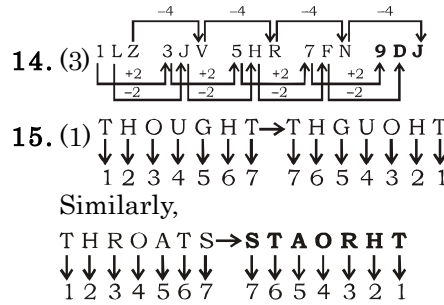


ANSWER SET - 38

01. (4) 02. (4) 03. (4) 04. (3) 05. (2)
 06. (4) 07. (4) 08. (3) 09. (2) 10. (3)
 11. (4) 12. (3) 13. (3) 14. (3) 15. (1)
 16. (3) 17. (4) 18. (2) 19. (2) 20. (2)
 21. (2) 22. (4) 23. (1) 24. (4) 25. (3)
 26. (2) 27. (2) 28. (3) 29. (4) 30. (3)
 31. (1) 32. (1) 33. (1) 34. (1) 35. (3)
 36. (4) 37. (1) 38. (3) 39. (3) 40. (2)
 41. (1) 42. (1) 43. (4) 44. (3) 45. (3)
 46. (4) 47. (3) 48. (1) 49. (3) 50. (2)
 51. (1) 52. (3) 53. (4) 54. (2) 55. (4)
 56. (1) 57. (2) 58. (1) 59. (3) 60. (2)
 61. (4) 62. (4) 63. (4) 64. (4) 65. (3)
 66. (1) 67. (3) 68. (4) 69. (2) 70. (4)
 71. (3) 72. (1) 73. (4) 74. (3) 75. (2)
 76. (1) 77. (3) 78. (3) 79. (1) 80. (2)
 81. (1) 82. (2) 83. (3) 84. (4) 85. (1)
 86. (4) 87. (3) 88. (2) 89. (2) 90. (3)
 91. (4) 92. (4) 93. (4) 94. (4) 95. (1)
 96. (4) 97. (3) 98. (2) 99. (2) 100. (2)

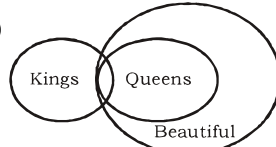
EXPLANATION - 38

1. (4) $A B D E : F G I J :: P O S T : U V X Y$
 2. (4)
 3. (4) $381 : 160 :: 478 : 257$
 4. (3) Note : There are three boys between C and B.
 5. (2) $5 * 3 = (5 \times 3) + (5 - 3)^2 = 19$
 $8 * 5 = (8 \times 5) + (8 - 5)^2 = 49$
 Similarly,
 $6 * 4 = (6 \times 4) + (6 - 4)^2 = 28$
 6. (4) (1) $8 - 11 = -3$
 (2) $1 - 4 = -3$
 (3) $7 - 10 = -3$
 (4) $3 - 5 = -2$
 7. (4) Except the option (4), all the other options start with small letters and end with capital letters.
 8. (3) Except the option (3), all the other options have parts interrelated to each other.
 9. (2) $Q > U > P > S > R$
 10. (3)
 Total number of students = $16 + 16 + 8 = 40$
 11. (4) a d c / a d c / a d c / a d c / a d c
 12. (3) $\frac{2}{[2 \times 1] + 1} \frac{3}{[3 \times 2] + 2} \frac{8}{[8 \times 3] + 3} \frac{27}{[27 \times 4] + 4} \frac{112}{[112 \times 5] + 5}$
 13. (3) $\frac{14}{[14 \times 2] - 1} \frac{27}{[27 \times 2] - 2} \frac{52}{[52 \times 2] - 3} \frac{101}{[101 \times 2] - 4} \frac{198}{[198 \times 2] - 5}$



16. (3) REVISION

17. (4)

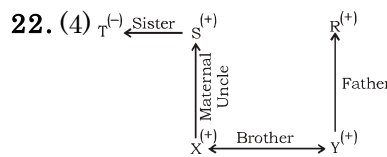


Conclusions = I - x
 = II - x

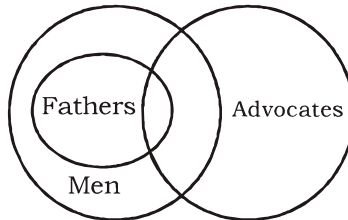
18. (2) $(11 + 1) \times (11 - 1) = 120$
 and $(7 + 2) \times (7 - 2) = 45$
 and, $(5 + 3) \times (5 - 2) = 16$
 19. (2) $(72 \div 8) \times 13 = 117$ and
 $(189 \div 21) \times 7 = 63$
 Similarly,
 $(36 \div 4) \times 6 = 54$

20. (2) U $\xrightarrow{\text{Place Value}}$ 21 \downarrow
 $21 \div 3 = 7 \xrightarrow{\text{Place Value}}$ G
 L $\xrightarrow{\text{Place Value}}$ 12 \downarrow
 $12 \div 3 = 4 \xrightarrow{\text{Place Value}}$ D
 I $\xrightarrow{\text{Place Value}}$ 9 \downarrow
 $9 \div 3 = 3 \xrightarrow{\text{Place Value}}$ C

21. (2) $\frac{\text{Submerge}}{e} \quad \frac{\text{Synarchy}}{d}$
 $\frac{\text{Syncretism}}{c} \quad \frac{\text{Syphilis}}{b} \quad \frac{\text{Syringe}}{a}$



23. (1)



24. (4) $35 - 4 + 25 \div 5 \times 5 = 56$
 $35 - 4 + 5 \times 5 = 56$
 $35 - 4 + 25 = 56$
 $35 + 25 - 4 = 56$
 $60 - 4 = 56$
 $56 = 56$ (Correct)
 25. (3) G = 02, 10, 23, 31, 44
 I = 56, 65, 79, 88, 97
 R = 59, 68, 77, 86, 95

- L = 03, 11, 24, 32, 40
 26. (2) Principal = P
 Rate = r
 Time = 16 years
 ATQ,
 $(2P - P) = \frac{P \times r \times 16}{100}$
 $r = \frac{100}{16} > 6\frac{1}{4}\%$
 27. (2) Total simple interest = 5420
 ATQ,
 $\frac{12000 \times 12 \times 1}{100 \times 2}, \frac{28000 \times 8 \times 1}{100}, \frac{40000 \times r \times 1}{100}$
 $= 5420$
 $780 + 2240 + 400r = 5420$
 $400r = 2400$
 $r = 6\%$
 28. (3) ATQ,
 First number \times second number
 = HCF \times LCM
 Second Number = $\frac{4 \times 576}{64} = 36$
 29. (4) $x - y = \frac{x, y}{7}$
 $7x - 7y = x + y$
 $6x = 8y$
 $3x = 4y$
 $x - y = \frac{xy}{4}$
 $4x - 4y = xy$
 $4x - 3x = x \left| \frac{3}{4}x \right| \Rightarrow x = \frac{4}{3}$
 $xy = \left| \frac{4}{3} \right| \times \left| \frac{4}{3} \times \frac{3}{4} \right| > \frac{4}{3}$
 30. (3) $x = \frac{\sqrt{3}, 1}{\sqrt{3} - 1}$
 $x = \frac{\sqrt{3}, 1}{\sqrt{3} - 1} \times \frac{\sqrt{3}, 1}{\sqrt{3}, 1}$
 $= \frac{3, 1, 2\sqrt{3}}{3 - 1}$
 $= 2, \sqrt{3}$
 $x^2 = 4 + 3 + 4\sqrt{3} = 7, 4\sqrt{3}$
 $x^2 - 4x + 2 = 7 + 4\sqrt{3} - 8 - 4\sqrt{3} + 2 = 1$
 31. (1) $\frac{\cot 54^\circ}{\tan 36^\circ}, \frac{\tan 20^\circ}{\cot 70^\circ} - 2$

$$= \sqrt{\frac{37^2}{\sqrt{5}} - 7\sqrt{5}} = \frac{12}{\sqrt{5}}$$

So, volume of the cone =

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

$$= \frac{1}{3} \times \frac{22}{7} \times 7\sqrt{5} \times 7\sqrt{5} \times \frac{12}{\sqrt{5}}$$

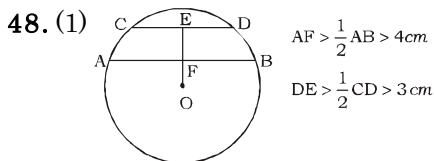
$$= 616\sqrt{5} \text{ cm}^3$$

47. (3) ATQ,

Time required to fill the tank by
7 cm

$$= \frac{50 \times 44 \times 7 \times 7 \times 100 \times 100}{100 \times 22 \times 7 \times 7 \times 5000}$$

$$= 2 \text{ hours}$$



$$(OD)^2 = (OF + 1)^2 + (DE)^2$$

$$(OD)^2 = (OF)^2 + 1 + 2 \times OF + 9$$

...(i)

$$(OA)^2 = (OF)^2 + (AF)^2$$

$$(OA)^2 = (OF)^2 + 16 \text{ ... (ii)}$$

From (i) and (ii)

$$(OF)^2 + 10 + 2 \times OF = (OF)^2 + 16$$

$$OF = 3$$

So, radius of the circle

$$= \sqrt{3^2 + 4^2}$$

$$= 5 \text{ cm}$$

49. (3) Total number of employees in

$$\text{scale V} = \frac{13}{100} \times 1700 = 221$$

Total number of male employees
in

$$\text{Scale V} = \frac{12}{100} \times 900 = 108$$

So, Total number of female
employees in

$$\text{Scale V} = 221 - 108 = 113$$

50. (2) Total number of employees in

$$\text{Scale VII} = \frac{6}{100} \times 1700 = 102$$

Total number of male employees
in

$$\text{Scale VII} = \frac{10}{100} \times 900 = 90$$

$$\text{Required Ratio} = 90 : (102 - 90)$$

$$= 90 : 12$$

$$= 15 : 2$$

76. (1) Change 'give off' into 'give up'.
'Give off' means to emit, to send
forth whereas 'give up' means to

surrender, to relinquish.

77. (3) No Error. The sentence is
correct.

79. (1) 'Recalled' is the right answer
as it means 'to ask or order to
return'. The sentence states that
the magazine was taken back
after the protests. Meaning of
other words –

- Refurbish means to make
clean, bright or fresh again.
- Redistribute means to
distribute again or
differently.
- Renovate is the synonym of
refurbish i.e., to restore to a
good condition.

80. (2) 'Deliberate' should fill the blank
as it means 'intentional'. The
sentence refers to a problem
because of the intentional silence
to avoid any other problem.
Meaning of other words –

- Decorative means serving or
tending to decorate
- Distributive means relating
to distribution
- Devalue means to lessen or
cancel the value of

82. (2) 'Smack of' should come in place
of the underlined part, as it means
to have some of the
characteristics or qualities of
something. The sentence talks
about the protests of the people
being done with strong personal
concerns. Other options don't hold
any validity.

83. (3) 'a meticulous job' should
replace the underlined part as it
means task of scrutinizing and
collecting each and every detail
about the issues.