IBPS PO PRELIMINARY GRAND TEST : IPP-170511 - HINTS AND SOLUTIONS

ANSWER KEY

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

1. (1) 'Cut and 'Reduce' are same in the meaning as per the passage.
2. (2) It is true of PDS that it has remained effective only in the cities.
3. (3) Absence of proper PDS is the main reason for the insufficient supply of enough food to the poorest.
4. (4) PDS must be made target group oriented in order to make it effective.
5. (1) The main purpose of public policy in the long run is good standard of living through productive employment.
6. (2) Author has been argumentative in the passage.
7. (5) 'Power' and 'Capacity' are similar in meaning in the passage.
8. (4) High administrative cost and wastage are the major parts that consume allocated food subsidy.

9. (3) 'Point' and 'Extent' are the words with similar meaning.
10. (1) 'System' and 'Mechanism' are the words with similar meaning.
11. (1)   **12.** (3)   **13.** (4)   **14.** (3)   **15.** (2)
16. (3) For the second blank only suitable word is 'drought'. But, 'failure' is suitable in the first blank. So, option (3) is appropriate.
17. (3) 'Sincerity' indicates that the does has been 'determined'. So, option (3) is the suitable choice in this sentence.
18. (4) 'Grumbled' is the suitable usage in the first blank that gives the sense of getting angry when favour is not shown. So, option (4) is suitable here.
19. (5) 'Solicit' and 'Supplicate' are the similar words which means 'to ask for something'.
20. (1) 'Reconcile' and 'Accommodate' are the words with similar meaning.
21. (5)   **22.** (1)   **23.** (4)   **24.** (3)   **25.** (1)
26. (2)   **27.** (1)   **28.** (2)   **29.** (4)   **30.** (1)
31. (5) SHE $\Rightarrow$ EHS; AND $\Rightarrow$ ADN; TWO $\Rightarrow$ OTW; WIT $\Rightarrow$ ITW; GUM $\Rightarrow$ GMU.
32. (5) Second word $\Rightarrow$ Fifth word $\Rightarrow$ GUM.

A $\boxed{\text{B C D E F}}$ G

33. (5)
34. (5)

3 $ 9 5 # 1
↓ ↓ ↓ ↓ ↓ ↓
Y E N A D Y

Condition (i) follows.

35. (3)

8 % © 3 # 5
↓ ↓ ↓ ↓ ↓ ↓
A R H F D A

Condition (iv) follows.

36. (4)

© 8 1 4 3 * $
↓ ↓ ↓ ↓ ↓ ↓ ↓
H I B J F P E

Condition (iv) follows.

37. (2) All squares are rights + All rings are circles = A + A= A = All squares are circles → conversion Some circles are squares. Hence, conclusion II (Atleast some circles are squares', i.e., 'Some circles are squares') follows. Again, No ellipse is a circle + Some circles are rings (converse of 'All rings are circles') = E + I = O* = Some rings are not ellipses. Now, draw the all possible venn diagrams for the above conclusion as given below
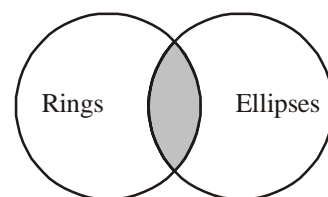
[Some rings are ellipses.]

We don't need to draw other possibilities.
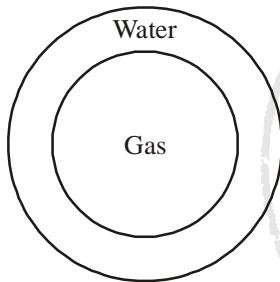
Therefore, the possibility, i.e., Conclusion I follows.

38. (4) No house is an apartment + Some apartment are bungalows (conversion of some bungalows are apartments) = E + I = O* = Some bungalows are not houses. Therefore neither Conclusion I nor II follows.

39. (1) Some gases are liquids + All liquids are water = I + A = I = Some gases are water. Now, draw al possible venn diagrams for the above conclusion as given below.
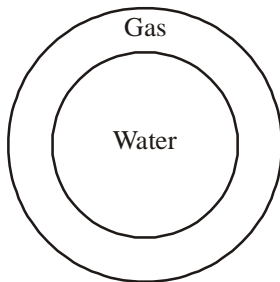
Possibility I
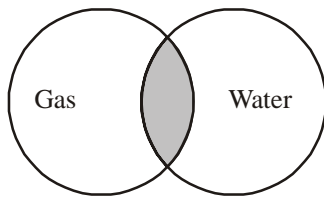
[Some gases are water.]

Possibility II

[all gases are water.]

Possibility III

[All water is gas.]

It is clear from the above Conclusion I, i.e., 'All gases being water is a possibility follows. Again, since there are no negative statements, therefore Conclusion II does not follow.

40. (2) All seconds are hours (A) conversion → Some hours are seconds (I) + No second is a day (E) = A + E = O = Some hours are not days. Therefore, Conclusion I does not follow. Again, All minutes are seconds + All seconds are hours = A + A = A = All minutes are hours

→ conversion → Some hours are minutes (I). Therefore, Conclusion II follows.

41. (1)

42-46. According to the information, the sitting arrangement of eight persons around a circular table is shown below.
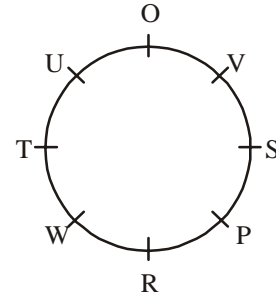
42. (2) T is to the immediate left of W.

43. (4) Three persons – P, S and V are seated between R and Q. if we go anti-clockwise from R to Q.

44. (1) V is second to the right of S.

45. (3) Q is sitting second to the right of S.

46. (5) Only V will remain unchanged.

47-50.
$\underline{P}$	$\underline{Q}$	$\underline{S}$	$\underline{T}$	$\underline{R}$	$\underline{Q}\downarrow$
$\underline{C}$	$\underline{F}$	$\underline{A}$	$\underline{E}$	$\underline{B}$	$\underline{D}\uparrow$

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

51. (3)   **52.** (1)   **53.** (4)   **54.** (2)

55. (5) M got the lowest marks.

56. (2)   **57.** (4)   **58.** (4)   **59.** (4)

60. (3)   **61.** (5)   **62.** (3)

63. (3)   **64.** (4)   **65.** (2)

66. (5) I. $\sqrt{25x^2} - 125 = 0 \Rightarrow \sqrt{25x^2} = 125$

$$\Rightarrow x^2 = \frac{125 \times 125}{25} = 625$$

$$\therefore x = \sqrt{625} = \pm 25$$

II. $\sqrt{361}y + 95 = 0$

$\Rightarrow 19y = -95 \Rightarrow y = -5$

Hence, relationship between x and y cannot be established.

67. (3) I. $\dfrac{5}{7} - \dfrac{5}{21} = \dfrac{\sqrt{x}}{42} \Rightarrow \dfrac{15-5}{21} = \dfrac{\sqrt{x}}{42}$

$$\Rightarrow \sqrt{x} = \frac{10}{21} \times 42 = 20$$

$\therefore$ x = 20 × 20 = 400

II. $\dfrac{\sqrt{y}}{4} + \dfrac{\sqrt{y}}{16} = \dfrac{250}{\sqrt{y}}$

$$\Rightarrow \frac{4\sqrt{y} + \sqrt{y}}{\sqrt{16}} = \frac{250}{\sqrt{y}}$$

$$\Rightarrow 5\sqrt{y} \times \sqrt{y} = 250 \times 16$$

$$\Rightarrow y = \frac{250 \times 16}{5} = 800$$

Hence, y > x

68. (1)   I. $(625)^{\frac{1}{4}} x + \sqrt{1225} = 155$

$$\Rightarrow (5^4)^{\frac{1}{4}} x + 35 = 155$$
$$\Rightarrow 5x = 155 - 35$$
$$\Rightarrow 5x = 120 \Rightarrow x = \frac{120}{5} = 24$$

II. $\sqrt{196}\, y + 13 = 279$

$$\Rightarrow 14y = 279 - 13 = 266$$
$$\Rightarrow y = \frac{266}{14} = 19$$

Hence, x > y

69. (1)   I. $5x^2 - 18x + 9 = 0$
$$\Rightarrow 5x^2 - 15x - 3x + 9 = 0$$
$$\Rightarrow 5x(x - 3) - 3(x - 3) = 0$$
$$\Rightarrow (5x - 3)(x - 3) = 0$$

$$\Rightarrow x = \frac{3}{5} \text{ or } 3$$

II. $3y^2 + 5y - 2 = 0$
$$\Rightarrow 3y^2 + 6y - y - 2 = 0$$
$$\Rightarrow 3y(y + 2) - 1(y + 2) = 0$$
$$\Rightarrow (3y - 1)(y + 2) = 0$$

$$\Rightarrow y = \frac{1}{3} \text{ or } -2$$

Hence, x > y

70. (3)   I. $\dfrac{13}{\sqrt{x}} + \dfrac{9}{\sqrt{x}} = \sqrt{x}$

$$\Rightarrow 13 + 9 = \sqrt{x} \times \sqrt{x} = x \Rightarrow x = 22$$

II. $y^4 - \dfrac{(13 \times 2)^{\frac{9}{2}}}{\sqrt{y}} = 0$

$$\Rightarrow y^{\frac{9}{2}} = (26)^{\frac{9}{2}} \Rightarrow y = 26$$

Hence, x < y

71. (2)   Car speed = $\dfrac{720}{9} = 80 \text{ km/hr}$

Speed of bus = $\dfrac{3}{4} \times 80 = 60 \text{ kmph}$

$15 \rightarrow 60 \text{ kmph}$

$27 \rightarrow ? \text{ kmph}$

Speed of train = $\dfrac{27}{15} \times 60 = 108 \text{ kmph}$

Distance covered by train in 7 hrs = $108 \times 7 = 756$ km.

72. (3)   Raman's age = 3 (Raman's daughter's age)

Raman's age = $\dfrac{9}{13} \times$ Raman's Mother's age

Sum of their ages
$\Rightarrow$ Raman's age + Raman's Mother's age + Raman's Daughte's age

$$\Rightarrow R + \frac{13R}{9} + \frac{R}{3} = 125$$

$$\Rightarrow \frac{9R + 13R + 3R}{9} = 125 \Rightarrow \frac{25R}{9} = 125$$

$\therefore$ Raman's age = 45
Raman's daughter's age = 15
Raman's Mothers's age = 65
Difference = 65 – 15 = 50 years.

73. (4)   Ravi scored 225 marks and failed by 15.
Passing marks = 225 + 15 = 240
$25\% \rightarrow 240$
$100\% \rightarrow ?$

Maximum marks = $\dfrac{100}{25} \times 240 = 960$

74. (3)   C.P. of 8 kg almonds = C.P. of 50 kg. apple
Cost of 19 kg mangoes = 456
C.P. of 1 kg apple = 2 × C.P. of 2 kg mangoes
$19 \text{ kg} \rightarrow 456$
$2 \text{ kg} \rightarrow ?$

2 kg of mango $\Rightarrow \dfrac{2}{19} \times 456 = 48$

1 kg apple = 96
4 kg apple = 96 × 4 = 384

3 kg almond = $\dfrac{3}{8} \times 50 \times 96 = 1800$

Total cost = 3 kg of almond + 4 kg of apple
           = 1800 + 384 = 2184

75. (2) $S^2 = 1225 \Rightarrow S = 35$

Side square = $\dfrac{1}{2} \times$ (Diameter of circle)

$\Rightarrow 35 = \dfrac{1}{2} \times \text{radius}$

Radius = 35

Area of circle = $\pi r^2 = \dfrac{22}{7} \times 35 \times 35 = 3850$

76. (2) 1000 ml → 44

1500 ml → ?

Cost Price of one day (milk) = $\dfrac{1500}{1000} \times 44 = 66$

1 day → 66

20 days → ?

Total amount = 20 × 66 = 1320.

77. (4) Raju runs on Monday = 1250 m

Raju runs on Tuesday = 1500 m

Raju runs on Wednesday = 1500 m

Raju runs on Thursday = 1500 m

Raju runs on Friday = 1250 m

Raju runs on Saturday = 1500 m

In a week he runs = 1250 + 1500+ 1500+ 1500 + 1250 + 1500 = 8500 m

In 3 weeks he runs = 3 × 8500 = 25500 m i.e. 25.5 km.

78. (5) Let the smalles odd number of set A is x.

Then, x + x + 2 + x + 4 + x + 6 + ... + x + 16 = 621

9x + 72 = 621 $\Rightarrow$ 9x = 621 – 72 = 549

$\therefore$ x = $\dfrac{549}{9} = 61$

Lowest even n o. of different set = 61 + 15 = 76

Reqired sum = 76 + 78 + 80 + 82 + 84 + 86 = 486

79. (2) Total students = 450.

Girls = $\dfrac{12}{100} \times 250 = 30$

Boys = 250 – 30 = 220

1 girl fee → 450

30 girls fee → ?

30 girls fee = 30 × 450 = 13500.

Boys fee = $\dfrac{124}{100} \times 450 \times 220 = 122760$

Total boys and girls fee = 122760 + 13500 = 136260

80. (5) Average speed of car = $\dfrac{588}{6} = 98 \text{ km / hr}$

Average speed of train = $98 \times \dfrac{10}{7} = 140 \text{ km / hr}$

$\therefore$ Distance covered by train in 13 hrs.

= 140 × 13 = 1820 km.

81. (4) Total amount spent = $\left(\dfrac{591}{3} + \dfrac{45}{60} \times 780 \right)$ paisa

= (197 + 585) = 782 paisa = ₹ 7.82

82. (1) C.P. = 46000

100% → 46000

88 % → ?

Selling price = $\dfrac{88}{100} \times 46000 = 40480$

Loss = 46000 – 40480 = 5520

100% → 40480

112% → ?

Selling Price = $\dfrac{112}{100} \times 40480 = 45337.6$

Profit = 45337.6 – 40480 = 4857.60

Loss = 5520 – 4857.60 = 662.40

83. (1) Debt = 400x, Equity = 500x

Total = 9000x

Earning = 30% of 900x = 270x

Total amont of money invested = 1170x

Debt = $\dfrac{6}{13} \times 1170x = 540x$

Equity = $\dfrac{7}{13} \times 1170x = 630x$

630x = 94500

500x = $\dfrac{500}{630} \times 94500 = 75000$

84. (5) Let first number x, second number y, third number z.

$\dfrac{6}{11} \times x = \dfrac{22}{100} \times y$

$y = \dfrac{1}{4} \times z$ and y = 2400

$\therefore$ y = $\dfrac{1}{4} \times 2400 = 600$

$x = \dfrac{22}{100} \times 600 \times \dfrac{11}{6} = 22 \times 11$

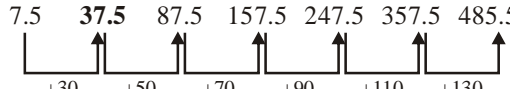$\Rightarrow \dfrac{45}{100} \times 22 \times 11 = 108.9$

85. (4) The total amount distributed among 45 officers

= 45 × ₹ 25000 = ₹1125000

Let the amont distributed to 80 clerks be x.

Then $\dfrac{1125000}{x} = \dfrac{5}{3} \Rightarrow x = 675000$

$\therefore$ Total Profit = 1125000 + 675000 = ₹ 18 lakhs

86. (5)　7.5　**37.5**　87.5　157.5　247.5　357.5　485.5

| | +30 | +50 | +70 | +90 | +110 | +130 |

Right number = 7.5 + 30 = 37.5.

So, wrong number = 47.5

87. (3)

1500   1581   1664   1749   **1836**   1925   2016

+81   +83   +85   +87   +89   +91

Right number = 1836. So, wrong number = 1833.

88. (1)

1331   2197   3375   **4913**   6859   9261   12167

$(11)^3$ $(13)^3$ $(15)^3$ $(17)^3$ $(19)^3$ $(21)^3$ $(23)^3$

Right number = $(17)^3$ = 4913.
So, wrong number = 4914.

89. (3)

13   16   21   **28**   39   52   69

+3   +5   +7   +11   +13   +17

Right number = 21 + 7 = 28. So, wrong number = 27.

90. (3)   **91.** (1)   **92.** (4)   **93.** (2)   **94.** (1)

95. (2)   Speed of boat = 7.5 km/h
And Speed of steam = 2.5 km/h
Down stream speed of boat = 7.5 + 2.5 = 10 km/h
And upstream speed of boat = 7.5 – 2.5 = 5 km/h
Hence, total taken time

$$= \frac{15}{10} + \frac{15}{5} = 1.5 + 3 = 4.5 \text{ h}$$

96. (2)   **97.** (2)   **98.** (5)   **99.** (4)   **100.** (1)