

IBPS PO PRELIMINARY GRAND TEST :
IPP-170634 - HINTS AND SOLUTIONS

ANSWER KEY

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

- (2) Refer to the first two sentences of the second paragraph.
- (2) Refer to the first half of the second paragraph.
- (5) Refer to the fourth sentences of the second paragraph.
- (2) the answer can be easily inferred.
- (5) Refer to the last sentence of the passage.
- (2) (B) is clearly not true in the context of the passage.
- (3) Refer to the last two sentences of the second paragraph.
- (3) Refer to the second last and third last sentences of the last paragraph.
- (4) Only (B) is correct.
- (1) All three (A), (B) and (C) are true in the context of the passage.
- 21-25. The proper sequence of the sentences to make a meaningful paragraph will be EFCABD.

31. (4) Investment of Abhinav = ₹ 6000
Investment of Sunil = $6000 \times \frac{100-30}{100} = ₹ 4200$

Investment of Rita = $4200 \times \frac{100+25}{100} = ₹ 5250$

Investment by all = 6000 + 4200 + 5250 = ₹ 15450

∴ Ratio = $\frac{5250 \div 150}{15450 \div 150} = \frac{35}{103} = 35:103$

32. (5) Principal = $\frac{1000 \times 100}{5 \times 4} = ₹ 5000$

Compound interest

= $10000 \left[\left(1 + \frac{5}{100} \right)^2 - 1 \right] = 10000 \times \frac{41}{100} = ₹ 4100$

33. (1) Principal of square = $2 \times 2(8+7) = 60$ cm

⇒ $4a = 60$ cm

∴ $a = 15$ cm

Diameter of circle = 15 cm

∴ Radius = 7.5 cm

Circumference of semi circle

= $\pi r + 2r = \frac{2}{7} \times 7.5 + 2 \times 7.5 = 38.57$ cm

34. (5) Present age of Radha = x yr
According to question, $x + 3 = 2(x - 12)$

⇒ $x + 3 = 2x - 24 \Rightarrow x = 27$ yr

Present age of Raj : Present age of Radha = 4 : 9

∴ Present age of Raj = $\frac{27}{9} \times 4 = 12$ yr

After 5 yr age of Raj = $12 + 5 = 17$ yr

35. (3) Total speed of car, bus and train = $72 \times 3 = 216$ km

Speed of car and train = $\frac{5+9}{5+9+4} \times 216 = 168$ km

∴ Average = $\frac{168}{2} = 84$ km

36. (3) Average speed of a tractor = $\frac{575}{223} = 25$ km

The speed of a bus in an hour = $25 \times 2 = 50$ km

The speed of a car in an hour = $50 \times \frac{9}{5} = 90$ km

So, the distance covered by car in 4 h is

= $90 \times 4 = 360$ km

37. (4) $2000 = \frac{P \times 4 \times 5}{100} \Rightarrow P = ₹ 10000$

Now, CI = $10000 \left[\left(1 + \frac{4}{100} \right)^2 - 1 \right]$

= $10000 \times 0.0816 = ₹ 816$



38. (4) Cost price = ₹ 54000

$$\text{Selling price} = 54000 \times \frac{(100-8)}{100} = ₹ 49680$$

Now, the cost price of another bike = ₹ 49680
Selling price of another bike

$$= 49680 \times \frac{110}{100} = ₹ 54648$$

Overall profit = 54648 - 54000 = ₹ 648

39. (2) $2m = 3W$

$$\therefore 1M = \frac{3}{2}W$$

$$\therefore 1M + 1W = \frac{3}{2}W + 1W = \frac{5}{2}W$$

$$\text{Number of days} = \frac{3 \times 4}{\frac{5}{2}} = \frac{24}{5} \text{ days}$$

40. (4) Suppose adjacent angle of parallelogram be $2x$ and $3x$.

Then, according to theorem, $2x^\circ + 3x^\circ = 180^\circ$

$$\Rightarrow 5x^\circ = 180^\circ \Rightarrow x = \frac{180^\circ}{5} = 36^\circ$$

Smaller angle of quadrilateral = 36°

\therefore Highest angle = $4 \times 36^\circ = 144^\circ$

Hence, required sum of angles = $144^\circ + 36^\circ = 180^\circ$.

41. (1) No. of units manufactured by Company F in the year 2008 = 16.7

Total no. of units manufactured by Company F in the year 2007 = 16.1

$$\% \text{ increase} = \frac{16.7 - 16.1}{16.1} \times 100 = \frac{0.6}{16.1} \times 100 = 3.726 \cong 3.73$$

42. (2) Average no. of unit manufactured by Company D in 2004 and 2007

$$= \frac{(16.2 + 15.3) \times 1000}{2} = \frac{31500}{2} = 15750$$

43. (3) A and B together in 2009 : C and D together in 2009

$$\Rightarrow (16.2 + 16.7) \times 1000 : (14.9 + 16.3) \times 1000$$

$$\Rightarrow 329 : 312.$$

44. (4) % approx. = $\frac{14100}{92100} \times 100 = 15.3 \cong 15\%$

45. Required percentage = $\frac{85000 \times 100}{390000} = 21.79\%$

$$46. \text{ Average} = \frac{20 + 40 + 45 + 50 + 70 + 70}{6} \text{ thousand} = \frac{300}{6} \text{ thousand} = 50000$$

47. Percentage increase

$$= \frac{70 - 65}{65} \times 100 = \frac{5}{65} \times 100 = 7.69\%$$

48. In year 2004,

$$\text{Percentage increase in college A} = \frac{40 - 20}{20} \times 100 = 100\%$$

$$\text{Percentage increase in college B} = \frac{60 - 30}{30} \times 100 = 100\%$$

49-53. Total player = 600

Male player: Female player = 11:4

Sum of ratio = 11 + 4 = 15

$$\text{Total male player} = \frac{11}{15} \times 600 = 440$$

$$\text{Total female player} = \frac{4}{15} \times 600 = 160$$

Sports	Male Player	Female Player
Athletics	165	48
Table Tennis	165	16
Kho-Kho	99	24
Lawn Tennis	11	72

49. Required ratio = 72 : 16 = 9 : 2

50. Required difference = 99 - 72 = 27

51. Required ratio = 11 : 16

52. Required number = 48 + 24 = 72

53. Required number = 165 + 165 + 48 + 16 = 394

$$54. 36 \times 15 - 56 \times 784 \div 112 = ?$$

$$\Rightarrow 540 - 56 \times 7 = ? \Rightarrow 540 - 392 = ?$$

$$\Rightarrow 148 = ?$$

$$55. 28.314 - 31.427 + 113.928 = ? + 29.114$$

$$\Rightarrow 28.314 - 31.427 + 113.928 - 29.114 = ?$$

$$\Rightarrow 142.242 - 60.541 = ? \Rightarrow 81.701 = ?$$

$$56. 540 \times \frac{75}{100} \times \frac{7}{5} \times \frac{2}{3} = ? \Rightarrow 378 = ?$$

$$57. 420 \times \frac{36}{100} - 350 \times \frac{56}{100} = ? - 94$$

$$\Rightarrow 151.2 - 196 + 94 = ? \Rightarrow 49.2 = ?$$

$$58. (5) 644 - 17 \times 1 = 627$$

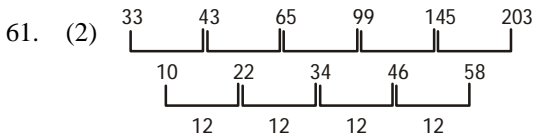
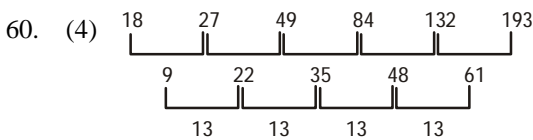
$$627 - 17 \times 2 = 593$$

$$593 - 17 \times 4 = 525$$

$$525 - 17 \times 8 = 389$$

$$389 - 17 \times 16 = 117.$$

$$59. (4) \begin{array}{cccccccc} 7 & 11 & 23 & 51 & 103 & 187 & & \\ | & | & | & | & | & | & & \\ \hline & 4 & 12 & 28 & 52 & 84 & & \\ | & | & | & | & | & | & & \\ \hline & 8 & 16 & 24 & 32 & & & \end{array}$$



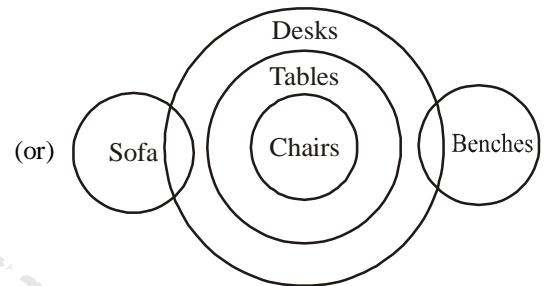
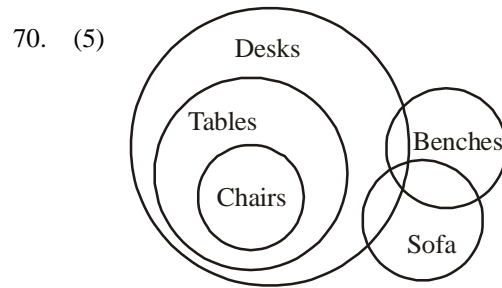
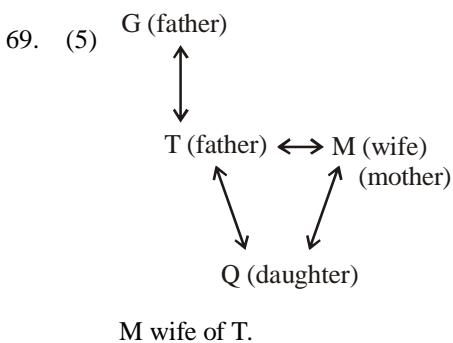
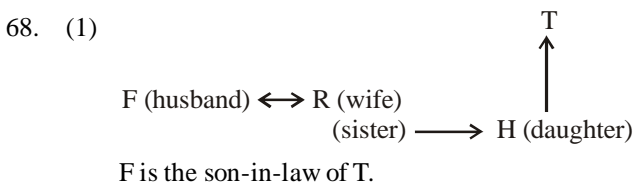
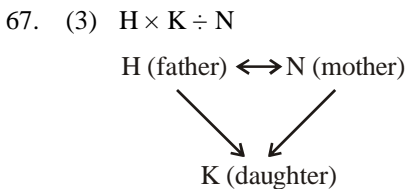
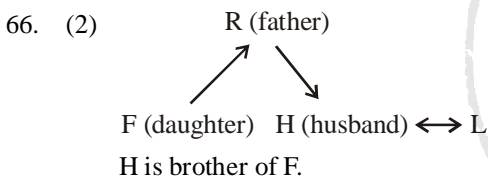
62. (3) $3942 \times \frac{1}{64} \times \frac{1}{3} = 20.5 \approx 21$

63. (3) $16.978 + 27.007 + 36.984 - 12.969 - 9.003 = 80.969 - 21.972 = 58.9 \approx 60.$

64. (2) $\frac{18}{100} \times 610 + \frac{28}{100} \times 450 = 109.8 + 126 = 235.8 \approx 233$

65. (4) $\frac{23}{10} \times \frac{34}{7} \times \frac{15}{2} = 83.7 \approx 84$

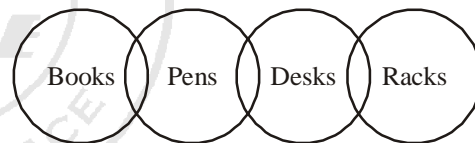
- 66-69. $A \times B \Rightarrow A$ (father) $\rightarrow B$
 $A \div B \Rightarrow A$ (daughter) $\rightarrow B$
 $A + B \Rightarrow A$ (Sister) $\rightarrow B$
 $A - B \Rightarrow A$ (Husband) $\rightarrow B$



- Conclusions : I. ✓ II. ✗
 III. ✓ IV. ✗

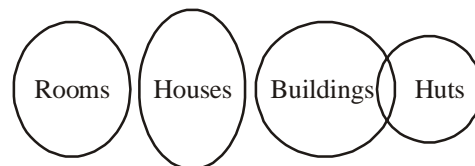
I and III follows.

71. According to the statements, venn diagram is as follow



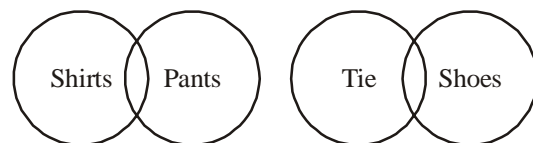
- Conclusions : I. ✗ II. ✓ III. ✗
 Only II follows.

72. According to the statements, venn diagram is as follow



- Conclusions : I. ✗ II. ✗ III. ✓
 Only III follows.

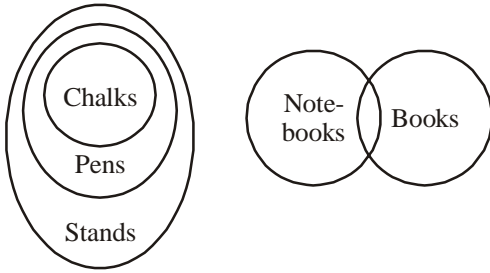
73. According to the statements, venn diagram is as follow



- Conclusions : I. ✗ II. ✗ III. ✗
 (or)
 IV. ✗

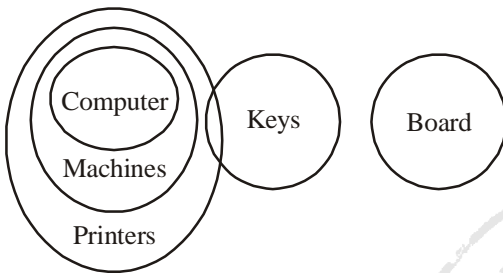
Either I or IV follows.

74. According to the statements diagram is as follow



Conclusions : I. ✓ II. ✓ III. ✗ IV. ✗
So, I and II follow.

75. According to the statements, diagram is as follow

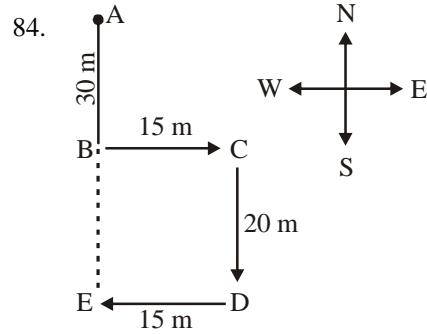


Conclusions : I. ✓ II. ✓ III. ✗ IV. ✗
So, I and II follow.

76-78.

Floor	Resident
7	G
6	F
5	E
4	A
3	C
2	D
1	B

76. (4) G is at topmost floor.
 77. (3) C is immediately above D's floor.
 78. (1) F – 6th floor E – 5th floor
 B – 1st floor G – 7th floor
 C – 3rd floor
 6th floor is an even digit number.
 79-80. she likes apples — pic sip dip
 parrot likes apples lots — dip pic tif nif
 she likes parrots — tif sip dip
 79. The code of partrot - tif
 81. Except ROL, in other groups third person is sitting in between first and second person.
 82. Except LP, first person is sitting to the immediate left of second person while L is immediate right of P.
 83. Number 5 9 1 6 4 8 2 3
 In decreasing order 9 8 6 5 4 3 2 1



84. Required distance = AE = (AB + BE) = 30 + 20 = 50 m

85. PQRST ABCDE
 PQRS ABCDE
 PQRS ABCD
 PQR

86. how can you go → ja da ka pa
can you come here → na ka sa ja
come and go → ra pa sa

87. C $\xrightarrow{+6}$ I $\xrightarrow{+6}$ O $\xrightarrow{+6}$ U
 E $\xrightarrow{+6}$ K $\xrightarrow{+6}$ Q $\xrightarrow{+6}$ W
 A $\xrightarrow{+6}$ G $\xrightarrow{+6}$ M $\xrightarrow{+6}$ S

- 88-90. 929 = how art thou ... (i)
 958 = thou art good ... (ii)
 15873 = thy good and thou bad ... (iii)
 From Eqs. (i) and (ii), 89 = art thou
 So, 2 = how and 5 = good

Now, 1 5 8 7 3 = thy good and thou bad
 ∴ thy = 1 or 7 or 3

88. (5)
 89. (5)
 90. (3)
 91-95. A @ B → A < B
 A # B → A ≥ B
 A \$ B → A = B
 A % B → A > B
 A © B → A ≤ B
 91. (1) F ≥ H > K = R ≤ M
 I. F > R (True)
 II. F ≥ M (False)
 92. (5) L < D ≤ P ≥ V > G
 I. P > L (True)
 II. G < P (True)
 93. (4) E > W ≤ Q = T < H
 I. H ≥ W (False)
 II. H ≥ E (False)
 94. (4) J ≤ T < H > I = L
 I. L ≤ H (False)
 II. J ≤ I (False)
 95. (4) R < Q > P ≤ V ≥ M
 I. R < P (True)
 II. R ≥ P (False)