

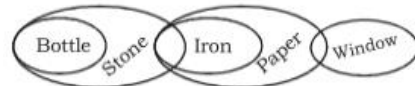
- II. $y^2 - 7y + 12 = 0$
 $\Rightarrow y^2 - 4y - 3y + 12 = 0$
 $\Rightarrow y(y-4) - 3(y-4) = 0 \Rightarrow y = 4, 3$
 Clearly, $x < y$
- 39.(5) I. $(441)^{\frac{1}{2}x^2} - 111 = (15)^2$
 $\Rightarrow 21x^2 = 225 + 111 \Rightarrow x^2 = 16 \Rightarrow x = +4, -4$
 II. $\sqrt{121y^2} + 6^3 = 260$
 $\Rightarrow 11y^2 = 260 - 216$
 $\Rightarrow y^2 = 44 \Rightarrow y^2 = 4 \Rightarrow y = +2, -2$
- 40.(1) I. $5x + 2y = 96$... (i)
 $3(7x + 5y) = 489$... (ii)
 Equation (i) $\times 15$ - equation (ii) $\times 3$,
 we get,
 $75x + 30y - 42x - 30x = 1440 - 978$
 $\Rightarrow 33x = 462 \Rightarrow x = 14$
 Put the value of x is equation (i),
 $5 \times 14 + 2y = 96$
 $\Rightarrow 2y = 96 - 70 \Rightarrow 2y = 26 \Rightarrow y = 13$
 Clearly, $x > y$
41. (4) Required number of cycles = $550 \times \frac{80}{100} \times \frac{60}{100} = 264$
42. (1) Required number of cycles =
 $(850 + 450 + 720 + 650 + 420) \times \frac{70}{100} = 2,163$
43. (3) Total number of cycles sold by
 shopkeeper R = 3770
 shopkeeper S = 3090
 \therefore Required ratio = $3770 : 3090 = 377 : 309$
44. (4) Required % = $\left(\frac{1000 - 650}{650} \times 100\right)\% = 53.84\% \approx 54\%$
45. (3) Required number of cycles
 $= (800 + 650 + 850 + 420 + 850) \times \frac{90}{100} = 3,213$
46. (1) Rate = $\frac{SI \times 100}{\text{Principal} \times \text{Time}} = \frac{10230 \times 100}{27500 \times 3} = 12.4\%$
 \therefore C.I = $P \left[\left(1 + \frac{R}{100}\right)^T - 1 \right] = 27500 \left[\left(1 + \frac{12.4}{100}\right)^3 - 1 \right]$
 $= 27500 (1.42 - 1) = 27500 \times 0.42 = \text{Rs. } 11,550$
- 47.(5) According to question,
 Selling Price = $\frac{6500 \times 95}{100} = \text{Rs. } 6175$
 \therefore Cost Price = $\frac{6175}{115} \times 100 = \text{Rs. } 5269.56 = \text{Rs. } 5,369$
48. (5) Side of the square = $\sqrt{1024} = 32$ cm.
 \therefore Length of rectangle = $2 \times 32 = 64$ cm.
 Breadth of rectangle = $32 - 12 = 20$ cm.
 \therefore Required ratio = $64 : 20 = 16 : 5$
49. (1) Required probability = $\frac{{}^5C_2}{{}^7C_2} = \frac{10}{21}$
50. (3) Four years ago,
 Shyam : Ram = $3 : 4$
 After four years,
 $\frac{3x+8}{4x+8} = \frac{5}{6}$
 $\Rightarrow 20x + 40 = 18x + 48$
 $\Rightarrow 2x = 48 - 40 = 8 \Rightarrow x = \frac{8}{2} = 4$
 \therefore Shyam's present age = $3x + 4 = 3 \times 4 + 4 = 16$ years

51. (1) Required difference
 $= [(46 + 64 + 72) - (62 + 48 + 36)] \times 100 = 5,100$
52. (4) Required difference
 $= \left[70 \times \frac{120}{100} - 30 \times \frac{110}{100} \right] \times 100 = 5,100$
- 53.(3) Number of students enrolled in college B in October
 $= \frac{72+76}{2} \times 100 = 7,400$
 Required number of students = $\frac{7400}{2} = 3,700$
54. (5) Total number of students in March 2017
 $= (84 + 38) \times \frac{140}{100} \times 100 = 17,080$
 Number of students in college A in March 2017
 $= 84 \times \frac{125}{100} \times 100 = 10,500$
 Required number of students = $17080 - 10500 = 6,580$
 Required ratio = $(62 + 14) : (30 + 72) = 76 : 102 = 38 : 51$
55. (4) The number series is as follows:
 $\frac{240}{+5} \quad \frac{48}{+4} \quad \frac{12}{+3} \quad \frac{4}{+2} \quad \frac{2}{+1}$
- 56.(2) The number series is as follows:
 $\frac{7}{-3} \quad \frac{8}{-3} \quad \frac{4}{-7} \quad \frac{13}{-7} \quad \frac{-3}{-11} \quad \frac{22}{-11} \quad \frac{-14}{-11}$
- 57.(4) The number series is as follows:
 $\frac{7}{-3} \quad \frac{8}{-3} \quad \frac{4}{-7} \quad \frac{13}{-7} \quad \frac{-3}{-11} \quad \frac{22}{-11} \quad \frac{-14}{-11}$
58. (5) The number series is as follows:
 $640 - 2^8 = 384$
 $384 - 2^7 = 256$
 $256 - 2^6 = 192$
 $192 - 2^5 = 160$
 $160 - 2^4 = 144$
- 59.(4) The number series is as follows:
 $11 + (16 \times 1) = 27$
 $27 + (16 \times 2) = 59$
 $59 + (16 \times 3) = 107$
 $107 + (16 \times 4) = 171$
 $171 + (16 \times 5) = 251$
60. (5) The number series is as follows:
 $3 + 1^2 = 4$
 $4 + 3^2 = 13$
 $13 + 5^2 = 38$
 $38 + 7^2 = 87$
 $87 + 9^2 = 168$
61. (1) $368 \div 23 \times 9 - 104 = ? - 43$
 $\Rightarrow \frac{368}{23} \times 9 - 104 = ? - 43 \Rightarrow ? = 40 + 43 = 83$
- 62.(4) $11.71 - 0.86 + 1.78 - 9.20 = ? \Rightarrow ? = 3.43$
63. (5) $5^2 - 4^2 - 7^2 - 6^2 = \sqrt{?}$
 $\Rightarrow 25 - 16 - 49 - 36 = \sqrt{?}$
 $\Rightarrow \sqrt{?} = -76 \Rightarrow ? = 5776$
64. (1) $8^{(2.4)} \times 2^{(3.7)} \div 16^{(1.3)} = 2^{(?)}$
 $\Rightarrow (2)^{3 \times 2.4} \times (2)^{3.7} \div (2)^{4 \times 1.3} = (2)^{?}$
 $\Rightarrow 2^{7.2} \times 2^{3.7} \div 2^{5.2} = 2^?$
 $\Rightarrow ? = 7.2 + 3.7 - 5.2 = 5.7$
65. (2) $84 \times 9 \div 12 - 36 + 101 = ?$
 $\Rightarrow ? = \frac{84 \times 9}{12} - 36 + 101 = 63 - 36 + 101 = 128$

Grand Test – SCP-180550

66. (2) $F \geq G = H > J \geq K$
 I. $F \geq K \rightarrow$ False II. $K < H \rightarrow$ True
 Only conclusion II is true
67. (4) $P \leq Q = R \geq S \leq T$
 I. $T \geq Q \rightarrow$ False II. $R > P \rightarrow$ False
 Neither conclusion I nor II is true
68. (1) $D \leq A \leq B < C \leq F$
 I. $D < C \rightarrow$ True II. $F \geq D \rightarrow$ False
 Only conclusion I is true
69. (4) $U > A = I \leq O < E$
 I. $I \leq E \rightarrow$ False II. $O > U \rightarrow$ False
 Neither conclusion I nor II is true
70. (1) $K > L = M \geq C$
 $K > L = M > P$
 I. $K > P \rightarrow$ True II. $K < C \rightarrow$ False
 Only conclusion I is true

86. (2)



- I. False II. True
 II. True IV. False
 Only II and III follow

87. (1)



- I. False II. False
 III. False IV. False
 None follows

88. (4)



- I. True II. True
 III. True IV. True
 All follow

71-75.



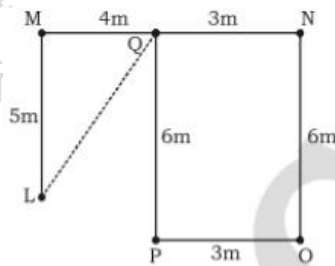
71. (1)
 73. (4)
 76-80.

72. (1)
 74. (4)

75. (1)

89-90.

Floor	Banker	Bank
9	R	Union Bank
8	M	BOB
7	C	Indian Bank
6	A	BOM
5	P	Axis Bank
4	D	ICICI
3	V	HDFC
2	L	Canara Bank
1	G	SBI

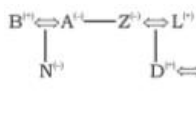


89. (3) $QL = \sqrt{5^2 + 4^2} = \sqrt{25 + 16} = \sqrt{41}m$
 90. (4)
 91-95.

76. (4)
 78. (3)
 81-83.

77. (5)
 79. (4)

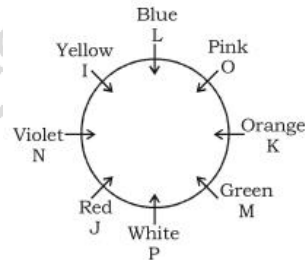
80. (1)



81. (1)
 84. (5)

82. (4)

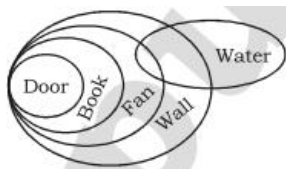
83. (1)



91. (5)
 93. (2)
 96-100.

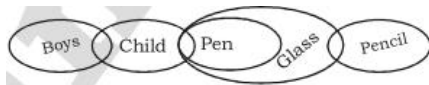
92. (2)
 94. (5)

95. (4)



- I. True II. True
 III. True IV. True
 All follow

85. (4)



- I. False II. True
 III. True IV. False
 Only II and III follow

Bowl Number	Colour
6	White
2	Black
4	Pink
5	Red
3	Yellow
7	Blue
1	Grey

96. (3)
 98. (3)

97. (5)
 99. (1)

100. (5)