

IBPS PO PRELIMINARY GRAND TEST :
IPP-170509 - HINTS AND SOLUTIONS

ANSWER KEY

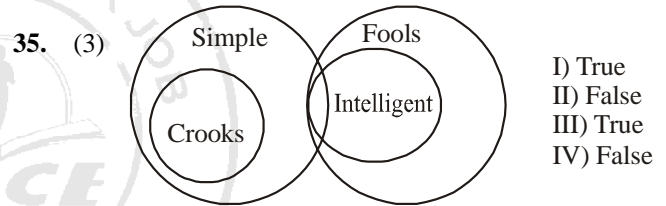
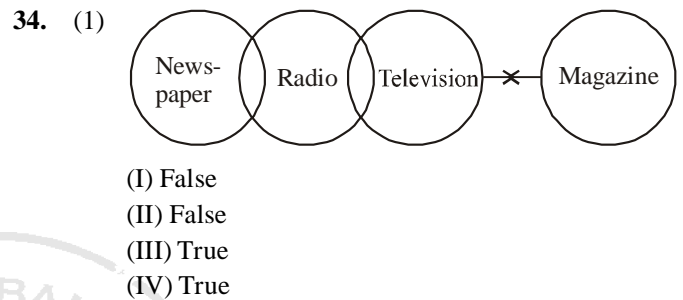
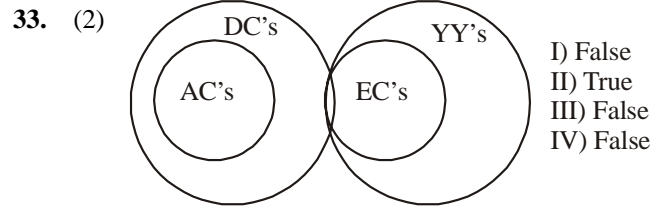
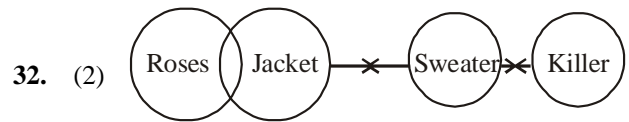
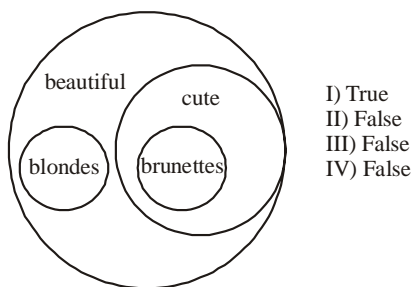
1	(1)	21	(1)	41	(4)	61	(5)	81	(4)
2	(3)	22	(4)	42	(1)	62	(1)	82	(5)
3	(2)	23	(2)	43	(2)	63	(2)	83	(2)
4	(4)	24	(5)	44	(2)	64	(5)	84	(5)
5	(2)	25	(5)	45	(3)	65	(5)	85	(3)
6	(1)	26	(4)	46	(4)	66	(4)	86	(4)
7	(4)	27	(5)	47	(1)	67	(4)	87	(1)
8	(2)	28	(4)	48	(4)	68	(1)	88	(2)
9	(2)	29	(2)	49	(2)	69	(2)	89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

1. (1) 2. (3) 3. (2) 4. (4)
5. (2) 6. (1) 7. (4) 8. (2) 9. (2)

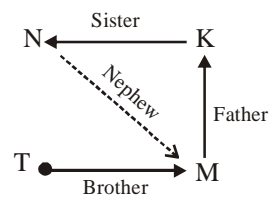
10-14. The correct sequence of five sentences to form a meaningful paragraph is DBACE.

10. (4) 11. (2) 12. (1) 13. (3) 14. (5)
15. (5) 16. (3) 17. (2) 18. (5) 19. (1)
20. (3) 21. (1) 22. (4) 23. (2) 24. (5)
25. (5) 26. (4) 27. (5) 28. (4) 29. (2)
30. (1)

31. (1)

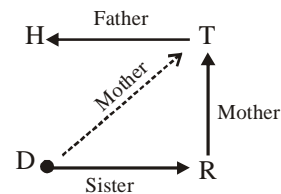


36. (4) From option (4),
 $N - K + M \times T$
 $N - K \rightarrow N$ is
The sister of K.



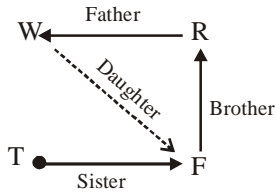
$K + M \rightarrow K$ is
The father of M.
 $M \times T \rightarrow M$ is the brother of T.
So, M is the Nephew.

37. (5) $H + T \div R - D$
 $H + T \rightarrow H$ is father of T.



$T \div R \rightarrow$ T is the mother of R.
 $R - D \rightarrow$ R is the sister of D.
 So, T is the mother of D.

38. (3) From option (3), $W + R \times F - T$



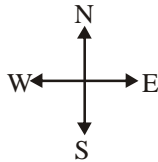
$W + R \rightarrow$ W is the father of R.
 $R \times F \rightarrow$ R is the brother of F.
 $F - T \rightarrow$ F is the sister of T.
 So, F is the daughter of W.

39. (3) 9th to the left 21st from left means 12th from the left end of the arrangement, i.e., 6.

40. (4)

41-45. Row 1. \downarrow P V S T R Q

Row 2. \uparrow C F A E B D



41. (4) 42. (1) 43. (2)

44. (2) $P \xrightarrow{+2} A, S \xrightarrow{+2} B$

Hence $T \xrightarrow{+2} D$

45. (3)

46-50.

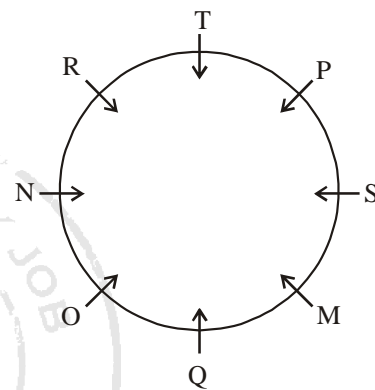
	Grade	Game
A	National	Badminton
O	International	Cricket
C	International	Cricket
D	National	Badminton
E	International	Badminton
F	International	Cricket
G	National	Badminton
H	National	Cricket

row 1	A	B
row 2	G	F
row 3	H	E
row 4	C	D

46. (4) 47. (1) 48. (4) 49. (2) 50. (4)

51-53.

M	Kerala	English
N	Andhra Pradesh	English
O	Maharashtra	English
P	Uttar Pradesh	Hindi
Q	Bi har	Hindi
R	Chandigarh	Punjabi
S	Haryana	Punjabi
T	Punjab	Punjabi



51. (4) 52. (2) 53. (2)
 54. (5) 55. (5)
 56. (3) 57. (4) 58. (1) 59. (5) 60. (2)

61-65.

$\$ \rightarrow \geq$	$\delta \rightarrow =$
$@ \rightarrow >$	$* \rightarrow \leq$
$\# \rightarrow <$	

61. (5) $N = B, B \geq W, W < H, H \leq Q$

So, $N = B \geq W < H \leq M$

I. $M > W$ (True)

II. $H > N$ (False)

III. $W = N$ (False) **or**

IV. $W < N$ (False)

$\therefore N \geq W$

So, either III or IV and I are true.

62. (1) $R \leq D, D \geq J, J < M, M > K$

So, $R \leq D \leq J < M > K$

I. $K < J$ (False)

II. $D > M$ (False)

III. $R < M$ (False)

IV. $D > K$ (False)

So, none is true.

63. (2) $H > T, T < F, F = E, E \leq V$

So, $H > T < F = E \leq V$

- I. $V \geq F$ (True)
 II. $E > T$ (True)
 III. $H > V$ (False)
 IV. $T < V$ (True)

So, I, II and IV are true.

64. (5) $D < R, R \leq K, K > F, F \geq J$

So, $D < R \leq K > F \geq J$

- I. $J < R$ (False)
 II. $J < K$ (True)
 III. $R < F$ (False)
 IV. $K > D$ (True)

So, II and IV are true.

65. (5) $M \geq K, K > N, N \leq R, R < W$

So, $M \geq K > N \leq R < W$

- I. $W > K$ (False)
 II. $M \geq R$ (False)
 III. $K > W$ (False)
 IV. $M > N$ (True)

So, only IV is true.

66. (4) Maximum marks in examination = 875

$$\text{Ritu marks} = 875 \times \frac{56}{100} = 490$$

$$\text{and Smita's marks} = 875 \times \frac{92}{100} = 805$$

and Rina's marks = 634

Hence, required average marks

$$= \frac{490 + 805 + 634}{3} = \frac{1923}{3} = 643$$

67. (4) Total no. of employees = 4800

$$\text{Male people} = 4800 \times \frac{45}{100} = 2160$$

Hence the no. of people younger than 25 yrs.

$$= 2160 \times \frac{40}{100} = 864$$

68. (1) $\frac{{}^5C_4}{{}^8C_4} = \frac{5}{70} = \frac{1}{14}$

69. (2) Ravina's monthly income = $32000 \times \frac{115}{100} = 36800$

Ramola's monthly income = $3 \times 36800 = 110400$

\therefore Ramola's annual income = $110400 \times 12 = \text{₹} 1324800$

70. (4) Let the C.P. of the article = ₹ 100

The labelled price = ₹ 130

$$\text{S.P.} = 130 - \left(\frac{10}{100} \times 130 \right) = 130 - 13 = 117$$

Gain = $117 - 100 = 17$

% Profit = 17%

71. (3) Perimeter of the circle = length of the wire

$$= 2 \times \frac{22}{7} \times 84 = 528 \text{ cm}$$

Side of the square = 132 cm

72. (4) Let number of student be 100.

Then, number of students who failed
 $= 35 + 25 - 10 = 50$

Hence, number of students who passed
 $= 100 - 50 = 50$

Percentage of students who passed = 50%

73. (1) $(17)^2 - (13)^2 = 289 - 169 = 120$

Now, $120 + 1 = (11)^2$

Required number is 1

74. (3) Required Probability

$$= \frac{{}^2C_1 \times {}^3C_2 + {}^2C_2 \times {}^3C_1}{{}^5C_3} = \frac{(2 \times 3 + 1 \times 3)}{10} = \frac{6+3}{10} = \frac{9}{10}$$

75. (5) $495 \times \frac{4}{9} - 516 \times \frac{5}{12} = 220 - 215 = 5$

76. (1) Suppose, the monthly salary of Ms. Deepti is x rupees.

$$x \times \frac{11}{100} = 5236 \Rightarrow x = \frac{5236 \times 100}{11} = \text{₹} 47600$$

\therefore Total annual amount invested by Ms. Deepti

$$= 47600 \left(\frac{11}{100} + \frac{19}{100} + \frac{7}{100} \right) \times 12$$

$$= 47600 \times \frac{37}{100} \times 12 = 476 \times 37 \times 12 = \text{₹} 211344$$

77. (4) Cannot be determined.

78. (5) Required difference

$$= P \left(\frac{R}{100} \right)^2 = 985 \left(\frac{14}{100} \right)^2 = 985 \times \frac{196}{10000} = \text{₹} 19.306$$

79. (2) Suppose the number are x and x + 2

$$\therefore x(x + 2) = 9408$$

$$\Rightarrow x^2 + 2x - 9408 = 0$$

$$\Rightarrow x^2 + 98x - 96x - 9408 = 0$$

$$\Rightarrow x(x + 98) - 96(x + 98) = 0$$

$$\Rightarrow (x - 96)(x + 98) = 0$$

$$\Rightarrow x = 96$$

\therefore Largest number = $x + 2 = 98$ (Largest number)

80. (3) $? = 4500 \times \frac{5}{9} \times \frac{36}{100} \times \frac{27}{100} = 243$

81. (4) $R = \frac{12000 \times 100}{40000 \times 3} \left[R = \frac{SI \times 100}{P \times T} \right]$
 $= 10\%$

$$\begin{aligned}
 CI &= P \left[\left(1 + \frac{r}{100} \right)^t - 1 \right] = 40000 \left[\left(1 + \frac{10}{100} \right)^3 - 1 \right] \\
 &= 40000 \left[\left(\frac{11}{10} \right)^3 - 1 \right] = 40000 \left[\frac{1331 - 1000}{1000} \right] \\
 &= 40000 \left[\frac{331}{1000} \right] = 40 \times 331 = \text{₹ } 13240
 \end{aligned}$$

82. (5) Average marks obtained by all students in English

$$= \frac{50 + 46 + 52 + 48 + 60 + 53}{6} = \frac{309}{6} = 51.5$$

83. (2) Average marks obtained by all students in Science

$$= \frac{100 + 96 + 112 + 88 + 92 + 108}{6}$$

$$= \frac{596}{6} = 99.33$$

Percentage of marks obtained by all student in Science

$$= \frac{99.33}{120} \times 100\% = 82.78\%$$

84. (5) Required percentage

$$\begin{aligned}
 &= \left(\frac{62}{75} \times 100 + \frac{67}{75} \times 100 + \frac{88}{120} \times 100 + \right. \\
 &\quad \left. \frac{108}{150} \times 100 + \frac{48}{80} \times 100 + \frac{34}{60} \times 100 \right)
 \end{aligned}$$

$$= (82.67 + 89.33 + 73.33 + 72 + 60 + 56.67)\%$$

$$= \left(\frac{434}{75 + 75 + 120 + 150 + 80 + 60} \right) \times 100$$

$$= \frac{434}{560} \times 100 = 77.5\%$$

85. (3) Average marks in Maths

$$= \frac{117 + 132 + 120 + 108 + 140 + 116}{6}$$

$$= \frac{733}{6} = 122.17$$

Marks obtained by T in Maths = 120

Which is approximately equal to average marks.

86. (4) C in 2012 → 9000

C in 2011 → 8000

% increase

$$= \frac{9000 - 8000}{8000} \times 100 = \frac{1000}{8000} \times 100 = 12.5\%$$

87. (1) District B

$$\begin{aligned}
 &= 5000 + 4000 + 7000 + 6000 + 4000 + 7000 = 33000 \\
 &2013 \text{ (in three districts)} = 8000 + 6000 + 7000 = 21000 \\
 &\text{Difference} = 33000 - 21000 = 12000
 \end{aligned}$$

88. (2) Average

$$= \frac{3000 + 5000 + 6000 + 8000 + 7000 + 5000}{6} = \frac{34000}{6}$$

$$\cong 5666$$

89. (3) 2010 ⇒ 3000 + 5000 + 6000 = 14000

$$2011 \Rightarrow 5000 + 4000 + 8000 = 17000$$

$$2012 \Rightarrow 6000 + 7000 + 9000 = 22000$$

$$2013 \Rightarrow 8000 + 6000 + 7000 = 21000$$

$$2014 \Rightarrow 7000 + 4000 + 5000 = 16000$$

$$2015 \Rightarrow 5000 + 7000 + 6000 = 18000$$

2013 is the second highest.

90. (1) 2015 (A + B) = 5000 + 7000 = 12000

$$2013 (A) = 8000$$

$$\Rightarrow \frac{12000}{8000} \times 100 = 150\%$$

91. (1) Days Women

$$\begin{array}{cc}
 18 \uparrow & 42 \downarrow \\
 21 & x
 \end{array}$$

$$21 : 18 :: 42 : x$$

$$\therefore x = \frac{18 \times 42}{21} = 36$$

92. (2) Suppose the age of Sulekha and Arunima is 9x yr and 8x yr.

$$\therefore \frac{9x + 5}{8x + 5} = \frac{10}{9}$$

$$81x + 45 = 80x + 50$$

$$81x - 80x = 50 - 45 ; x = 5$$

$$\therefore \text{Difference} = 9 \times 5 - 8 \times 5 = 45 - 40 = 5 \text{ yr}$$

93. (1) $\frac{?}{171} = \frac{76}{?}$

$$\therefore (?)^2 = 171 \times 76 \Rightarrow ? = \sqrt{171 \times 76}$$

$$\Rightarrow ? = \sqrt{12996} \Rightarrow ? = 114$$

94. (3) Suppose total amount was ₹ x

$$\therefore x - 68357 - 25675 = x \times \frac{28}{200}$$

$$\Rightarrow x - \frac{28x}{100} = 94032 \Rightarrow \frac{72x}{100} = 94032$$

$$\Rightarrow x = \frac{94032 \times 100}{72} = 130600$$

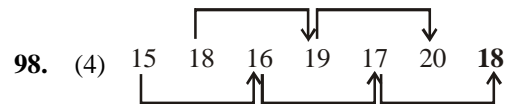
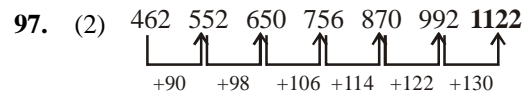
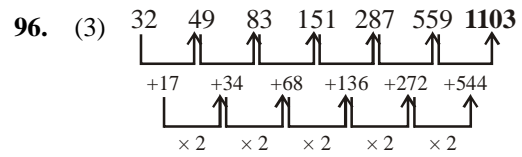
$$\Rightarrow x = \text{T } 130600$$

95. (2) Suppose the number is x.

$$\Rightarrow x \times \frac{5}{6} = 720 \Rightarrow x = \frac{720 \times 6}{5}$$

$$\therefore x = 864$$

$$\therefore x = 864 \times \frac{45}{100} = 388.8$$



99. (1) 100. (5)

