ANSWER SET - 08

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

EXPLANATION - 08

1. (2) Female gender of Bull is Cow. Similarly, Female gender of Lion is Lioness.

2. (2) STU → ZAB (+7)
Similarly, HIJ → OPQ (+7)

3. (3) $99 \Rightarrow (9+2)\times 10 - 9 = 101$
$90 \Rightarrow (9+2)\times 10 - 0 = 110$

4. (2) Except Brinjal, all others have roots as eatable parts.

5. (2) E D G (−1 +3); I H L (−1 +4)
I H K (−1 +3); Q P S (−1 +3)

6. (2) Except 8000, all others are square numbers.

7. (2) Cable → Cannal → Capricon → Clamp → Cloud.

8. (1) ATQ,
Difference between both dates
= 28 + 30 + 31 + 31 + 30 + 38
= 25 weeks + 6 days
Hence, Required days = Sunday + 6 days = Saturday

9. (2) Total weight of all combinations will be
190, 170, 130, 160, 200, 290, 120, 100 and 220 kgs.
Hence, option (3) i.e. 310 kg is correct answer
or
Total weight of all boxes = 290 kgs. From option (3) i.e. 310 kgs is correct answer.

10. (2) MINES

11. (3) 21 26 33 42 53 66 (+5 +7 +9 +11 +13)

12. (4) ABC DEF HIJ MNO (+3 +4 +5)

13. (3) −7.5 15 −30 60 −120 240 (×4 ×4 ×4 ×4)

14. (2) CROWNED → APMULCB (−2)
Similarly, CAMPUS → AYKNSQ (−2)

15. (4) $642 \times 6 \div 25 + 4$
Changing the signs, as per given details,
$642 \div 6 - 25 \times 4 = 107 - 100 = 7$

16. (3) $2 + 9 - 6 - 4 = 1$
$8 + 7 - 2 - 5 = 8$
$8 + 9 - 6 - 2 = 9$

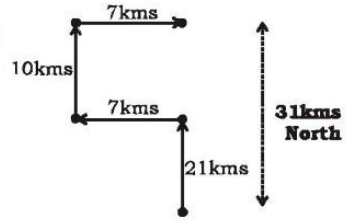
17. (2) $217 - 24 = 193$
$113 - 23 = 90$
$78 - 29 = 49$

18. (4)

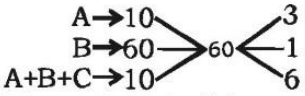
19. (4)

I True
II False

20. (3)



21. (1) 22. (1) 23. (1) 24. (1)
25. (2)
52. (3) ATQ,



Hence, Required days

$= \frac{60}{6-3-1} = 30$ days.

54. (1) ATQ,
Required S.P

$= 450 \times \frac{(100+90)}{100} \times \frac{(100-30)}{100}$

= ₹ 598.5

56. (3) ATQ,

$= \frac{12x+83}{13} = x+3$

$\Rightarrow x = 44$

Hence, Required average = 44 +3= 47

58. (2) ATQ,
Required amount

$= \frac{1000}{(100+150)} \times 100$

= ₹400

59. (2) ATQ,

$\frac{60-X}{7} + \frac{X}{5} = 10$

$\Rightarrow$ x = 25 kms
Hence, Required distance
= 25 kms

61. (4) ATQ,

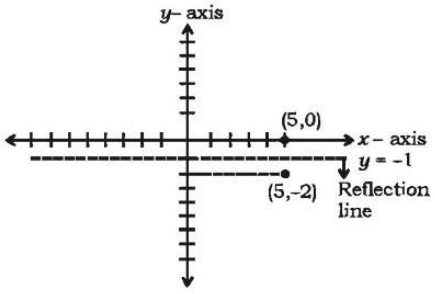
$\frac{1}{3}\left(\frac{12x}{5} - \frac{1}{2}\right) + \frac{6}{5} = \frac{7}{6}$

$\Rightarrow 24x + 31 = 35$

$\Rightarrow x = \frac{1}{6}$

64. (1) ATQ,
$a + 7d - a - 2d = 49 - 19$
$\Rightarrow 5d = 30$
$\Rightarrow$ = 6 and
$\Rightarrow$ = 7
Hence, $T_{13} = a + 12d$
$= 7 + 12 \times 6 = 79$

65. (3) ATQ,



Hence, Required point = (5,0)

66. (2) ATQ,
Coordinate of C
= [(−1 × 3 −(−3 + 3), 4 × 3 −(−1 + 5)]

$\left[x = \frac{x_1+x_2+x_3}{3}, y = \frac{y_1+y_2+y_3}{3}\right]$

= (−3, 8)

67. (1) ATQ,
Slope of Line (ax +3y = 6)

$= \frac{-a}{3}$ ..... (i)

but slope of line (ax +3y = 6)

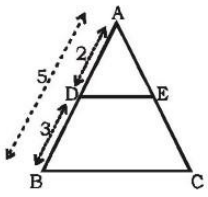
$= \frac{-2}{3}$ .....(ii)

from equation (i) and (ii),

$\frac{-a}{3} = \frac{-2}{3}$

$\Rightarrow a = 2$

68. (1) ATQ,



Then, $\frac{\text{area of } \Delta ADE}{\text{area of } \Delta ABC} = \frac{2^2}{(2+3)^2}$

$\Rightarrow \text{area of } \Delta ADE = \frac{4}{25} \times 150$

$= 24 \text{ cm}^2$

Hence, area of BCED

$=$ area of Δ ABC

$-$ area of Δ ADE

$= 150 - 24 = 126\text{cm}2$

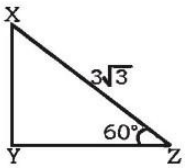
69. (3) ATQ,

$\sin 30° + 2\cos 30°$

$= \frac{1}{2} + \frac{2\sqrt{2}}{3}$

$= \frac{1+2\sqrt{3}}{2}$ units

70. (2) ATQ,



As, we know the ratio when horizontal angle is 60°

Perpendicular : Base : Hypotenuse

3 : 1 : 2

Hence, length of YZ = $= \frac{3\sqrt{3}}{2}$ cm

71. (1) ATQ,

$\text{cosec A} = = \frac{\sec A}{\sqrt{\sec^2 A - 1}}$

$= \frac{\frac{13}{12}}{\sqrt{\left(\frac{13}{12}\right)^2 - 1}} = \frac{13}{12} \times \frac{12}{5} = \frac{13}{5}$

72. (4)

73. (4) ATQ,

Required percentage

$= \frac{4000 - 3000}{4000} \times 100 = 25\%$

74. (1) ATQ,

Total sum = 6000 + 2000 + 1000 + 4000= 13000

75. (4) ATQ,

Total Sum = 5000 + 1300 + 3000

$= 2100$

Then, Required number

$= \frac{21000}{100} \times (100 - 10) = 18900$

82. (3) Add 'the' before 'other'. 'From one end to the other' is the correct phrase.

84. (3) To express possession, we cannot use apostrophe for non living things. Hence replace 'van's door' with 'doors of the van'.

86. (1) 'Rational person' means one who can think rationally.