

IBPS PO PRELIMINARY GRAND TEST :
IPP-170626 - HINTS AND SOLUTIONS

ANSWER KEY

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

11. to see everyone alive' completes the sentence meaningfully and grammatically.
12. 'there was no playground for the children' produces a meaningful and grammatically correct sentence.
13. 'His performances are generally boring' completes the sentence meaningfully and grammatically.
14. None of (1), (2), (3), (4) completes the sentence in a logical way.
15. 'The milk is pasteurized' produces a logically and grammatically correct sentence.
16. So, deteriorate is most opposite in meaning to it.
17. Preposition 'for' should be used in place of 'to'.
18. Remove 'of the'. Its use is superfluous.
19. Use 'between' in place of 'among'. Among is used for 'more than two' and between is used for 'two'.
20. Use 'has' in place of 'is'. The sentence is in Perfect Tense.
26. 'perception' fits the blank appropriately.
27. 'quality' fits the blank appropriately.

28. 'ranked' fits the blank appropriately.
29. 'unduly' fits the blank appropriately.
30. 'belief' fits the blank appropriately.
31. Let the income be ₹ x crore

$$\Rightarrow 20 = \frac{x - 200}{200} \times 100$$

$$\Rightarrow 40 = x - 200 \Rightarrow x = ₹ 240 \text{ crore}$$

32. The income of Company A in 2002 = ₹ 600 crore
Per cent profit = 60
Let the Expenditure be ₹ x crore.

$$\therefore 60 = \left(\frac{600 - x}{x} \right) \times 100 \Rightarrow x = \left(\frac{600 - x}{60} \right) \times 100$$

$$\Rightarrow 3x = 3000 - 5x \Rightarrow 8x = 3000 \Rightarrow x = \frac{3000}{8} = ₹ 375 \text{ crore}$$

33. It can't be determined as Income and Expenditure of respective year is not known.
34. Graduate male population in State A

$$= \left(24 \times \frac{16}{100} \times \frac{7}{12} \right) \text{ lakh} = 2.24 \text{ lakh}$$

Male population of Std. XII

$$= \left(32 \times \frac{15}{100} \times \frac{7}{16} \right) \text{ lakh} = 2.1 \text{ lakh}$$

Required difference = (2.24 - 2.1) lakh = 14000

35. Graduate female population of State C

$$= 24 \times \frac{15}{100} \times \frac{4}{9} = 1.6 \text{ lakh}$$

Std. XII female population of State C

$$= 32 \times \frac{18}{100} \times \frac{5}{9} = 3.2 \text{ lakh}$$

$$\text{Required percentage} = \frac{1.6}{3.2} \times 100 = 50\%$$

36. Graduate male population of State E

$$= 24 \times \frac{20}{100} \times \frac{9}{16} = 2.7 \text{ lakh}$$

Std. XII pass female population of State E

$$= 32 \times \frac{19}{100} \times \frac{10}{19} = 3.2 \text{ lakh}$$

Required ratio = 27 : 32

37. Graduate male population of state A

$$= \frac{7}{12} \times \frac{24 \times 16}{100} = 2.24 \text{ lakh}$$

Std. XII pass male population of State A

$$= 32 \times \frac{15}{100} \times \frac{7}{16} = 2.1 \text{ lakh}$$

$$\text{Sum} = (2.24 + 2.1) \text{ lacs} = 4.34 \text{ lakh}$$

Graduate Female population of State A

$$= \frac{5}{12} \times \frac{24 \times 16}{100} = 1.6 \text{ lakh}$$

Std. XII pass female population of state A

$$= 32 \times \frac{15}{100} \times \frac{9}{16} = 2.7 \text{ lakh}$$

Sum = (1.6 + 2.7) lakh = 4.3 lakh

Required ratio = 4.34 : 4.30 = 217 : 215

38-42. Area of customer transaction room = $23 \times 29 = 667 \text{ ft.}$

Cost for wooden flooring = ₹ 113390

⇒ Area of branch manager room = $13 \times 17 = 221 \text{ ft.}$

Cost for wooden flooring = $221 \times 170 = ₹ 37570.$

⇒ Area of pantry = $14 \times 13 = 182 \text{ ft.}$

Cost for marble pantry = ₹ 34580

⇒ Area of record keeping and service room

$$= 21 \times 13 = 273 \text{ ft.}$$

Cost for record keeping service room marble

$$= 273 \times 190 = ₹ 51870$$

⇒ Area of locker area = $29 \times 21 = 609 \text{ ft.}$

Cost for locker area marble = ₹ 115710.

Total area = 2000 sq. ft.

38. (3) $150960 : 202160 = 1887 : 2527.$

39. (5) Remaining area = $2000 - 1952 = 48 \text{ sq. ft.}$

Cost for carpet = $48 \times 110 = ₹ 5280.$

42. (1) Cost for customer transaction area = ₹ 113390

Cost for locker area = ₹ 115710

Total cost = ₹ 113390 + ₹ 115710 = ₹ 229100.

43. (3) $\frac{80 - 55}{55} \times 100 = 45\%$

44. (2) $8500 : 9000 = 17 : 18.$

45. (1) $(6000 + 6500 + 8000 + 9000 + 7500 + 8500) - (8500 + 6000) = 30000.$

46. (5) $\frac{8500 + 8000 + 9500 + 6500 + 4000 + 9000}{8000 + 5500 + 9500 + 8000}$

$$= \frac{45500}{31000} = 146.77 \approx 147$$

47. (1) C.P. = 78350

$$\text{M.P.} = \frac{130}{100} \times 78350 = 101855$$

$$\text{S.P.} = \frac{80}{100} \times 101855 = 81484.$$

$$\begin{aligned} \% \text{ Profit} &= \frac{\text{SP} - \text{CP}}{\text{CP}} \times 100 \\ &= \frac{81484 - 78350}{78350} \times 100 = 4\%. \end{aligned}$$

48. (2) $\frac{9 - x}{15 - x} = \frac{15 - x}{27 - x}$

$$\Rightarrow 243 - 9x - 27x + x^2 = 225 - 15x - 15x + x^2$$

$$\Rightarrow 36x - 30x = 18 \Rightarrow 6x = 18 \Rightarrow x = 3.$$

49. (2) Difference = $\frac{\text{PR}^2}{100 \times 100} = \frac{7300 \times 6 \times 6}{100 \times 100} = 26.28$

50. (5) $x + x + 1 + x + 2 = 2262$

$$\Rightarrow 3x = 2262 - 3 = 2259$$

$$\Rightarrow x = 753$$

$$\text{Highest number} = 753 + 2 = 756.$$

$$\Rightarrow \frac{41}{100} \times 755 = \frac{30955}{100} = 309.55$$

51. (4) $5! \times {}^6P_2 = 5! \times \frac{6!}{4!} = 5! \times \frac{6 \times 5 \times 4!}{4!} = 3600$

52. $\frac{?}{49} = \frac{16}{?}$

$$\Rightarrow ?^2 = 49 \times 16 \Rightarrow ? = \sqrt{49 \times 16}$$

$$\Rightarrow ? = \sqrt{7 \times 7 \times 4 \times 4} = 7 \times 4$$

$$\therefore ? = 28$$

53. $? = 630 \times \frac{2}{3} \times \frac{50}{100} \times \frac{25}{100}$

$$\Rightarrow ? = \frac{210 \times 50 \times 25 \times 2}{100 \times 100} = \frac{210}{4}$$

$$\therefore ? = 52.5$$

54. Let fraction be $\frac{x}{y}$

∴ According to the question,

$$\frac{x \times 120\%}{y \times 125\%} = \frac{3}{5} \Rightarrow \frac{x}{y} = \frac{3}{5} \times \frac{125}{120} = \frac{5}{8}$$

55. Let two digits number be $10x + y.$

∴ According to the question,

$$10x + y - (10y + x) = 27$$

$$\Rightarrow 9x - 9y = 27$$

$$\therefore x - y = 3$$

Again, $x = 2K$ and $y = K$

$$\Rightarrow 2K - K = 3$$

$$\Rightarrow K = 3$$

Then, $x = 2 \times 3 = 6, y = 3$

and Number = $10 \times 6 + 3 = 63.$

56. Let the adjacent angles of the parallelogram be $4x$ and $5x.$

$$\therefore 4x + 5x = 180 \text{ or } 9x = 180$$

$$\therefore x = 20$$

$$\text{One angle of quadrilateral} = 3 \times 80^\circ = 240^\circ$$

Again, sum of angles of quadrilateral

$$4y + 11y + 9y + 240^\circ = 360^\circ$$

$$\Rightarrow 24y = 120^\circ \Rightarrow y = 5$$

Hence, the sum of the largest and the smallest angles of the quadrilateral = $4 \times 5 + 240 = 260^\circ$

57. Distance covered by the aeroplane in 9 h
 $= 9 \times 756 = 6804$ km

$$\text{Speed of helicopter} = \frac{2 \times 6804}{48}$$

\therefore Distance covered by helicopter in 18 h

$$= \frac{2 \times 6804}{48} \times 18 = 5103 \text{ km}$$

58. $? = 14.001 \times 26.999 \times 7.998 \approx 14 \times 27 \times 8 \approx 3024$
 $\therefore ? \approx 3000$

59. $? = 36.15 + 71.58 + 6.33 + 2.71 = 116.77$

60. $? = 2.55\% \text{ of } 440 + 0.366\% \text{ of } 4880$
 $= 11.22 + 17.86 = 29.08 \approx 29$

61. $? = (3537.988 \div 18.005) \times 1.999$
 $= (3538 + 18) \times 2 = 196.5 \times 2 = 393$

62. $? = 1135 \div \left(\frac{7}{5} \times \frac{3}{7} \times \frac{2}{9} \right)$

$$= 1135 \div \frac{42}{315} = \frac{1135 \times 315}{42} = 8512.5 \approx 8510$$

63. $\frac{175 \times 460}{100} + \frac{110 \times 170}{100} + 2^2 = 1000$

$$\Rightarrow 805 + 187 + 2^2 = 1000$$

$$\Rightarrow 992 + 2^2 = 1000$$

$$\Rightarrow 2^2 = 8 \Rightarrow 2^2 = 2^3 \Rightarrow ? = 3$$

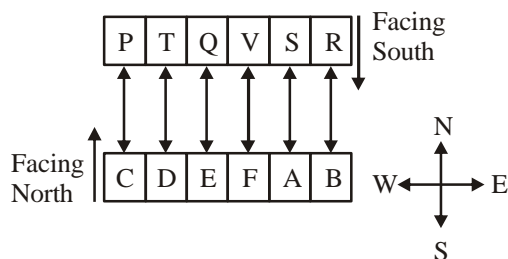
64. $18^{7.9} \times 18^{0.1} - 18^4 = 18^{(7.9+0.1-4)} = 18^4$
 $\therefore ? = 4$

65. $\frac{22}{7} + \frac{13}{5} + \frac{36}{5} - \frac{38}{7} - \frac{18}{35}$

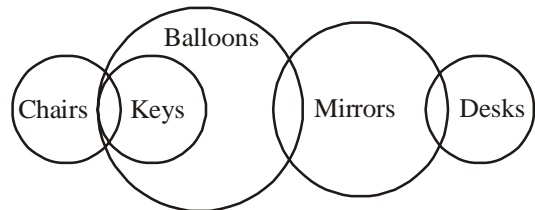
$$= \frac{110 + 91 + 252 - 190 - 18}{35} = \frac{245}{35} = 7$$

$$\therefore ? = \frac{35}{7} = 5$$

66-70.

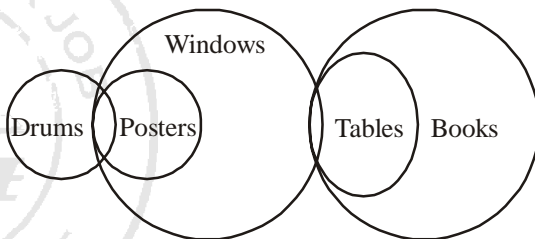


66. PR sits extreme ends of rows, who are facing southward.
 67. S is facing A.
 68. There are two persons Q, V sits between T and S.
 69. V is third to the East of P and F is also third to the East of C. So, B will be the correct answer because B is third to the East of E.
 70. F faces V is definitely true.
 71. (2) According to the statements, venn diagram is follow



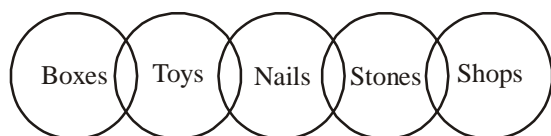
Conclusions : I. ✗ II. ✓ III. ✗

72. (1) According to the statements, venn diagram is follow



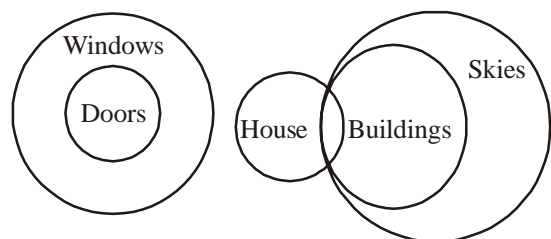
Conclusions : I. ✗ II. ✗ III. ✗

73. (5) According to the statements, venn diagram is follow



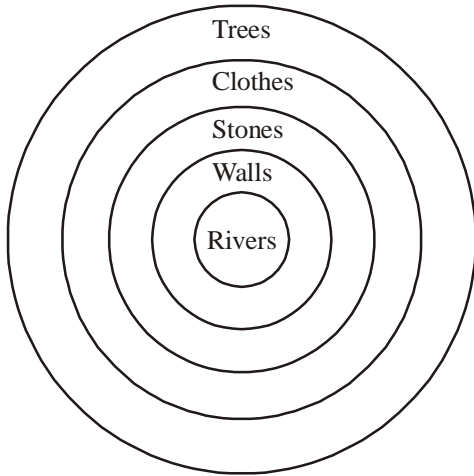
Conclusions : I. ✓ II. ✓ III. ✗

74. (2) According to the statements, venn diagram is follow



Conclusions : I. ✗ II. ✓ III. ✗

75. (1) According to the statements, venn diagram is follow



Conclusions : I. ✓ II. ✓ III. ✗

76. (5) Second lower number is 614. Third digit is 4.
 77. (2) Highest number is 965.
 Sum of first and second = $9 + 6 = 15$.
 78. (1) 823 956 784 295 641
 Lowest number = 295. Last digit = 5.
 79. (5) 382 695 478 529 164
 Second highest number = 529. Second digit = 2.
 80. (3) Highest number = 748.
 Difference between first and third digits = $8 - 7 = 1$.
 85. (1) $W \geq D < M < P < A = F$
 I. $F > D$ (True)
 II. $P > W$ (False)
 86. (4) $H \geq M > F < A = B > S$
 I. $H > B$ (False)
 II. $F < S$ (False)
 87. (2) $B > T > Q > R = F$
 I. $Q \geq F$ (False)
 II. $T > F$ (True)
 88. (2) $S = R \geq Q > P$
 I. $S \geq P$ (False)
 II. $R > P$ (True)
 89. (2) $S \geq M < Y = Z > F > T$
 I. $S > F$ (False)
 II. $Y > T$ (True)
 90. $28 \times 12 + 4 + 6 - 4 = ?$
 $\Rightarrow ? = 28 + 12 + 4 - 6 \times 4$
 $\Rightarrow ? = 28 + \frac{12}{4} - 6 \times 4$
 $\Rightarrow ? = 28 + 3 - 24 \Rightarrow ? = 7$

91. 27 is the cube of 3. While others are not.
 92. The meaningful words are \Rightarrow MART, TRAM
 93. Number 53216894

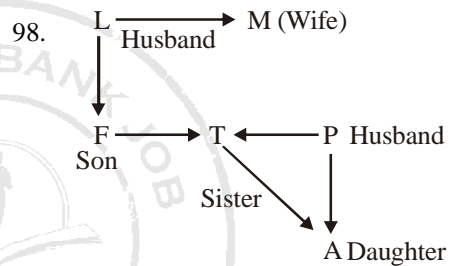
After interchanging the digits 6 8 9 4 5 3 2 1

94. Number 5 3 1 4 7 9 2 6
 In decreasing order 9 7 6 5 4 3 2 1

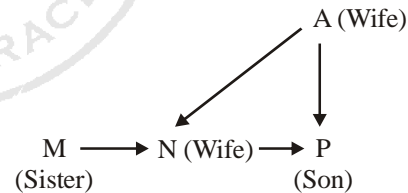
95-97. Five friends paid amount for mobile phone discending order one as follow.

$$B > D > A > E > C$$

95. None statement is true with regard to the given information.
 96. E's paid amount for the phone = ₹ 8000
 \therefore D's paid amount for the phone = $8000 + 17000 = ₹ 25000$
 \therefore A's paid amount for the phone is between the amount of ₹ 8000 and ₹ 25000.
 Hence, A's paid amount for the phone = ₹ 16000
 97. A paid the third highest amount for the mobile phone.



99. It is clear that A is cousin of F.
 $M + N * P > A \rightarrow N$ is the daughter-in-law of A.



100. $Q \times P < B + F \rightarrow P$ is the niece of F.

