, Effective discount =

$$= \frac{(4000 - 2350)}{4000} \times 100 = 41.25\%$$

55. (1) ATQ, $\frac{A}{B} = \frac{5}{11}$ and $\frac{C}{B} = \frac{9}{16}$

$$\text{then, } \frac{A}{B} \times \frac{B}{C} = \frac{5}{11} \times \frac{16}{9} = \frac{80}{99}$$

Hence, C : A = 99 : 80

57. (3) ATQ,

Required profit

$$= \frac{\left(657.57 - \frac{504 \times 100}{100 - 16}\right)}{\frac{504 \times 100}{100 - 16}} \times 100$$

$$= 9.595\%$$

58. (2) ATQ,

Required percentage

$$= \frac{(100 - 45)}{45} \times 100 = 122.22\%$$

59. (2) ATQ, $\frac{x+1}{14} = \frac{x}{12} \Rightarrow x = 6 \text{ kms}$

60. (3) ATQ,

$$\text{Required rate} = 15 + 10 + \frac{15 \times 10}{100} = 26.5\%$$

Then, Required principal

$$= \frac{21505}{(100 + 26.5)} \times 100 = ₹17000$$

61. (4) ATQ,

$$\frac{10x}{3} + \frac{5}{2} \left(2 - \frac{x}{3}\right) = \frac{7}{2}$$

$$\Rightarrow \frac{20x}{6} + \frac{30 - 5x}{6} = \frac{7}{2} \Rightarrow x = -\frac{3}{5}$$

62. (1) ATQ,

$$\begin{aligned} a^3 - b^3 &= (a - b)(a^2 + b^2 + ab) \\ &= 2((a - b)^2 + 3ab) \\ &= 2(4 + 3 \times 80) = 488 \end{aligned}$$

63. (3) ATQ,

$$x + \frac{5}{x} = \frac{14}{3} \Rightarrow 3x^2 + 15 = 14x$$

$$\Rightarrow (3x - 5)(x - 3) = 0$$

$$\Rightarrow x = \frac{5}{3} \text{ or } 3$$

but according to options, $\frac{5}{3}$

is correct.

64. (1) ATQ,

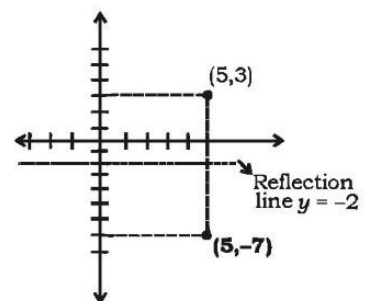
$$\begin{aligned} a + 2d - a - 9d &= -14 - 7 \\ \Rightarrow -7d &= -21 \end{aligned}$$

$$\Rightarrow d = 3 \text{ and}$$

$$a = -14 - 6 = -20$$

$$\text{Hence } T_{29} = -20 + 3 \times 28 = 64$$

65. (4)



Hence, Required points are (5, -7)

66. (1) ATQ,

$$37^2 = (4 - k)^2 + (8 - (-4))^2$$

$$\Rightarrow 1369 = 16 + k^2 - 8k + 144$$

$$\Rightarrow k^2 - 8k - 1209 = 0$$

$$\Rightarrow (k - 39)(k + 31) = 0$$

$$\Rightarrow k = 39, -31$$

67. (2) ATQ,

$$\text{Slope of line } (2x + 3y = -6) = -\frac{2}{3}$$

$$\text{for perpendicular } m_1 \times m_2 = -1$$

$$\Rightarrow -\frac{2}{3} \times m_2 = -1 \Rightarrow m_2 = \frac{3}{2}$$

(m_2 is the slope of perpendicular

$$\text{line) then, } y = \frac{3x}{2} + c$$

$$\Rightarrow 3x - 2y = -c$$

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

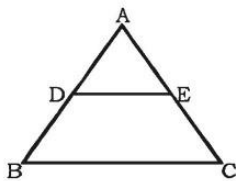
$$\Rightarrow \frac{-x}{\frac{c}{3}} + \frac{y}{\frac{c}{2}} = 1$$

but y intercept is 3

$$\text{then } \frac{c}{2} = 3 \Rightarrow c = 6$$

$$\text{Hence, Required line} = 3x - 2y = -6$$

68. (2) ATQ,



$$\text{area of } \triangle ABC = \frac{(5)^2}{(2)^2} \times 4 = 25 \text{ cm}^2$$

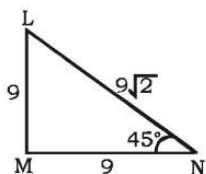
$$\text{Hence, required area} = 25 - 4 = 21 \text{ cm}^2$$

69. (3) ATQ,

$$\sin 30^\circ - \operatorname{cosec} 45^\circ = \frac{1}{2} - \sqrt{2}$$

$$= \frac{1 - 2\sqrt{2}}{2}$$

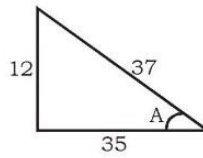
70. (1) ATQ,



$$MN = 9\sqrt{2} \cos 45^\circ = 9\sqrt{2} \times \frac{1}{\sqrt{2}}$$

$$= 9 \text{ cm}$$

71. (1) ATQ,



$$\cos A = \frac{35}{37}$$

$$\text{then, } \cot A + \tan A = \frac{35}{12} + \frac{12}{35}$$

$$= \frac{1369}{420}$$

72. (1) E

73. (1) No of employee in department F after addition = 8 This number is lies between 6 and 10 So B and C is correct.

74. (4) B

75. (2) Total expenditure = $8000 \times 64 = 5.12$ lakh

76. (1) Replace article 'a' with 'the' because here the rate of which we are talking about is definite.

77. (2) Change 'Eclair' into 'Eclairs'.

82. (1) To die of some disease (cancer). To die from some indirect cause (illness, wound etc.)

83. (2) 'Nip in the bud' is an idiomatic phrase which means 'to stop something at an early stage'. Mock