

IBPS PO PRELIMINARY GRAND TEST :
IPP-170630 - HINTS AND SOLUTIONS

ANSWER KEY

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

11-15. Usually negative are sentence to form a meaningful paragraph will be DBFAEC.

26. (5) 'lost' fits the blank appropriately.

27. (5) 'consider' fits the blank appropriately.

28. (3) 'deterioration' fits the blank appropriately.

29. (1) 'altered' fits the blank appropriately.

30. (2) 'dissipate' fits the blank appropriately.

31. (3) Speed of car = $\frac{540}{9} = 60$ km/h

Speed of train = 60 2 = 120 km/h

Speed of bike = 80 km/h

Distance covered by bike in 5 h = 80 5 = 400 km

32. (3) $3x + 4x + 6x + 5x = 360 \Rightarrow x = 20$

Largest angle of quadrilateral = $6x = 6 \times 20 = 120^\circ$

Smaller angle of parallelogram = $120 \times \frac{2}{3} = 80^\circ$

So, the adjacent angle = 100

33. (5) Cost Price = 5600

$$\text{Selling price} = 5600 \times \frac{3}{4} = 4200$$

$$\text{Loss} = 5600 - 4200 = 1400$$

$$\text{Percent loss} = \frac{140}{5600} \times 100 = 25\%$$

34. (1) $1200 = \frac{P \times 4 \times 8}{100} \Rightarrow P = \frac{1200 \times 100}{4 \times 8} = 3750$

$$\text{Now, SI} = \frac{3750 \times 3 \times 6 \times 3}{100} = 2025$$

35. (3) Area of square (a)² = 196

$$\therefore a = \sqrt{196} = 14 \text{ cm}$$

$$\text{Radius of a circle} = 14 \times 2 = 28 \text{ cm}$$

$$\therefore \text{Circumference} = \frac{22}{7} \times 2 \times 28 = 176 \text{ cm}$$

Now according to question b = 176 cm

$$\text{Also } 2(l + b) = 712$$

$$\Rightarrow 2(l + 176) = 712 \Rightarrow l + 176 = 356$$

$$\Rightarrow l = 356 - 176 \Rightarrow l = 180 \text{ cm}$$

36. (2) Monthly investment by Mrudul = 29500 × 24 = 708000

$$\text{And by Shalaka} = 33500 \times 20 = 670000$$

$$\text{Ratio} = 708000 : 670000 = 708 : 670$$

$$\text{Share of Mrudul} = \frac{708}{708 + 670} \times 120575 = 61950$$

37. (4) Because (31)² < 1020 < (32)²

$$\text{Hence, the required number} = (32)^2 - 1020 = 1024 - 1020 = 4$$

38. (3) The LCM of 18, 22, 30 is 990

So, they will meet each other after 990, i.e., 16 min and 30 s.

39. (4) Required time to fill the tank

$$= \frac{1}{\left(\frac{1}{4} + \frac{1}{6}\right) - \frac{1}{3}} = \frac{1}{\frac{5}{12} - \frac{1}{3}} = \frac{1}{\frac{1}{12}} = 12 \text{ h}$$

40. (1) Amount = $11200 + \frac{1120 \times 8.5 \times 3}{100}$
= 11200 + 2856 = 14056

41. (3) Req. % = $\frac{110^\circ}{90^\circ} \times 100 = 122 \frac{2}{9}$

42. (1) Req. difference = $\frac{(85^\circ - 35^\circ)}{360^\circ} \times 24 = 3 \text{ hrs. } 24 \text{ min}$

43. (5) Req. % = $\frac{40}{360} \times 100 = 11 \frac{1}{9}$

44. (2) If the time spends n school is equal to that of spent in sleeping, then angle of sleeping is increased by 20°.

Hence, his time of games is decreased by 20° .

$$\therefore \text{Req. \%} = \frac{20}{35} \times 100 = 57 \frac{1}{7} \%$$

45. (5) Req. time = $\left(\frac{3}{4} \times \frac{40^\circ}{360^\circ} \times 24\right)$ hrs. = 2 hrs.

46. (3) Req. difference in the amount earned

$$= \left(\frac{16}{100} \times 1000 \times 7420 - \frac{14}{100} \times 1000 \times 7220\right) \times 12$$

$$= ₹ 21.168 \text{ lakh}$$

47. (5) Req. % increase = $\frac{(7280 - 4240)}{4240} \times 100 \approx 72\%$

48. (1) Req. difference

$$= (0.30 \times 400 + 0.34 \times 600 + 0.32 \times 200 + 0.14 \times 1000 + 0.16 \times 800) - (0.24 \times 400 + 0.18 \times 600 + 0.32 \times 200 + 0.16 \times 1000 + 0.28 \times 800)$$

$$= 4$$

49. (3) Req. % increase = $\frac{(8440 - 6210)}{6210} \times 100 \approx 36\%$

50. (2) Req. annual rate

$$= \left[\frac{(9250 - 4880)}{4880} \times 100\right] \times \frac{1}{4} = 22.3873 \approx 22.4\%$$

51. (5) Highest no. of flights cancelled by airline Q = 680
Lowest no. of flights cancelled by airline T = 258
Their difference = $680 - 258 = 422$.

52. (2) No. of flights cancelled by airline 'S' in 2008 = 550
No. of flights cancelled by airline 'S' in 2007 = 430
Required percentage = $\frac{550 - 430}{430} \times 100 = 27.9 \approx 27$.

53. (2) Average no. of flights cancelled by airlines P, R, S and T in the year 2008 = $\frac{160 + 708 + 550 + 586}{4} = 501$.

54. (1) 2010, 40% flights are cancelled by airlines R due to bad weather and remaining 60% flights cancelled due to technical fault.

$$\therefore \frac{60}{100} \times 880 = 528.$$

55. (4) S.P. = 1850
Profit = 25%

$$\text{C.P.} = \frac{100}{100 + \text{Profit \%}} \times \text{S.P.}$$

$$= \frac{100}{125} \times 1850 = 1480.$$

56. (4) One litre milk cost (1000 ml) = 44
One day 550 litre milk cost = $\frac{550}{1000} \times 44 = 24.2$
45 days cost = $45 \times 24.2 = 1089$.

57. (5) I. $\sqrt{x+18} = \sqrt{144} - \sqrt{49}$

$$\Rightarrow \sqrt{x+18} = 12 - 7$$

$$\Rightarrow x + 18 = 25$$

$$\Rightarrow x = 7$$

II. $y^2 + 409 = 4730$

$$\Rightarrow y^2 = 473 - 409$$

$$\Rightarrow y = \sqrt{64}$$

$$\Rightarrow y = \pm 8$$

If $y = 8$ and $x = 7$ the $y > x$

And $y = -8$ and $x = 7$ the $x > y$

So, relationship cannot be established.

58. (4) I. $x^2 - 7x + 12 = 0$

$$\Rightarrow x^2 - 4x - 3x + 12 = 0$$

$$\Rightarrow x(x-4) - 3(x-4) = 0$$

$$\Rightarrow (x-4)(x-3) = 0$$

$$\therefore x = 4 \text{ or } 3$$

II. $y^2 - 9y + 20 = 0$

$$\Rightarrow y^2 - 5y - 4y + 20 = 0$$

$$\Rightarrow y(y-5) - 4(y-5) = 0$$

$$\Rightarrow (y-4)(y-5) = 0$$

$$\Rightarrow y = 5 \text{ or } 4$$

$$\therefore y \geq x$$

59. (3) I. $y^2 - x^2 = 32$

$$\Rightarrow (y+x)(y-x) = 32$$

$$\Rightarrow (y+x) \times 2 = 32$$

$$\Rightarrow y+x = 16$$

II. $y - x = 2$

From (I) & (II),

$$y+x = 16$$

$$\frac{y-x}{2} = \frac{2}{2}$$

$$2y = 18$$

$$y = 9$$

$$9 - x = 2 \Rightarrow x = 7$$

60. (5) I. $\sqrt{x} - \frac{\sqrt{5}}{\sqrt{x}} = 0 \Rightarrow \frac{x - \sqrt{5}}{\sqrt{x}} = 0$

$$\Rightarrow x - \sqrt{5} = 0$$

$$\Rightarrow x = \sqrt{5} = (5)^{\frac{1}{2}} \Rightarrow (x)^3 = (5)^{\frac{3}{2}}$$

II. $y^3 - 5^{(3/2)} = 0 \Rightarrow y^3 = (5)^{\frac{3}{2}}$

$$\therefore x = y$$

61. (5) I. $3x^2 - 2x - 8 = 0$

$$\Rightarrow 3x^2 - 6x + 4x - 8 = 0$$

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

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

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

II. $7y^2 - 5y - 18 = 0$

$$\Rightarrow 7y^2 - 21y + 6y - 18 = 0$$

$$\begin{aligned} &\Rightarrow 7y(y-3) + 6(y-3) = 0 \\ &\Rightarrow (y-3)(7y+6) = 0 \\ &\Rightarrow y = 3 \text{ or } -\frac{6}{7} \end{aligned}$$

∴ Relation can't be determined.

62. (3) $7960 + 2956 - 8050 + 4028 = ?$
 $\Rightarrow 14944 - 8050 = ? \Rightarrow 6894 = ?$

63. (2) $25 \times 3.25 + 50.4 \div 24 = ?$
 $\Rightarrow 81.25 + 2.1 = ? \Rightarrow 83.35 = ?$

64. (1) $350\% \text{ of } ? \div 50 + 248 = 591$
 $\Rightarrow x \times \frac{350}{100} \times \frac{1}{50} + 248 = 591$
 $\Rightarrow \frac{7x}{100} = 591 - 248 \Rightarrow \frac{7x}{100} = 343$

$$\Rightarrow x = \frac{343 \times 100}{7} = 4900$$

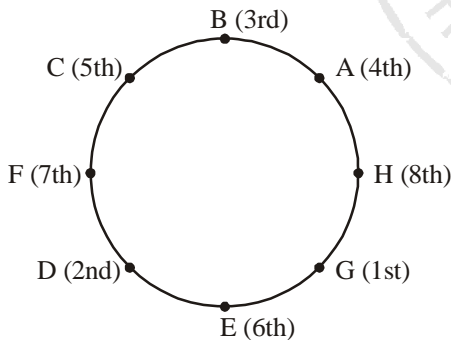
65. (1) $\frac{1}{2}$ of $3842 + 15\%$ of $? = 2449$

$$\Rightarrow 1921 + x \times \frac{15}{100} = 2449$$

$$\Rightarrow x \times \frac{15}{100} = 2449 - 1921$$

$$\Rightarrow x = \frac{528 \times 100}{15} = 3520$$

66-70.



66. (5) none is true.

67. (4) B

68. (4) Three (H, G, E)

69. (2) D studies in Std. 2.

70. (3) H and the student of Std. 6.

71. (5) $O^+ = Q^-$
 \updownarrow
 $N^- - P^- \text{ or } P^+$

72. (3) $V^+ = Y^-$
 $|$
 $S^- = T^+ - W^-$

73. (3) LU — EO
 SV — MH
 NI — GV

74. (5)

75. (2) GLAD BUMP
 SANU FEBH

76-80. The word and number arrangement machine rearranges words in increasing order of their lengths and in case there is a tie, the words are arranged according to the reverse alphabetical order. Numbers are rearranged in descending order in each step, the machine rearranges one word and one number.

Input : 8 possibility 38 chocolates 72 row 14 other 82 64 chisel season.

Step I : row 82 8 possibility 38 chocolates 72 14 other 64 chisel season.

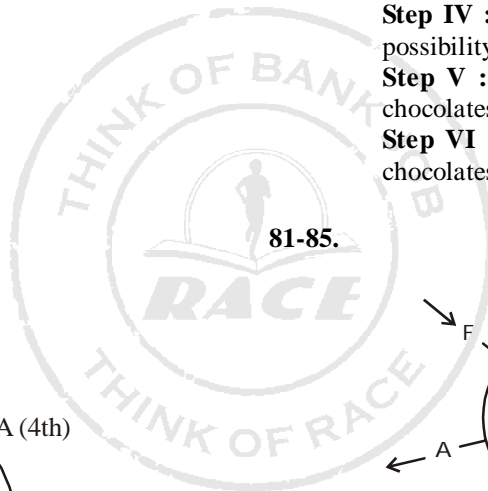
Step II : row 82 other 72 8 possibility 38 chocolates 14 64 chisel season.

Step III : row 82 other 72 season 64 8 possibility 38 chocolates 14 chisel.

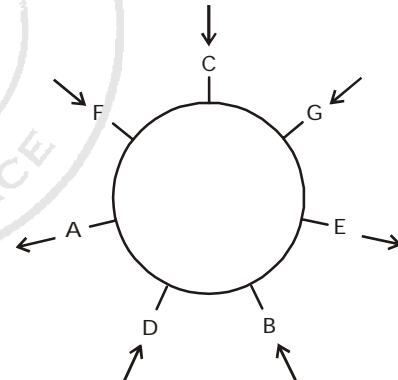
Step IV : row 82 other 72 season 64 chisel 38 8 possibility chocolates 14.

Step V : row 82 other 72 season 64 chisel 38 chocolates 14 8 possibility.

Step VI : row 82 other 72 season 64 chisel 38 chocolates 14 possibility 8.



81-85.



86. (4) $S < T < U = W < X$

(i) $S \geq W$ False

(ii) $W \geq T$ False

87. (5) $I < G < H < J \leq K$

(i) $H < K$ True

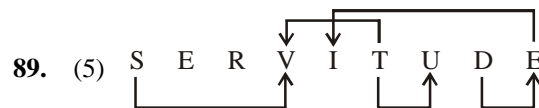
(ii) $H > I$ True

88. (1) $C < B \leq K \geq G = M$

$M \leq B$

(i) $M \leq K$ True

(ii) $C = G$ False

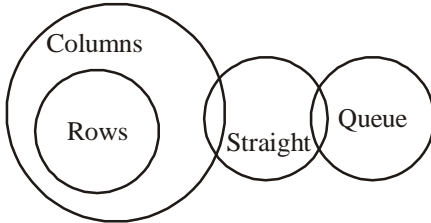


So, such number of pairs are – SV, TU, DE, EI, TV.

90. (4) Given number \rightarrow 5 9 1 2 6 8 7 4
 According to the ques. after rearranged in descending order \rightarrow 9 8 7 6 5 4 2 1

Hence, three such pairs are 21, 96, 87.

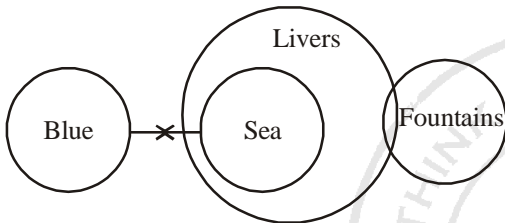
91-92.



91. (1) **Conclusions :** I. ✓ II. ✗
 Only I follows.

92. (4) **Conclusions :** I. ✗ II. ✗
 Neither I nor II follow.

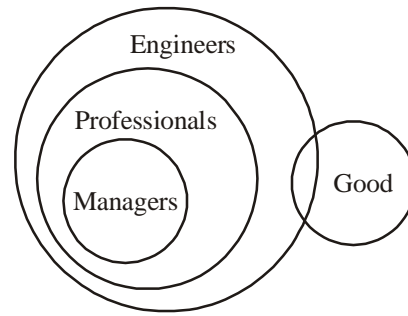
93-94.



93. (1) **Conclusions :** I. ✓ II. ✗
 Only I follows.

94. (2) **Conclusions :** I. ✗ II. ✓
 Only II follows.

95. (1)



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

96-100. a friend of mine = 4916 ... (i)
 mine lots of metal = 3109 ... (ii)
 a piece of metal = 7163 ... (iii)

From Eqs. (i) and (ii), of mine = 1, 9
 From Eqs. (ii) and (iii), of metal = 1, 3
 So, of = 1, metal = 3, mine = 9. Similarly, you can find the code of all by comparing equations.

98. (3) a = 6, of = 1 and mine = 9 and we don't know the code of pleasure but seeing the and options 6, 1, 9, is available in answer option (3) only].

100. (5) We know the code of 7 and 3, i.e., piece and metal. Once again you have to do intelligent guess with the help of answer options. The answers option will be (5).

