

39. (4) $A \Rightarrow P \left(1 + \frac{r}{100}\right)^2 = 8988.80$

$B \Rightarrow P + \frac{2rp}{100} = 8960$

$C \Rightarrow P = 8000$

By solving any two, the result can be found.

40. (4) Let the length and breadth of a rectangle be x and y respectively.

$A \Rightarrow A(r) : A(c) = 6 : 11$

$B \Rightarrow A(c) = 132$

Therefore, area of rectangle

$= \frac{6}{11} \times 132 = 72 \text{ m}^2 \quad \dots(1)$

Combining statement (c) and (1)

$= x \times \frac{x}{2} = 72 \Rightarrow x^2 = 144 \Rightarrow x = \text{length} = 12$

Breadth = 6

41. (5) Unsold units of the company in year 2008

$= (25 - 17.5) = 7.5 \text{ lacs}$

Unsold unit of company in year 2011

$= (30 - 20) = 10 \text{ lacs}$

Hence required difference $= (10 - 7.5) = 2.5 \text{ lacs}$

42. (2) Required avg. $= \frac{1}{6} \times (35 + 37.5 + 25 + 40 + 32.5 + 30) \text{ lacs}$

$= \frac{1}{6} \times 200 = 33 \text{ lacs}$

43. (2) Required ratio $= 37.5 : 25 = 3 : 2$

44. (3) Required percentage $= \left[\frac{20}{27.5} \times 100\right] = 73\%$

45. (2) Required number $= (37.5 - 30) + (32.5 - 25) \text{ lacs}$
 $= (7.5 + 7.5) \text{ lacs} = 15 \text{ lacs}$

46. (3) Both of the examinations had almost the same difficulty level.

47. (4) Total no. of students in class IX =

$(28+23+17+27+14+12+8+13+6+17+9+15+64+55+46+76) = 430$

48. (4) Pass students in at least one of the two examinations for different sections are

For A: $\frac{(14+6+64)}{(28+14+6+64)} \times 100 = 75\%$

For B: $\frac{(12+17+55)}{(23+12+17+55)} \times 100 = 78.5\%$

For C: $\frac{(8+9+46)}{(17+8+9+46)} \times 100 = 78.75\%$

For D: $\frac{(13+15+76)}{(27+13+15+76)} \times 100 = 79.39\%$

49. (1) Section A has the maximum success rate in annual examination.

For A $= \frac{14+64}{28+14+6+64} \times 100 = 69.64, B = 62.61, C =$

$67.5, D = 67.9$. So answer is (1).

50. (4) Section D has the minimum failure rate in help yearly examination.

$A = \frac{28+14}{28+14+6+64} = 37.5; B = 33.7, C = 31.25, D =$

30.53 . So answer is (4).

51. (1) I. $2x^2 + 11x + 15 = 0$

$\Rightarrow 2x^2 + 6x + 5x + 15 = 0$

$\Rightarrow 2x(x+3) + 5(x+3) = 0$

$\Rightarrow (x+3)(2x+5) = 0$

$\Rightarrow x = -3 \text{ or } -\frac{5}{2}$

II. $5y^2 + 22y + 24 = 0$

$\Rightarrow 5y^2 + 10y + 12y + 24 = 0$

$\Rightarrow 5y(y+2) + 12(y+2) = 0$

$\Rightarrow (y+2)(5y+12) = 0$

$\Rightarrow y = -2 \text{ or } -\frac{12}{5}$

Clearly, $x < y$

52. (2) I. $25x^2 + 25x + 4 = 0$

$\Rightarrow 25x^2 + 20x + 5x + 4 = 0$

$\Rightarrow 5x(5x+4) + 1(5x+4) = 0$

$\Rightarrow (5x+4)(5x+1) = 0$

$\Rightarrow x = -\frac{4}{5} \text{ or } -\frac{1}{5}$

II. $5y^2 + 11y + 6 = 0$

$\Rightarrow 5y^2 + 5y + 6y + 6 = 0$

$\Rightarrow 5y(y+1) + 6(y+1) = 0$

$\Rightarrow (y+1)(5y+6) = 0$

$\Rightarrow y = -1 \text{ or } -\frac{6}{5}$

Clearly, $x > y$

53. (5) I. $2x^2 + x - 1 = 0$

$\Rightarrow 2x^2 + 2x - x - 1 = 0$

$\Rightarrow 2x(x+1) - 1(x+1) = 0$

$\Rightarrow (2x-1)(x+1) = 0$

$\Rightarrow x = \frac{1}{2} \text{ or } -1$

II. $2y^2 + y - 6 = 0$

$\Rightarrow 2y^2 + 4y - 3y - 6 = 0$

$\Rightarrow 2y(y+2) - 3(y+2) = 0$

$\Rightarrow (2y-3)(y+2) = 0$

$\Rightarrow y = \frac{3}{2} \text{ or } -2$

54. (3) I. $x^2 - 10x + 21 = 0$

$\Rightarrow 7x - 3x + 21 = 0$

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

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

$\Rightarrow x = 3 \text{ or } 7$

II. $y^2 - 16y + 63 = 0$

$\Rightarrow y^2 - 9y - 7y + 63 = 0$

$\Rightarrow y(y-9) - 7(y-9) = 0$

$\Rightarrow (y-7)(y-9) = 0$

$\Rightarrow y = 7 \text{ or } 9$

Clearly, $x \leq y$

55. (5) I. $6x^2 + 17x + 12 = 0$

$\Rightarrow 6x^2 + 9x + 8x + 12 = 0$

$\Rightarrow 3x(2x+3) + 4(2x+3) = 0$

$\Rightarrow (2x+3)(3x+4) = 0$

$\Rightarrow x = -\frac{3}{2} \text{ or } -\frac{4}{3}$

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11. $6y^2 + 21y + 9 = 0$

$\Rightarrow 2y^2 + 7y + 3 = 0$

$\Rightarrow 2y^2 + 6y + y + 3 = 0$

$\Rightarrow 2y(y + 3) + 1(y + 3) = 0$

$\Rightarrow (2y + 1)(y + 3) = 0$

$\Rightarrow y = -\frac{1}{2}$ or -3

56. (2) Area of the circle = $\frac{22}{7} \times (14)^2 = 616 \text{ cm}^2$

Area of the rectangle = $1166 - 616 = 550 \text{ cm}^2$

Breadth of the rectangle = $\frac{550}{25} = 22 \text{ cm}$

So, required sum = $2 \times \frac{22}{7} \times 14 + 2(25 + 22) = 182 \text{ cm}$

57. (1) Let the length of train A and train B be x and 2x, then

Speed of train A = $\frac{x}{25}$

Speed of train B = $\frac{2x}{75}$

Required ratio = $\frac{x}{25} : \frac{2x}{75} = 3 : 2$

58. (2) Let the number of days he was absent be x days.

$180(40 - x) - 20x = 5200$

$7200 - 180x - 20x = 5200$

$7200 - 200x = 5200$

$x = \frac{2000}{20} = 10 \text{ days}$

59. (5)

Efficiency	Days	
4	A	16
5	B	64/5
2	C	32

LCM 64

(A + B + C) work together for 4 days
 $= 4 \times (4 + 5 + 2) = 44$

C work alone, last 3 days = $3 \times 2 = 6$

Remaining work done by (B + C)

$= (64 - 50) / 7 = 14/7 = 2 \text{ days}$

Total days = $4 + 3 + 2 = 9 \text{ days}$.

60. (3) Let A complete the work in x days and B complete the work in y days.

So, By 1st case,

$\frac{2}{x} + \frac{9}{y} = 1$... (1)

And By 2nd case,

$\frac{3}{x} + \frac{6}{y} = 1$... (2)

From Eq. (1) and (2), $y = 15 \text{ days}$.

61. (1) $? = 6575 \div 18 \times 42 \div 7$

$= \frac{6576}{18} \times \frac{42}{7}$

$= 365 \times 6 = 2190$

62. (2) $? = 12 \times 15 - 9 \times 7$

$= 180 - 63 = 117$

63. (3) $? = 13 \times 22 \times 18 = 5148$

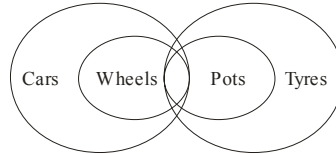
64. (4) $? = 17 + 27 + 37 - 13 - 9$

$= 81 - 22 = 59$

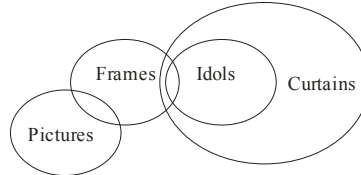
65. (1) $? = \frac{18 \times 600}{100} + \frac{28 \times 450}{100}$

$= 108 + 126 = 234$

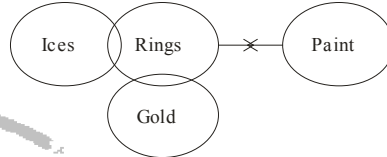
66. (3)



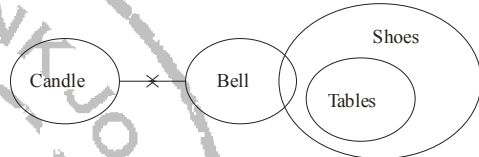
67. (2)



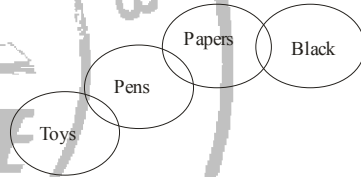
68. (4)



69. (4)



70. (3)



(71 - 75):

After careful analysis of the given input and various steps of rearrangement it is evident that in each step two elements (one word and one number) are rearranged. In the first step the word which contains maximum number of letters is placed at the extreme left position while the lowest number is placed at the extreme right position after reversing its digits. In the second step the word which contains the second highest number of letters is placed at the extreme left position and the second lowest number is placed at the extreme right position after reversing its digits. The same procedure is continued till all the words and numbers get rearranged.

Input: micro 63 make 19 morales 72 25 my map 48 margin 56

Step I: morales micro 63 make 72 25 my map 48 margin 56 91

Step II: margin morales micro 63 make 72 my map 48 56 91 52

Step III: micro margin morales 63 make 72 my map 56 91 52 84

Step IV: make micro margin morales 63 72 my map 91 52 84 65

Step V: map make micro margin morales 72 my 91 52 84 65 36

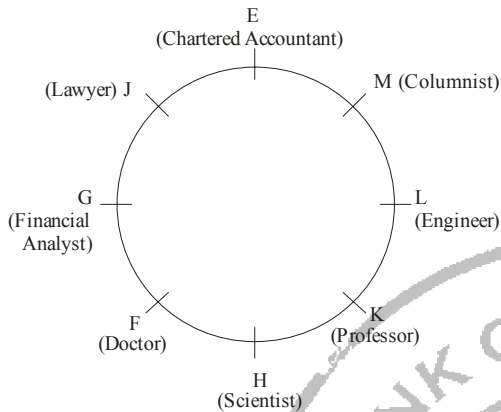
Step VI: my map make micro margin morales 91 52 84 65 36 27

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- 71. (3) The elements 'morales 63 72 my map 91' are found in the same order in the Fourth step.
- 72. (1) The element '72' is at the seventh position from the right end in the Fifth Step.
- 73. (2) 10th from the right end of the Third Step \Rightarrow Morales 5th to the right of 'morales' \Rightarrow map
- 74. (4) Option (4) is the Third Step.
- 75. (5) The elements '63 make' are exactly between 'micro' and '72' in the Second Step.

(76 – 80)



- 76. (2) G
- 77. (4) K
- 78. (3) J - Engineer
- 79. (2) Second to the right
- 80. (1) The Lawyer is second to the left of the Doctor

(81-85):

Day	Dance Style
Monday	Western Dance style
Tuesday	Lavani Dance style
Wednesday	Bharatnatyam Dance style
Thursday	Bhangra Dance style
Friday	Kuchipudi Dance style
Saturday	Disco Dance style
Sunday	Freestyle Dance style

- 81. (2) Lavani Dance style was performed on Tuesday.
- 82. (4) Freestyle dance style was performed on Sunday.
- 83. (1) The combination Monday-Western dance style is correct.
- 84. (3) Four dance styles-Bharatnatyam, Bhangra, Kuchipudi and Disco-were performed between Lavani and Freestyle dance styles.
- 85. (5) Bhangra dance style was performed immediately after Bharatnatyam dance style.
- 86. (4) $P \leq A < R = K$
 $A > S$
 $U \leq K$
 $S < A < R = K \geq U$
 $P \leq A > S$
 Conclusions
 I. $A > U$: Not True
 II. $P < S$: Not True

- 87. (2) $B = C < D \leq N > O \geq P$
 $Q \leq D$
 $Y > B$
 $Q \leq D \leq N$
 $Y > B = C < D$
 Conclusions
 I. $Y > D$: Not True
 II. $N \geq Q$: True

- 88. (3) $B > L \geq A = M < E$
 $L \leq O = S$
 $S = O \geq L \geq A = M$
 Conclusions
 I. $S > M$: Not True
 II. $M = S$: Not True

S is either greater than or equal to M. Therefore, either Conclusion I or Conclusion II is true.

- 89. (5) $G \geq R = E \leq A \leq T$
 $E \leq G$: True
 $T \geq R$: True

- 90. (1) $P < N > H \geq B = R \leq K$
 $N > R$: True
 $P < H$: Not True
 $R > P$: Not True
 $B = K$: Not True
 $H > K$: Not True

- 91. (4) If the data given in both the statements I and II together are not sufficient to answer the question.
- 92. (5) If the data in both the statements I and II together are necessary to answer the question.
- 93. (4) If the data in both the statements I and II together are not sufficient to answer the question.
- 94. (3) If the data given in either statement I or II are sufficient to answer the question.
- 95. (3) If the data either in statement I alone or in statement II alone are sufficient to answer the question.

96-100. Use different symbols to different words as :

you are good	\longrightarrow	ni za ri	}	\Rightarrow good \rightarrow za
you are with me	\longrightarrow	ri si ni ti		\Rightarrow me \rightarrow ti
meet good person	\longrightarrow	ap li za		\Rightarrow meet \rightarrow ap
you are me	\longrightarrow	ri ni ti		
meet me now	\longrightarrow	ku ti ap		

Now from statement (iii), person \rightarrow Li
 Statement (v), now \rightarrow ku
 Also from (i), (ii) and (iii), you are \rightarrow ni ri
 From (ii), with \rightarrow si

- 96. (4)
- 97. (5)
- 98. (1)
- 99. (1)
- 100. (3)