

ANSWER SET - 08

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

EXPLANATION - 08

1. (3) Error in part C: Replace 'the' with 'an'
2. (4) Error in part D: Replace 'therein' with 'thereby' Error in part E: Replace 'credited' with 'credit'
3. (5) Error in part A: Replace 'is ailing' with 'ails' Error in part E: Replace 'was' with 'is'
4. (3) Error in part C: Replace 'that' with 'who' Error in part D: Replace 'upto' with 'to'
5. (4) Error in part B: Replace 'with' with 'against' Error in part D: Replace 'made' with 'picked'

(6-10) : A D F B E C

6. (1) 7. (4) 8. (4) 9. (5) 10. (2)
11. (5) 12. (4) 13. (2) 14. (3) 15. (4)
16. (4) 17. (3) 18. (1) 19. (2) 20. (3)
21. (4) 22. (3) 23. (2) 24. (1) 25. (5)
26. (4) 27. (5) 28. (3) 29. (1) 30. (2)
31. (1) $? = 415.25 - 627.10 + 958.55 = 1373.80 - 627.10 = 746.70$
32. (3) $? = 34928 - 2591 - 14986 = 34928 - 17577 = 17351$
33. (5) $? = \frac{147}{7 \times 0.3} = \frac{210}{3} = 70$
34. (3) $12.5 \times 6.7 \times 4.2 = 351.75$
35. (3) $\frac{? \times 375}{100} = \frac{27 \times 450}{100} - 76.5$
 $= 27 \times 4.50 - 76.5 = 121.5 - 76.5 = 45$
 $\therefore ? = \frac{45 \times 100}{375} = \frac{4500}{375} = 12$
36. (4) $? = 5038 - (4567.8 + 14 \times 9.8) = 5038 - (4567.8 + 137.2)$

$$= 5038 - 4705.0 = 333$$

37. (1) $? = \frac{53}{3} \times \frac{123}{106} = \frac{41}{2} = 20\frac{1}{2}$
38. (2) $8888 - 4444 + 222 = 9110 - 4444 = 4666$
39. (4) $17^? = 17^{34.5} \times 17^{68.9} \div 17^{27.4}$
 $= 17^{34.5 + 68.9 - 27.4} = 17^{103.4 - 27.4} 17^? = 17^{76}$
 $\therefore ? = 76$
40. (1) $? = 6^3 \times 2^4 - 9^2 = 216 \times 16 - 81 = 3456 - 81 = 3375$
41. (3) In 8 days the plant manufactures 96 dozen cars, In 17 days, the plant will manufacture.

$$\frac{96 \times 17}{8} = 12 \times 17 = 204 \text{ dozen}$$
42. (1) $43x + 43y = 4816$
 $\therefore x + y = \frac{4816}{43} = 112$

$$\text{Average of } (x + y) = \frac{112}{2} = 56$$

43. (4) Let the length of the rectangle be x metres.
Then, perimeter = $2(l + b)$
 $\therefore 2(x + 84) = 364$
or, $x + 84 = 182$
 $\therefore x = 182 - 84 = 98$ metres
Now, radius = $98 + 7 = 105$ metres

$$\text{Circumference} = 2\pi r = 2 \times \frac{22}{7}$$

$$\times 105 = 660 \text{ metres}$$

$$\text{Cost of fencing the garden} = 660 \times 8 = ₹5280$$

44. (2) Passing marks = 280
Hema got 264 marks.
 $\therefore 280 - 264 = 16$
So, 2 percentage marks = 16
 \therefore Maximum aggregate marks

$$= \frac{16 \times 100}{2} = 800$$

 \therefore Required passing percentage

$$= \frac{280}{800} \times 100 = 35\%$$

45. (1) Let the number be x.

$$\text{Then, } \frac{x \times 7}{15} - \frac{x \times 20}{100} = 124$$

$$\text{or, } 4x = 124 \times 15$$

$$\therefore x = \frac{124 \times 15}{4} = 31 \times 15 = 465$$

$$40\% \text{ of } 465 = \frac{465 \times 40}{100} = 186$$

46. (5) Square of 51 = 2601
 $\therefore 2601 - 2530 = 71$
71 is the least number to be added to make 2530 a perfect square.
47. (2) Let the present age of A be x and B be y.

$$\text{Now, } x \times \frac{30}{100} = y$$

$$\therefore 3x = 10y \quad \dots\dots(i)$$

Again,

$$(x + 8) = \frac{240}{100} \times (y + 8)$$

$$\text{or, } 5x + 40 = 12y + 96$$

$$\therefore 5x - 12y = 56 \quad \dots\dots(ii)$$

$$\text{Equation (i)} \times 5$$

$$15x = 50y \quad \dots\dots(iii)$$

$$\text{and equation (ii)} \times 3$$

$$15x - 36y = 168 \quad \dots\dots(iv)$$

$$\text{From (iii) and (iv), we get}$$

$$50y - 36y = 168$$

$$\text{or, } 14y = 168$$

$$\therefore y = 12$$

$$\text{And } x = \frac{10}{3} \times 12 = 40 \text{ years}$$

$$\therefore \text{Difference} = 40 - 12 = 28 \text{ years}$$

48. (1) Let the price of a TV be x and that of a computer be y.
Now, $8x + 6y = 141000 \dots(i)$
Again,

$$\frac{x \times 7.5}{100} \times 8 + \frac{y \times 12 \times 6}{100} = 12600$$

$$\text{or, } 60x + 72y = 1260000$$

$$\therefore 5x + 6y = 105000 \dots(ii)$$

Subtracting equation (ii) from equation (i), we get

$$3x = 141000 - 105000 = 36000$$

$$\therefore x = 12000 \text{ and } y = 7500$$

$$\therefore \text{Ratio} = 12000 : 7500 \Rightarrow 8 : 5$$

49. (4) Let their speeds be $3x$ m/s and $5x$ m/s respectively and their lengths l_1 and l_2 metres respectively. Relative speed = $3x + 5x = 8x$ m/sec

$$\frac{l_1 + l_2}{8x} = 10.5 \dots\dots(i)$$

$$\frac{l_1}{8x} = 5 \dots\dots(ii)$$

Dividing equation (i) by (ii), we get

$$\frac{l_1 + l_2}{l_1} = \frac{10.5}{5} = \frac{21}{10}$$

$$\text{or, } \frac{l_2}{l_1} = \frac{21}{10} - 1 = \frac{11}{10}$$

$$\therefore l_1 : l_2 = 10 : 11$$

50. (2) (A + B + C)'s daily earning

$$= \frac{2119}{13} = 163$$

(A + C)'s daily earning = $\frac{1728}{16}$
 $= 108$

(B + C)'s daily earning = $\frac{1397}{11}$
 $= 127$

B's daily earning = $163 - 108 = 55$
 C's daily earning = $127 - 55 = 72$

\therefore Number of days = $\frac{1296}{72} = 18$

51. (2) Work done by B in 20 days

$$= \frac{1}{40} \times 20 = \frac{1}{2} \text{ work}$$

(A + B) do $1 - \frac{1}{2} = \frac{1}{2}$ work

\therefore (A + B) do the complete work in

$$\frac{60 \times 40}{60 + 40} = 24 \text{ days}$$

Thus, they will do $\frac{1}{2}$ work in 12 days. So A left after 12 days.

52. (3) Let the amount borrowed at 18% be x.

$$\frac{12000 \times 13 \times 2}{100} + \frac{x \times 18 \times 2}{100} = 9240$$

or, $36x = (9240 - 3120) \times 100 = 612000$

$$\therefore x = \frac{612000}{36} = 17000$$

\therefore Total amount = $17000 + 12000 = ₹29000$

53. (3) Interest on ₹80899.20 in one year is $85753.152 - 80899.20 = ₹4853.952$

\therefore Rate of interest = $\frac{4853.952 \times 100}{80899.20} = 6\%$

54. (3) For divisibility by 5 the unit's place should have 0 or 5

(I) When 0 is in unit's place then the arrangement will be in 7! ways, ie 5040 ways.

(II) When 5 is in the unit's place then 0 should not be in the first place. So the total numbers = $7! - 6! = 5040 - 720 = 4320$
 Total numbers = $5040 + 4320 = 9360$

55. (1) The total letters are 7, So, $n(S) = 7P7 = 7!$

We consider A and I as a unit, So total letters = $5 + 1$

= 6, so the number of arrangements = $6P6 = 6!$ and A

and I can be arranged in 2! ways among themselves,

So total number of ways = $6! \times 2!$

$$\therefore P(E) = \frac{6! \times 2!}{7!} = \frac{2}{7}$$

56. (1) The series is 27

$$27 + 7^3 = 370$$

$$370 + 9^3 = 1099$$

$$1099 + 11^3 = 2430$$

$$2430 + 13^3 = 4627$$

$$4627 + 15^3 = 8002$$

57. (3) The series is $\times 5 - 9, \dots$

58. (5) The series is $+248, +496, +992, +1984, \dots$

59. (1) The series is $\times 4 - 3, \times 5 - 4, \times 6 - 5, \dots$

60. (2) The series is $6^3 + 16, 7^3 + 17, 8^3 + 18, 9^3 + 19, \dots$

61. (4) Number of girls in F = $\frac{45 \times 1936}{55} = 1584$

Total students in F = $1584 + 1936 = 3520$

Total number of students in all six schools

$$= \frac{360}{115.2} \times 3520 = 11000$$

\therefore Required percentage =

$$\frac{1584}{11000} \times 100 = 14.4\%$$

62. (5) Number of girls in D

$$= 858 \times \frac{35}{65} = 462$$

Number of girls in C

$$= \left\{ \frac{28.8}{43.2} \times (462 + 858) \right\} \times \frac{45}{100}$$

$$= 396$$

$$\therefore \text{Average} = \frac{396 + 462}{2} = 429$$

63. (2) The total number of students in E

$$= 11000 \times \frac{54}{360} = 1650$$

Number of girls in E =

$$1650 \times \frac{42}{100} = 693$$

Number of boys in E = $1650 - 693 = 957$

\therefore Difference = $957 - 693 = 264$

64. (3) Number of boys in B =

$$\left(\frac{1760 \times 360}{57.6} \right) \times \frac{61.2}{360} \times \frac{70}{100} = 1309$$

65. (4) Girls in D are 35% So, total number of students in D

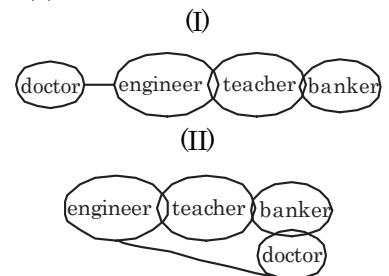
$$= \frac{462 \times 100}{35} = 1320$$

Total number of students in C

$$= \frac{28.8}{360} \left(\frac{360 \times 1320}{43.2} \right) = 880$$

(66-70)

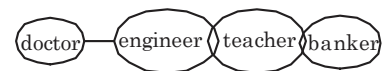
66. (2)



(I) Conclusion I doesn't follow.

(II) From diagram II conclusion II follows.

67. (5)

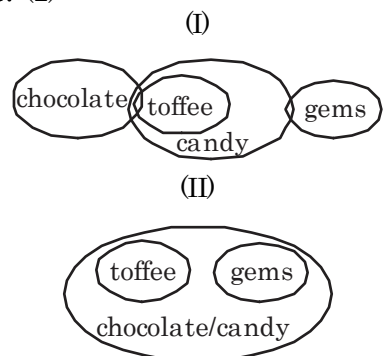


(I) Conclusion I doesn't follow.

(II) Conclusion II also doesn't follow.

But both are complementary pair.

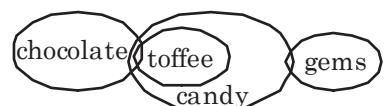
68. (2)



(I) Conclusion I doesn't follow.

(II) From diagram II conclusion II follows.

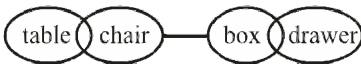
69. (4)



(I) Conclusion I doesn't follow.

(II) Conclusion II also doesn't follow.

70. (3)

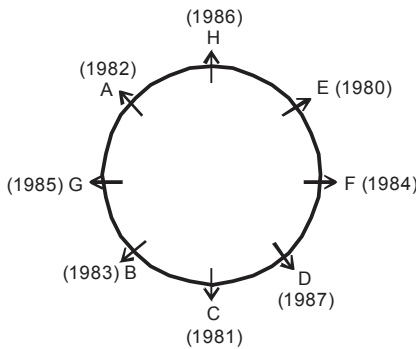


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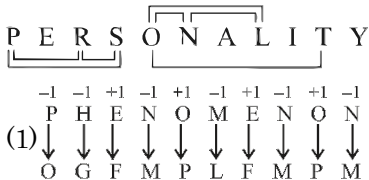
(71-75)

- IPL — do
- are — xo
- interesting — ym
- match — mv
- cricket — ms
- watch — sw
- fans — jk
- is — to
- series — ze
- very — bg
- excited — lg
- every — md

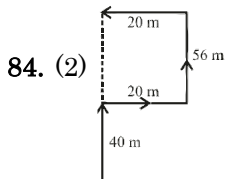
71. (2) 72. (4) 73. (3) 74. (5) 75. (1)
 (76-80)



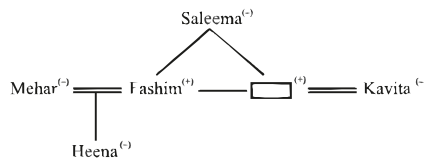
76. (2) 77. (1) 78. (4) 79. (5) 80. (1)
 81. (2)



82. (1) The alphabet which is third to the left and fifth from the right is F.
 83. (1) First letter of the word is — R
 Third letter of the word is — I
 Fourth letter of the word is — N
 Sixth letter of the word is — A
 Possible words are — Rain,
 I is third letter of the word



84. (2) Required distance = 56 + 40 = 96 m
 85. (4)



86. (1) Given :
 $L < N$ (i)
 $S > N$ (ii)
 $D > S$ (iii)
 Combining (i), (ii) and (iii), we get
 $L < N < S < D$
 (I) $D > L$ is true. So, conclusion I is true.
 (II) $S < L$ is not true. So, conclusion II is not true.

87. (2) Given :
 $M < T$ (i)
 $K < T$ (ii)
 $N < K$ (iii)
 Combining (i), (ii) and (iii), we get
 $M < T > K > N$
 (I) $N > M$ we can't compare N and M. So, conclusion I is not true.
 (II) $N < T$ is true. So, conclusion II is true.

88. (4) Given :
 $S > H$ (i)
 $K > H$ (ii)
 $M < K$ (iii)
 Combining (i), (ii) and (iii), we get
 $S > H < K > M$
 (I) $S > K$ we can't compare S and K. So, conclusion I is not true.
 (II) $H > M$ we can't compare H and M. So, conclusion II is also not true.

89. (1) Given :
 $D > M$ (i)
 $L > P$ (ii)
 $M > P$ (iii)
 Combining (i), (ii) and (iii), we get
 $D > M > P < L$
 (I) $P < D$ is true. So, conclusion I is true.
 (II) $M < P$ is not true. So, conclusion II is not true.

90. (4) Given :
 $U > B$ (i)
 $S = F > T$ (ii)
 $B < S$ (iii)
 Combining (i), (ii) and (iii), we get
 $U > B < S = F > T$
 (I) $U > T$ we can't compare U and T. So, conclusion I is not true.
 (II) $T > B$ we can't compare T and B. So, conclusion II is also not true.

(91-95)



91. (1) 92. (4) 93. (2) 94. (3) 95. (2)
 (96-100)
 96. (3) 716 928 678 483 237

Ascending order of the numbers are = 237 < 483 < 678 < 716 < 928
 Third highest number is — 678 and that is 876

97. (1) 761 982 876 843 732
 $732 < 761 < 843 < 876 < 982$
 Second lowest number is = 761 and that is 617
 98. (4) After interchanging the position =
 $77, 109, 156, 114, 102$
 Largest number is = 156 and that is 876
 99. (4) 717 929 976 484 832
 Total numbers which first digit is perfect square — 3
 100. (5) Smallest even number is = 384
 Addition of 1 = 384 + 1 = 385
 Highest odd number is = 829
 after subtraction of 1 = 828
 Second digit of highest number is = 2
 Second digit of lowest number is = 8
 Subtracted value = 8 - 2 = 6