ANSWER SET - 03

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

EXPLANATION - 03

1. (4) Read the third-last paragraph carefully.

2. (1) Read the second and third sentences of the third-last paragraph carefully.

3. (5) Read the second and third sentences of the first paragraph carefully.

4. (2) Read the third, fourth, fifth and sixth paragraphs carefully.

5. (3) Read the fourth paragraph carefully.

6. (5) Readthe first sentence of the third paragraph carefully.

7. (1) Readthe last sentence of the second-last paragraph carefully.

8. (3) **9.** (4) **10.** (1)

11. (1) Replace the phrase with 'A more completly national'.

12.(1) Replace the phrase with 'Reaching collective decisions'.

13. (5)

14. (2) Replace the phrase with 'larger institutional reform to reduce'.

15. (4) Replace the phrase with 'matters to the rest of the world.'

16. (3) **17.** (5) **18.** (3) **19.** (2) **20.** (10)
21. (4) **22.** (1) **23.** (5) **24.** (1) **25.** (2)
26. (3) **27.** (10) **28.** (5) **29.** (4) **30.** (2)

31. (4)

$$\frac{0.5\times ?}{100}=\frac{4.78\times 1255}{100}+\frac{3.24\times 440}{100}$$

$= 59.989 + 14.256$

$$\therefore ? = = \frac{74.245\times 100}{0.5} = 14849$$

32.(4) $$? = \frac{(128.5\times 64)+(13.8\times 456)}{25}$$

$$= \frac{8224+6417}{25} = 585.64$$

33. (1) $(2^2)^{3.7} \times (2^3)^{-1.2}$ „i $(2^5)^{-1}$ „i $\frac{1}{(2^3)^{-3}}$

$= (2)?$

$= 2^{7.4} \times 2^{-3.6}$ „i 2^{-5} „i 2^9

$= (2)^{7.4-3.6+5-9}$

$= (2)^{-0.2}$

$\therefore ? = -0.2$

34. (2) $? = 4056 \times 7776$

$$\therefore ? = \sqrt{31539456} = 5616$$

35. (4) $$51975 \times \frac{5}{9}\times\frac{3}{11}\times\frac{2}{7} = \frac{1559250}{693}$$

$= 2250$

36. (4) Series is –99, –89, –79, –69, –59, –49

37. (1) Series is ×1 + 11, ×2 + 21, ×3 + 31, ×4 + 41, ×5 + 51

38. (2) Series is $+(11)^2$, $+(10)^2$, $+(9)^2$, +(8)2.....

39. (5) Series is ×9 + 9, ×8 + 8, ×7 + 7, ×6 + 6.....

40. (3) Series is +91,+81,+71, +61.....

41. (4) Total employees = $\frac{940\times 100}{23.5}$

$= 4000$

$$\therefore \text{Total employees of A} = \frac{20}{100}\times 4000$$

$= 800$

$\therefore$ Female employees of

$$A = \frac{37}{100}\times 800 = 296$$

$\therefore$ male employee of A = 800 – 296 = 504

Similarly, for other companies we get total females = 1796

And total males = 2204

$\therefore$ Difference = 2204 – 1796 = 408

42. (5) Required percentage

$$= \frac{296}{128}\times 100 = 231.25\%$$

43. (2) Male of (A + B + C) = 504 + 517 + 356 = 1377

Female of (D + E + F) = 192 + 122 + 407 = 721

$\therefore$ Difference = 1377 – 721 = 656

44.(2) Required percentage

$$= \frac{17.8}{20}\times 100 = 89\%$$

45. (4) Female of B = 423

Male of F = 333

$$\therefore \text{Ratio} = \frac{333}{423} = \frac{37}{47} = 37 : 47$$

46. (1) Let the present age of the father be x and that of the son be y.

then $\frac{x}{y} = \frac{8}{3}$

or, $3x = 8y$ ....(i)

Further, $\frac{x+12}{y+12} = \frac{2}{1}$

$x + 12 = 2y + 24$

$x – 2y = 12$ ....(ii)

From equation (i) and (ii), x = 48, y = 18

$\therefore$ Sum = 66 years

47. (2) Probability of there being all men in the committee is

$$\frac{{}^4C_4}{{}^7C_4} = \frac{1}{35}$$

$\therefore$ Probability of there being at least one woman

$$= 1 - \frac{1}{35} = \frac{34}{35}$$

48. (3) Let the length be x and breadth be y. Then, $\frac{x}{y} = \frac{13}{9}$

or, $9x = 13y$ ....(i)

$x = y + 72$

Again,

$13y = 9y + 648$

or, $13y – 9y = 648$

$$\therefore y = \frac{648}{4} = 162$$

$\therefore x = 162 + 72 = 234$

$\therefore$ Perimeter = 2(234 + 162) = 2 × 396 = 792 ft

49. (2) Let the numbers be 600, 800 and 1500.

Then the new numbers are 2400, 3000 and 3000.

$\therefore$ Ratio = 24 : 30 : 30 $\Rightarrow$ 4 : 5 : 5

50. (5) One girl can be chosen in ${}^4C_1$ = 4 ways

and 4 boys can be chosen in ${}^6C_4$ = 15 ways

$\therefore$ Total number of ways = 4 × 15 = 60 ways.

51. (2) CI = $40 \times (1.05)^4 – 40 = 8.62025$ lakh = ₹862025

52. (3) Let the interest rate be 'r' and the sum 'x' then $\frac{x(r+4)\times 3}{100}$

$$= \frac{x\times r\times 3}{100} + 408$$

$\therefore 3xr + 12x – 3xr = 40800$

$$\therefore x = \frac{40800}{12} = ₹3400$$

53.(3) The difference between the speeds of the trains to make the difference of 128 km = 48 – 32 = 16 km/hr

Difference in distance = 128 km

$\therefore$ time $= \frac{128}{16} = 8$ hours

i.e. they meet after 8 hours

$\therefore$ Total distance $= 32 \times 8 + 48 \times 8$

$= 256 + 384 = 640$ km

54. (4) One-fourth of the remaining amount = 3610

Remaining amount = 100 – 12 – 22 –28 = 38% = 3610 × 4

Money spent on bills

$= \frac{12}{100} \times \frac{3610 \times 4}{38} \times 100 = ₹4560$

55. (1) Maximum marks that Bina can score = 150 × 5 = 750

Bina's score = 110 + 135 + 140 + 120 + 115 = 620

$\therefore$ Percentage marks $= \frac{620}{750} \times 100$

$= 82.66 \approx 83\%$

56. (1)

I. $3x^2 - 59x + 210 = 0$

$\Rightarrow 3x^2 - 45x - 14x + 210 = 0$

$\Rightarrow 3x(x - 15) - 14(x - 15) = 0$

$\Rightarrow (3x - 14)(x - 15) = 0$

$\therefore x = \frac{14}{3}, 15$

II. $2y^2 - 8y - 9y + 36 = 0$

$\Rightarrow 2y(y - 4) - 9(y - 4) = 0$

$\Rightarrow (y - 4)(2y - 9) = 0$

$\therefore y = 4, \frac{9}{2}$ [x > y]

57. (3)

I. $15x^2 - 20x - 21x + 28 = 0$

$\Rightarrow 5x(3x - 4) - 7(3x - 4) = 0$

$\Rightarrow (5x - 7)(3x - 4) = 0$

$\therefore x = \frac{7}{5}, \frac{4}{3}$

II. $7y^2 - 14y - 15y + 30 = 0$

$\Rightarrow 7y(y - 2) - 15(y - 2) = 0$

$\Rightarrow (y - 2)(7y - 15) = 0$

$\therefore y = 2, \frac{15}{7}$ [x < y]

58. (1)

I. $4x^2 - 4x + 3x - 3 = 0$

$\Rightarrow 4x(x - 1) + 3(x - 1) = 0$

$\Rightarrow (4x + 3)(x - 1) = 0$

$\therefore x = \frac{-3}{4}, 1$

II. $y^2 + 4y + 4 = 0$

$\Rightarrow (y + 2)2 = 0$

$\Rightarrow y + 2 = 0$

$\therefore y = -2$ [x > y]

59. (1)

I. $x = \sqrt{5329}$

$\therefore x = 73$

II. $y = \sqrt[3]{12167}$

$\therefore y = 23$

So, x > y

60. (5)

I. $x^2 + 14x = 0$

$\Rightarrow x(x + 14) = 0$

$\therefore x = 0, -14$

II. $y^2 + 10y + 8y + 80 = 0$

$\Rightarrow y(y + 10) + 8(y + 10) = 0$

$\Rightarrow (y + 10)(y + 8) = 0$

$\therefore y = -8, -10$ i.e. no relation

61. (2)

$\frac{\text{Import of A}}{\text{Export of A}} = 0.6; \frac{\text{Import of B}}{\text{Export of B}} = 0.8$

$\therefore \text{Export of A} = \frac{\text{Import of A}}{0.6}$

$= \frac{43.2}{0.6} = 72 \text{ lakh}$

$\text{Export of B} = \frac{\text{Import of B}}{0.8}$

$= \frac{68}{0.8} = 85 \text{ lakh}$

Sum = 72 + 85 = 157 lakh

62. (1)

For export < Import $\frac{\text{Import}}{\text{Export}} > 1$

i.e. in year 2013 and 2015,

Import > Export

63. (3) $\frac{\text{Import}}{\text{Export}} = 0.6 = \frac{3}{5}$

$\text{Import}_1 = \text{Import} + \frac{150 \times \text{Import}}{100}$

$= 2.5 \text{ Import}$

$= 2.5 \times 3 = 7.5$

$\text{Export1} = \text{Export} + \frac{50 \times \text{Export}}{100}$

$= 1.5 \times 5 = 7.5$

$\therefore \frac{\text{Import}_1}{\text{Export}_1} = \frac{7.5}{7.5} = 1.0$

64. (2)

$\frac{\text{Import of A}}{\text{Export of A}} = 0.9; \frac{\text{Import of B}}{\text{Export of B}} = 0.8$

$\therefore$ Required percentage

$= \frac{0.9}{0.8} \times 100 = 112.5\%$

65. (3) $\frac{\text{Import of A}}{\text{Export of A}} = 1.4$

$\therefore$ Import of A = 1.4 Export of A

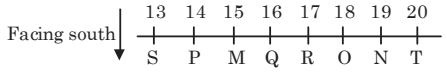
Similarly

Import of B = 1.2 Export of B

$\therefore \frac{\text{Import of A}}{\text{Export of B}} = \frac{\text{Export of A}}{\text{Export of B}} \times \frac{1.4}{1.2}$

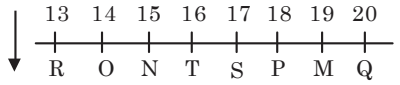
$= \frac{3}{7} \times \frac{7}{6} = \frac{1}{2} = 1 : 2$

(66-70)



66. (1) **67.** (3) **68.** (4) **69.** (4)

70. (5)

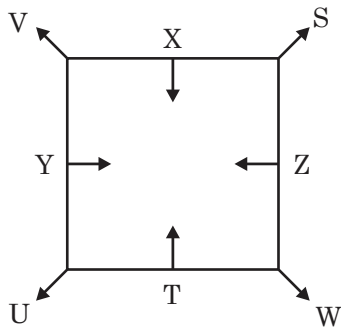


(71-75)

Sports Persons	Sports	Country
A	Cricket	Bangladesh
B	Kabaddi	Australia
C	Tennis	Nepal
D	Football	India/Sri Lanka
E	Hockey	India/Sri Lanka
F	VallyBall	Pakistan
G	Chess	South Africa

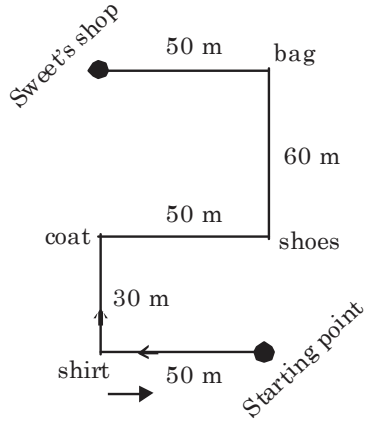
71. (1) **72.** (4) **73.** (3) **74.** (3) **75.** (2)

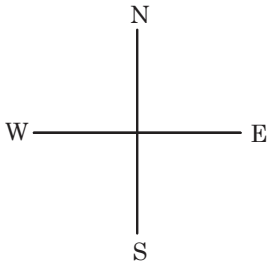
(76-80)



76. (1) **77.** (5) **78.** (2) **79.** (4) **80.** (3)

(81-84)





81. (2) **82.** (5) North-east

83. (1) 60 + 30 = 90 m **84.** (1)

(85-86) :

Given :

$A \geq B = C \leq D$ ...(i)

$E > F \geq A$ ...(ii)

$D = G$ ....(iii)

Combining (i), (ii) and (iii), we get

$E > F \geq A \geq B = C \leq D = G$

85. (2)

(I) $G > B$ is not true.

(II) $C \leq G$ is true. So, conclusion II is true.

86. (5)

(I) $E > C$ is true. So, conclusion I is true.

(II) $F \geq B$ is true. So, conclusion II is also true.

(87-88):

Given :

$M < N = O > P$ ...(i)

$Q > R = S \leq P$ ...(ii)

Combining (i) and (ii), we get

$Q > R = S \leq P < O = N > M$

87. (4)

(I) $M > P$ we can't compare M and P. So, conclusion I is not true.

(II) $O \geq R$ is not true. So, conclusion II is also not true.

88. (1)

(I) $N > R$ is true. So, conclusion I is true.

(II) $Q < O$ we can't compare O and Q. So, conclusion II is not true.

89. (3) Given :

$P \leq Q < R = S \geq T \geq U < V$

(I) $R > U$ is not true.

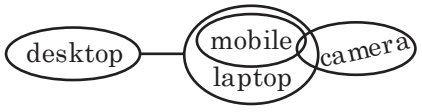
(II) $U = R$ is not true.

But both are complamentary pair.

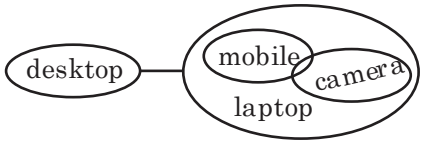
(90-94)

90. (5)

(I)



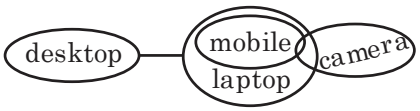
(II)



(I) Conclusion I follows.

(II) From diagram II, conclusion II also follows.

91. (5)



(I) The part of camera which is mobile, can never be desktop. So, conclusion I follows.

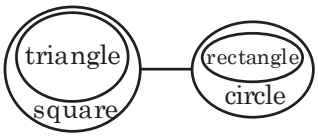
(II) Conclusion II also follows.

92. (1)

(I) The part of college which is school, can never be bank. So, conclusion I follows.

(II) There is no relation between bank and school. So, conclusion II doesn't follow.

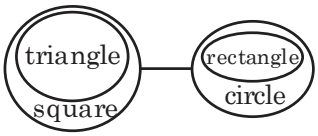
93. (2)



(I) Conclusion I doesn't follow.

(II) Conclusion II follows.

94. (4)



(I) Conclusion I is restatement, so, conclusion I doesn't follow.

(II) Conclusion II also doesn't follow.

(95-99)

India – ra

wins – ja

gold – sa

Pakistan – ga/pa

no – na

any – pa/ga

medal – ta

Russia – ma

silver – ri

and – ki

95. (4) **96.** (1) **97.** (2) **98.** (5) **99.** (4)

100. (3)