<u>IBPS PO PRELIMINARY GRAND TEST :</u> <u>IPP-170512 - HINTS AND SOLUTIONS</u>

ANSWER KEY

1	(5)	21	(2)	41	(1)	61	(3)	81	(4)	
2	(4)	22	(1)	42	(2)	62	(1)	82	(3)	l
3	(2)	23	(2)	43	(5)	63	(1)	83	(5)	Ì
4	(2)	24	(5)	44	(4)	64	(1)	84	(5)	Ì
5	(2)	25	(3)	45	(3)	65	(2)	85	(3)	l
6	(5)	26	(2)	46	(3)	66	(1)	86	(3)	Ì
7	(1)	27	(4)	47	(1)	67	(2)	87	(5)	Ì
8	(3)	28	(1)	48	(5)	68	(3)	88	(4)	Ì
9	(3)	29	(5)	49	(4)	69	(2)	89	(3)	l
10	(1)	30	(3)	50	(3)	70	(3)	90	(2)	
11	(3)	31	(4)	51	(3)	71	(2)	91	(1)	
12	(2)	32	(4)	52	(5)	72	(1)	92	(2)	
13	(4)	33	(3)	53	(1)	73	(2)	93	(5)	
14	(3)	34	(3)	54	(2)	74	(3)	94	(3)	5
15	(2)	35	(4)	55	(3)	75	(5)	95	(1)	9
16	(3)	36	(1)	56	(1)	76	(5)	96	(3)	
17	(1)	37	(3)	57	(5)	77	(5)	97	(5)	h
18	(4)	38	(5)	58	(4)	78	(3)	98	(5)	
19	(2)	39	(4)	59	(2)	79	(4)	99	(5)	
20	(2)	40	(4)	60	(3)	80	(1)	100	(4)	
 (5) 2. (4) 3. (2) 4. (2) 5. (2) (5) 7. (1) 8. (3) 9. (3) 10. (1) (1) Use 'found' in place of 'find'. (2) Use 'have in place of 'has'. (3) It should be 'in the competition'. (4) Remove 'about'. (5) 'transformation' fits the blank appropriately. (6) (2) 'transformation' fits the blank appropriately. (1) 'removing' fits the blank appropriately. (3) 'irreversibly' fits the blank appropriately. (4) Meaning words SIFT, FIST and FITS. (4) C H R O N I C L E 										
Required pairs, C-E, C-H and N-O. 33. (3) $? = 15 \text{ W } 12 \text{ T } 8 \text{ R } 2 \text{ B } 6$ $= 15 - 12 + 8 \div 2 \times 6$ $= 15 - 12 + 4 \times 6$ = 15 - 12 + 24 - 27										

34. (3) Given number = 89123654After rearrangement

1

3 6 5 4 8 9 1 2

So, 1 is second from the right end.

35.	(4)	As, B	А	S	Κ	Е	Т				
		Ļ	Ļ	Ļ	Ļ	Ļ	Ļ				
		5	%	3	#	4	2				
		And A	R I	M I			So,	Т	Е	RM	I
		Ļ	Ļ	ţ				Ļ		\downarrow \downarrow	
		%	@	9				2	4	@ 9)

- **36-39.** Patterns of the arrangement of sets of given input are as follows.
- **36.**(1) **Step I** 14 just in time for 36 48 59 Step II 14 for just in time 36 48 59 Step III 14 for 36 just in time 48 59 Step IV 14 for 36 in just time 48 59 Step III 17 do 29 foreign 95 74 heights mountain **37.**(3) Step IV 17 do 29 foreign 74 95 heights mountain Step V 17 do 29 foreign 74 heights 95 mountain Step II 34 dress fire well 63 43 prime 52 **38.** (5) Step III 34 dress 43 fire well 63 prime 52 Step IV 34 dress 43 fire 52 well 63 prime Step V 34 dress 43 fire 52 prime well 63 Step VI 34 dress 43 fire 52 prime 63 well This is the last step. **39.**(4) Cannot be determined.
- **42.** (2) According to statements, venn diagram is follow



Conclusions I. \times II. \checkmark **43.** (5) According to statements, venn diagram is follow







II. ×





(3) Word 'VENT" is only one meaningful word with the fourth, fifth and tenth letters of the word TELEVISION.

46-50	Day	Representative	Country	
10 201	Monday	Samir	South Africa	
	Tues da y	Nita	Australia	
	Wednesday	Gifty	France	
	Thursday	Paul	Australia	
	Friday	Richa	South Africa	
	Saturday	Shweta	France	
	Sunday	Mohit	South Africa	

- **46.** (3) Nita will be travelling on Wednesday.
- **47.** (1) Shweta is travelled on Saturday.
- **48.**(5) None of the above
- **49.** (4) Nita travelled to Australia on Tuesday.

50. (3) Mohit was the last one to travel. **51-54.** $P \delta Q \Rightarrow P < Q$

 $P \ \delta \ Q \implies P \le Q$ $P \ \% \ Q \implies P \ge Q$ $P \ \textcircled{w} \ Q \implies P = Q$ $P \ \textcircled{w} \ Q \implies P = Q$ $P \ \textcircled{w} \ Q \implies P > Q$ $P \ \textcircled{w} \ Q \implies P > Q$

- **51.** (3) **Statement** $R > J, J \ge M, M = K$ **Conclusions I.** K = J **II.** K < JSo, Conclusions either I or II are true. **52.** (5) **Statements** D < R, M > R, M = F

- So, only Conclusion II is true.55-59. Eight people seating arrangements are as follows.



- 55. (3) Except R, all other sitting extreme ends of the line.
- **56.** (1) P faces B.
- **57.**(5) None is true
- **58.** (4) D faces Q.
- **59.** (2) D sits exactly between B and C and D faces Q.









62. (1) $W > X < Y * Z \rightarrow W$ is the nephew of Z.



63. (1) Highest number = 841 Lowest number = 289 Difference = 525 Now, required second digit = 2

64.(1)

476	538	289	814	753
+1	+1	+1	+1	+1
↓	\downarrow	\checkmark	\downarrow	\checkmark
576	638	389	914	853
\mathbb{V}^{-}	\mathbb{V}	\mathbb{V}	\mathbb{V}	\mathbb{V}
A	A.	A.	A.	A
675	536	983	419	358

Now, second highest number = 836 \therefore Third digit of 2nd highest number = 6

65 (2)	476	538	289	814	753
03.(2)	_1	_1	_1	_1	_1
	↓ ↓	- ↓	- -	- -	↓
	475	537	288	813	752
	\mathbb{V}	\mathbb{V}	\mathbb{V}	\mathbb{V}	Ψ
	\mathbf{A}	A	A	A	\square
	574	735	882	318	257

Now, first digit of 574 = 5 \therefore Third highest number = 574

66. (1) Simple interest =
$$\frac{8955 \times 10 \times 7}{100} = \frac{626850}{100}$$

= \top 6268.50 67. (2) Let be number is x. According to the question, \Rightarrow (x²) + (73)²= 14933

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 $\Rightarrow x^2 + 5329 = 14933$ $\Rightarrow x^2 = 14933 - 5329$ $\Rightarrow x^2 = 9604$ $\Rightarrow x = 98$

(3) The total age of a man and his son is = 162 = 32 yr 68. Total ratio of age = 15+1 = 16

Son's age is
$$=\frac{32}{16} \times 1 = 2$$
 ye

(2) Compound interest = $9000 \left(1 + \frac{12}{100}\right)^2 - 1$ **69**. $= \left| 9000 \left(\frac{112}{100} \right)^2 - 1 \right| = \left[9000 \times \left(\frac{28}{25} \times \frac{28}{25} - 1 \right) \right]$ $= \left[9000 \times \left(\frac{784}{625} - 1\right)\right] = \left[\frac{9000 \times 159}{625}\right]$ = T 2289.6

 $\frac{45000 \times 10 \times 3}{1000} = \frac{1350000}{10000}$ **70.** (3) Simple interest = $(3 + 3)^{-1}$ =T13500 100 100 Ms. Luthra got the total amount =45000 + 13500 = T58500

71. (2) B's share in the amount =
$$\frac{9861 \times 11}{19} = 15709$$

72. (1)
$$3450 \times \frac{42}{100} = \frac{144900}{100} = 1449$$
 got promotion.

73. (2) Bhairavi scores =
$$\frac{543}{875} \times 100 = 62.05\% = 62\%$$
 (approx.)
74. (3) \therefore 9% = 540 - 432 = 108

74. (3)
$$\therefore$$
 9% = 540 - 432 = 108

$$\therefore 9\% = 108 \Longrightarrow 1\% = \frac{108}{9}$$

$$\therefore 100\% = \frac{108}{9} \times 100 = 1200$$
 marks

75. (5) Weight of water in the mixture of 60 g water

$$=60 \times \frac{75}{100} = 45 \,\mathrm{g}$$

Weight of water in the mixture of 45 g water = 45 + 15 = 60 g

Percentage of water =
$$\frac{60 \times 100}{75} = 80\%$$

- **76.** (5) Average of first two number = 48.5Average of last two numbers = 53.5Sum of five numbers = 290Third number = x
 - $\therefore 2 \times (48.5) + x + 2 \times (53.5) = 290$ 97 + x + 107 = 290x = 290 - 204 = 86

80.

77. (5) There 5 letters in the word SMART.
So, the required number of ways to arrange =
$${}^{5}P_{5} = 5!$$

= 5 × 4 × 3 × 2 × 1 = 120.

78. (3) Suppose B got
$$T x$$

Amount to C =
$$x - x \times \frac{25}{100}$$

$$=\frac{100x-25x}{100}=\frac{75x}{100}=\top \frac{3x}{4}$$

So, the amount to A =
$$\frac{3x}{4} \times \frac{125}{100} = \frac{15x}{16}$$

A: B: C =
$$\frac{15x}{16}$$
: x: $\frac{3x}{4}$ = 15x: 16x: 12x

Sum of the ratio = 15x + 16x + 12x = 43x

A. Share of A =
$$\frac{2236 \times 15x}{43x} = 7780$$

79. (4) Loss in weight =
$$65 - 45 = 20$$
 kg

Loss in average weight =
$$\frac{20}{53}$$
 = 0.38 kg

Original average weight = 58 - 0.38 = 57.62 kg

1)
$$\operatorname{CI} = 20000 \left[\left(1 + \frac{15}{100} \right)^4 - 1 \right] = 20000 \left[\left(\frac{23}{20} \right)^4 - 1 \right]$$

$$=20000 \left[\frac{23 \times 23 \times 23 \times 23 - 20 \times 20 \times 20 \times 20}{20 \times 20 \times 20 \times 20} \right]$$

$$=20000 \left[\frac{279841 - 160000}{160000} \right] = 20000 \times \frac{119841}{160000}$$
$$= T 14980.125$$

81. (4) Required percentage
$$=\frac{31}{15} \times 100 = 206.67 \approx 207$$

82. (3)
$$A = 35000 \times \frac{18}{100} \times \frac{3}{10} = 1890$$

 $B = 35000 \times \frac{22}{100} \times \frac{11}{20} = 4235$

$$C = 35000 \times \frac{31}{100} \times \frac{3}{5} = 6510$$

$$D = 35000 \times \frac{15}{100} \times \frac{2}{5} = 2100$$

$$E = 35000 \times \frac{14}{100} \times \frac{1}{4} = 1225$$

Total number of males in all the organizations = 1890 + 4235 + 6510 + 2100 + 1225 = 15960



83. (5) Total number of males in Organizations A and C

$$= 35000 \left(\frac{18}{100} \times \frac{30}{100} + \frac{31}{100} \times \frac{40}{100} \right)$$

$$=\frac{35000}{10000}(540+1240) = 3.5\times1780 = 6230$$

84. (5) Number of females in Organization B

$$=\frac{35000 \times 22 \times 55}{100 \times 100} = 4235$$

Number of females in organization E

$$=\frac{35000\times14\times3}{100\times4}=3675$$

Required difference = 4235 - 3675 = 560.

- (3) In year 2007, Company A earn maximum amount of 85. profit.
- (3) Suppose in 2005, profit earned = T x86.

$$\therefore x \times \frac{135}{100} \times \frac{140}{100} = 7.56$$

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$$x = \frac{7.56 \times 100 \times 100}{135 \times 140} = 7.4 \text{ lakh}$$

87. (5) Average percent increase in profit of Company A

$$=\frac{\left(25+30+40+45+35+30\right)\%}{6}$$

$$=\frac{(205)\%}{6} = 34.16\% \approx 34\%$$

- **88.** (4) The pattern of series is $4 \times 1 + 2 = 6$ $6 \times 2 + 4 = 16$ $16 \times 3 + 6 = 54$ $54 \times 4 + 8 = 224$
- The pattern of series is **89.** (3) $5 \times 8 - 1 = 39$ $39 \times 7 - 1 = 272$ $272 \times 6 - 1 = 1631$ $1631 \times 5 - 1 = 8154$
- **90.** (2) The pattern of series is

768 192 48 12
$$3$$

 $\div 4$ $\div 4$ $\div 4$ $\div 4$

91. (1)
$$?=11.304 \times (6.839 - 4.331) \approx 11 \times (7 - 4) \approx 11 \times 3 \approx 33 \approx 30$$

 $?=61\times24.87\div(14.059-6)\approx61\times25\div(14-6)\approx1525\div8$ **92.** (2) ≈ 190.625 ≈ 190

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93. (5)
$$?=(3.805)^{2\times14.018-5.991}$$

 $\approx (4)^{2}14-6$ 16 14-6 224-6
 $\approx 218 \approx 200$
94. (3) $?=\sqrt{230} \div 2.017 + 58.794$
 $\approx \sqrt{225} \div 2 + 59 \approx 15 \div 2 + 59$
 $\approx 7.5 + 59 \approx 66.5 \approx 68$
95. (1) $?=3451 \div 9.895 \times 3.0126$
 $\approx 3451 \div 10 \times 3 \approx 345.1 \times 3 \approx 1035.3 \approx 1050$
96. (3) Three Consonant out of 7 and 2 vowels out of 4 can
be chosen in $^{7}C_{3}^{4}C_{2}$ ways. Since, each group contain
5 letters, which can be arranged among themselves in
5! Ways.
Hence, the required number of words
 $= (^{7}C_{3}^{4}C_{2})5! = 25200$
97. (5) $? = 1\frac{1}{4} + 1\frac{5}{9} \times 1\frac{5}{8} \div 6\frac{1}{2} = \frac{5}{4} + \frac{14}{9} \times \frac{13}{8} \times \frac{1}{13}$
 $= \frac{5}{4} + \frac{7}{18} = \frac{45 + 14}{36} = \frac{59}{36} = 1\frac{23}{36}$
98. (5) $289 = 17^{\times/5} \Rightarrow 17^{5} = 17^{\times/5}$
 $\frac{x}{5} = 2 \Rightarrow x = 2 \times 5 \Rightarrow x = 10$
99. (5) $? = 0.01 \times 0.1 - 0.001 \div 10 + 0.01$
 $= 0.001 - 0.0001 \times \frac{1}{10} + 0.01$
 $= 0.001 - 0.0001 + 0.01 = 0.0109$
100. (4) $500 \times \frac{x}{10} = 300 \times \frac{y}{100}$

4)
$$500 \times \frac{x}{100} = 300 \times \frac{y}{100}$$

 $\Rightarrow 5x = 3y$
 $\Rightarrow y = \frac{5x}{3}$...(i)

$$\frac{xy \times 200}{100 \times 100} = 60$$
$$\Rightarrow xy = 3000$$

$$\Rightarrow x \times \frac{5x}{3} = 3000 \qquad \left[\because y = \frac{5x}{3} \right]$$
$$\Rightarrow 5x^2 = 3000 \times 3$$

$$\Rightarrow x^2 = \frac{3000 \times 3}{5}$$

$$\Rightarrow x^{2} = 1800 \Rightarrow x = \sqrt{1800} = \sqrt{2 \times 3 \times 3 \times 10 \times 10}$$
$$\therefore x = 30\sqrt{2}$$