

## **KD Campus**

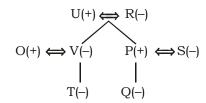
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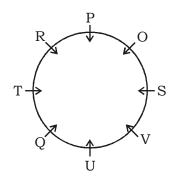
## IBPS PO PHASE - I - 187 (SOLUTION)

#### REASONING

### (1-5):

#### Family tree





- 1. (3)
- 2. (1)
- 3. (4)

- 4. (3)
- 5. (2)

#### 6. (4) Given statements

$$C \ge D = E < G$$

.....(i)

 $L \ge T > N = G$ 

....(ii)

Combining both statements

$$C > D = E < G = N < T < L$$

I.  $T > D \rightarrow True$ 

II.  $L > E \rightarrow True$ 

III.  $C \ge T \rightarrow False$ 

IV. D < E  $\rightarrow$  False

Only I and II are true

#### 7. (4) Given statements

$$W \leq V = Q < R \qquad \dots (i)$$

$$P > S = T > W$$

.....(ii)

Combining both statements

$$P > S = T \ge W \le V = Q \le R$$

I.  $P \leq Q \rightarrow False$ 

II.  $S \le V \rightarrow False$ 

III.  $R < T \rightarrow False$ 

IV.  $P > V \rightarrow False$ 

None is true.

## 8. (4) Given statements

$$H \ge W < M$$

$$N = P > H$$

 $K \le L < N$ 

...(i) ...(ii) ...(iii) Combining all these statements

 $K \le L < N = P > H \ge W < M$ 

I.  $N > W \rightarrow True$ 

II.  $M \ge N \rightarrow False$ 

III.  $K = H \rightarrow False$ 

IV.  $P > L \rightarrow True$ 

Only I and IV are true.

(2) Given statements

$$G = C > P = T$$

...(i)

U < N = J < G

Combining both statements

 $U \le N = J < G = C \ge P = T$ 

I.  $U \leq P \rightarrow False$ 

II.  $G > N \rightarrow True$ 

III.  $G \ge T \rightarrow True$ 

IV.  $U < G \rightarrow True$ 

Only II, III and IV are true.

## 10. (2) Given statements

 $R \le S < Q = P$ 

...(i)

T = U > E > P

...(ii)

14. (3)

Combining both statements

 $R \leq S < Q = P \leq E < U = T$ 

I.  $S > T \rightarrow False$ 

II.  $E < Q \rightarrow False$ 

III.  $S < U \rightarrow True$ 

IV.  $T > R \rightarrow True$ 

Only III and IV are true

#### (11-15):

Person	Floor	Game
J	7	Badminton
I	6	Polo
N	5	Chess
L	4	Hockey
M	3	Rugby
О	2	Cricket
K	1	Ludo

11. (4) 12. (1) 13. (2)

15. (4)

(16-20):

**Input** : all in one 27 79 every 63 58 90 54

**Step I**: all in one 27 79 every second 63 58

54 90

Step II : all every in one 27 second 63 58 54

90 79



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**Step III:** all every in one 27 second 58 54 90

79 63

 $\textbf{Step IV} \ : \ \ \text{all every in one } 27 \ \text{second} \ 54 \ 90 \ 79$ 

63 58

**Step V**: all every in one second 27 90 79 63

58 54

**Step VI:** all every in one second 90 79 63 58

54 27

Hence, in this illustration step VI is the final step.

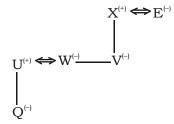
16. (1)

17. (3)

18. (5)

19. (5) 20. (3)

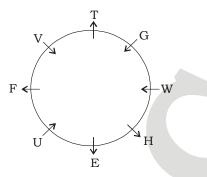
(21-23):



21. (3) **(24-28)**:

22. (3)

23. (3)



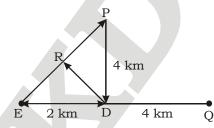
24. (1)28. (2)

25. (2)

26. (2)

27. (4)

(29-30):



29. (4)

30. (4)

(31-35):

31. (3) **Statement:** 



#### Conclusion:

I. Can't say

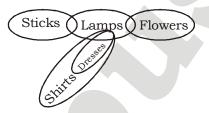
II. Can't say

I. True

IV. True

Only III and IV follow.

32. (1) **Statement:** 



#### Conclusion:

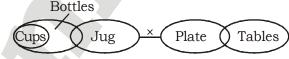
I. Can't sayIII. Can't say

II. Can't say

IV. Can't say

None follows.

33. (5) **Statement:** 



#### Conclusion:

I. Can't say

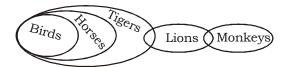
II. Can't say

III. Can't say

IV. Can't say

But after comparing, we find that either I or III is true.

34. (1) **Statement:** 



#### **Conclusion:**

I. True

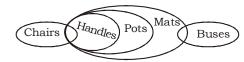
II. Can't say

III. True

IV. Can't say

Only I and III follow.

35. (2) **Statement:** 



### Conclusion:

I. Can't say

II. True

III. True

IV. True

Only II, III and IV follow.

## Maths

36. (4) Let there are n no. of males

$$(n + 15) \times 18 = 240 + 20n$$

 $\Rightarrow$  n = 15



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37. (2) Let Deepak's present age = (7x + 7) years Arun's present age = (5x + 7) years ATO,

7x - 5x = 14x = 7

- :. Deepak's present age = 49 + 7 = 56 years
- 38. (2) Difference between C.I. & S.I. = 450

So,  $450 = \frac{p \times 15 \times 15}{100 \times 100}$ 

 $\Rightarrow$  P = 20000

So, amount invested = Rs. 20,000

- 39. (3) Total letters = D, R, A, S, T, I, C (7) Total vowels = A, I (2)
  - :. Required no. of ways = 6! × 2! = 1440
- 40. (1) Marking of balls are 1, 5, 7, 10, 14, 15, 20

Required probability =  $\frac{4}{20} + \frac{2}{20} = \frac{1}{s} + \frac{1}{10}$ 

 $=\frac{3}{10}$ 

- 41. (1) Required difference = (15% 5%) of 500 lakhs = 50 lakhs
- 42. (1) Fund left from government agencies
  = 45% of 500 lakhs 20% of 45% of 500 lakhs = 180 lakhs
- 43. (2) Required percentage =  $\frac{15}{35} \times 100 = 43\%$
- 44. (3) Total amount used by school for payment

 $= \frac{30}{100} \times 500 \, \text{lakhs}$ 

= Rs. 150 lakhs

- 45. (4) Amount acquired by school from government agencies = 45 × 5 = 225 lakhs
- **46. (5)** 3 5 8 12 17 **23** 30 +2 +3 +4 +5 +6 +7
- 47. (3)  $1^{3} \Rightarrow 1$  ;  $2^{3} \Rightarrow 8$   $3^{3} \Rightarrow 27$  ;  $4^{3} \Rightarrow 64$   $5^{3} \Rightarrow 125$  ;  $6^{3} \Rightarrow 216$  $7^{3} \Rightarrow 343$
- 48. (1) 18 21 16 23 14 **25**

- 50. (5) 4.5 7 18 68 335 2004 ×2-2 ×3-3 ×4-4 ×5-5 ×6-6
- 51. (3) Suppose the ages of father and son are 5x year and 2x year

After four years, the age of son = (2x + 4) year

After four years, the age of mother = (4x + 8) year

So, the present age of mother = (4x + 4) year

Ratio of the age of father and mother = 5x : 4x + 4

Since, data is insufficient, so cannot be determined.

52. (1) Amount of mixture in the container = 60 liters

Given, the ratio of water to spirit is 4:1 Therefore, Amount of water

$$=\frac{4}{5}\times 60 = 48$$

Amount of spirit =  $\frac{1}{5} \times 60 = 12$ 

Let the amount of spirit added be x Therefore,

 $\frac{\text{Amount of water}}{\text{Amount of spirit}} = \frac{3}{2}$ 

$$\frac{48}{12 + x} = \frac{3}{2}$$

96 = 36 + 3x3x = 60; x = 20

53. (1) If the investment is the ratio of 8:7 then the profit will be in the ratio of 8:7

so,  $\frac{8}{15} \times 6000 = 3200 \rightarrow \text{A's share}$ 

54. (2) Initial ratio of red and blue marbles = 99:1

50 parts = 100 marbles

Final ratio of Red and blue marbles becomes 98:2 = 49:1

As only red marbles are taken out, therefore amount of blue marbles remain constant. Thus, it can be seen that 99 - 49 = 50 parts were taken out. These 50 parts are equal to number of red marbles taken out.

We are given total initial marbles = 200 = 99 + 1 = 100 parts 1 part = 2 marbles 55. (2) Let the income be  $\rightarrow$  100 So, 100  $\rightarrow$  120

And saving is 10 so, expenditure raises from  $90 \rightarrow 110$ 

Increase 
$$\rightarrow \frac{20}{90} \times 100 = 22.22\%$$

56. (5) I.  $3x^2 - 38\sqrt{7}x + 728 = 0$ 

$$\Rightarrow 3x^2 - (26\sqrt{7} + 12\sqrt{7})x + 728 = 0$$

$$\Rightarrow 3x^2 - 26\sqrt{7} - 12\sqrt{7}x + 104(\sqrt{7})^2 = 0$$

$$\Rightarrow$$
  $(3x - 26\sqrt{7}) - 4\sqrt{7} (3x - 26\sqrt{7}) = 0$ 

$$\Rightarrow$$
  $(x - 4\sqrt{7}) (3x - 26\sqrt{7}) = 0$ 

$$\Rightarrow$$
 x =  $4\sqrt{7}$ ,  $26\sqrt{7/3}$  = 0

$$\Rightarrow$$
 x =  $4\sqrt{7}$ , 8.6 $\sqrt{7}$  ( $\sqrt{7}$  = 2.646)

- $\Rightarrow$  x = 10.584, 22.7556
- II.  $3y^2 104y + 805 = 0$

$$\Rightarrow 3y^2 - 104y + 805 = 0$$

$$\Rightarrow$$
 3y<sup>2</sup> - 69y - 35y + 805 = 0

$$\Rightarrow$$
 3y (y - 23) - 35(y - 23) = 0

$$\Rightarrow$$
 (3y - 35) (y - 23) = 0

$$\Rightarrow$$
 y = 35/3, 23

$$\Rightarrow$$
 y = 11.66, 23

Hence, No relation

57. (5) I.  $36x^2 - 19x - 7 = 0$ 

$$\Rightarrow 36x^2 - (28 - 9)x - 7 = 0$$

$$\Rightarrow 36x^2 - 28x + 9x - 7 = 0$$

$$\Rightarrow 4x(9x-7) + 1(9x-7) = 0$$

$$\Rightarrow$$
 (9x - 7) (4x + 1) = 0

$$\Rightarrow x = \frac{7}{9}, \frac{1}{4}$$

II.  $12y^2 - 5y - 2 = 0$ 

$$\Rightarrow 12y^2 - (8-3)y - 2 = 0$$

$$\Rightarrow 12y^2 - 8y + 3y - 2 = 0$$

$$\Rightarrow$$
 4y(3y - 2) + 1(3y - 2) = 0

 $\Rightarrow$  (3y - 2) (4y + 1) = 0

$$\Rightarrow y = \frac{2}{3}, -\frac{1}{4}$$

58. (5) I.  $2x^2 + 6\sqrt{7}x - 56 = 0$ 

$$\Rightarrow 2(x^2 + 3\sqrt{7}x - 28) = 0$$

$$\Rightarrow x^2 + 3\sqrt{7}x - 28 = 0$$

$$\Rightarrow$$
  $x^2 + (4\sqrt{7} - \sqrt{7})x - 28 = 0$ 

$$\Rightarrow x^2 + 4\sqrt{7}x - \sqrt{7}x - 28 = 0$$

$$\Rightarrow x(x + 4\sqrt{7}) - \sqrt{7}(x + 4\sqrt{7}) = 0$$

$$\Rightarrow (x - \sqrt{7})(x + 4\sqrt{7}) = 0$$

$$\Rightarrow$$
 x =  $\sqrt{7}$ ,  $-4\sqrt{7}$ 

II.  $2y^2 - 9y + 7 = 0$ 

$$\Rightarrow 2v^2 - (7 + 2)v + 7 = 0$$

$$\Rightarrow 2y^2 - 7y - 2y + 7 = 0$$

$$\Rightarrow 2y^2 - 7y - 2y + 7 = 0$$

$$\Rightarrow$$
 y(2y - 7) -1(2y - 7) = 0

$$\Rightarrow$$
  $(2y-7)(y-1)=0$ 

$$\Rightarrow$$
 y =  $\frac{7}{2}$ , 1

59. (5) I.  $(\sqrt{26}) x^2 + (26^{3/2} - 1)x - 26 = 0$ 

$$\Rightarrow (\sqrt{26}) x^2 + 26 \sqrt{26} x - x - 26 = 0$$

$$\Rightarrow \frac{\sqrt{26}x^2}{\sqrt{26}} + \frac{26\sqrt{26}x}{\sqrt{26}} - \frac{x}{\sqrt{26}} - \frac{26}{\sqrt{26}} = 0$$

$$\Rightarrow x^2 + 26x - \frac{x}{\sqrt{26}} - \frac{26}{\sqrt{26}} = 0$$

$$\Rightarrow$$
 x(x + 26) -  $\frac{1}{\sqrt{26}}$  (x + 26) = 0

$$\Rightarrow$$
  $(x - \frac{1}{\sqrt{26}})(x + 26) = 0$ 

$$\Rightarrow x = (\frac{1}{\sqrt{26}} = \frac{1}{5.01}), -26$$

II.  $y^2 + 0.7y + 0.1 = 0$ 

$$\Rightarrow$$
 y<sup>2</sup> + 0.5y + 0.2y + 0.1 = 0

$$\Rightarrow$$
 y(y + 0.5) + 0.2(y + 0.5) = 0

$$\Rightarrow$$
 (y + 0.2) (y + 0.5) = 0

$$\Rightarrow$$
 y = -0.5, -0.2

Hence, No relation

60. (5) I.  $(x + 3)^2 < 10x + 6$ 

$$(x + 3)^2 - (10x + 6) < 10x + 6 - (10x + 6)$$

$$\Rightarrow$$
 (x + 3)<sup>2</sup> - 10x - 6 < 0

$$\Rightarrow$$
  $x^2 + 9 + 6x - 10x - 6 < 0$ 

$$\Rightarrow x^2 - 4x + 3 < 0$$

$$\Rightarrow x^2 - 3x - 1x + 3 < 0$$

$$\Rightarrow x(x-3) - 1(x-3) < 0$$

$$\Rightarrow$$
 (x -3)(x -1) < 0

$$\therefore 1 < x < 3$$

II. 
$$5 - x = y$$

If 
$$x = 1$$
, then

$$\Rightarrow$$
 y = 5 - 1 = 4

If 
$$x = 3$$
, then

$$\Rightarrow$$
 y = 5 - 3 = 2

$$\therefore 2 < y < 4$$

Hence, No relation can be established.

- 61. (1) A does 25% of work in 5 days, 100% work will be done in 20 days
  - D does (100 (25 + 20 + 10 + 20)) = 25%of work in 4 days, 100% work will be done in 16 days

Total work = LCM(20,16) = 80 units

A does = 
$$\frac{80}{20}$$
 = 4 units/day

D does = 
$$\frac{80}{16}$$
 = 5 units/day

$$A + D = 4 + 5 = 9 \text{ units/day}$$

So, total work will be done in =  $\frac{80}{9}$  days

- $= 8.88 \, \text{days}$
- 62. (5) B does 20% work in 4 days then 100% will be done in 20 days.

Let the total amount of work be 100 units. B does 5 units/day.

B + E = 
$$\frac{100}{9\frac{1}{11}}$$
 units/day = 11 units/day

E does (11 - 5) = 6 units/day

The required answer =  $\frac{100}{6}$  = 16.67 days

- 63. (3) A's efficiency 20 days to do whole work B's efficiency 20 days to do whole work C's efficiency 40 days to do whole work D's efficiency 16 days to do whole work Total units of work = LCM(20, 20, 40, 16)= 320 units
  - A = 16 units/day
  - B = 16 units/day
  - C = 8 units/day
  - D = 20 units/day
  - 40% of whole work is =  $320 \times 0.4$
  - = 128 units
  - A + B = 16 + 16 = 32 units/day
  - B + C = 16 + 8 = 24 units/day
  - C + D = 8 + 20 = 28 units/day

Now left amount of target work

- = 128 (32 + 24 + 28) = 44 units
- 4th day work done = A + B = 32,
- So left = 44 32 = 12

The required answer is = 4.5 days

64. (3) A, B, C and D separately can do the work in 20, 20, 40 and 16 days respectively.

Total work = LCM (20, 20, 40, 16)

- = 320 units
- A = 16 units/day
- B = 16 units/day
- C = 8 units/day
- D = 20 units/day
- A + B = 16 + 16 = 32 units/day

$$B + C = 16 + 8 = 24 \text{ units/day}$$

 $\frac{1}{5^{\text{th}}}$  work will be done in (320/5)/32

= 2 days by A and B.

Half of the left work =  $\frac{320-64}{2} = \frac{128}{20}$ 

= 6.4 days

Rest is done =  $\frac{128}{24}$  = 5.33 days

The answer is = 2 + 6.4 + 5.33

- $= 13.73 \, days$
- 65. (5) A needs 20 days to do whole work

So, F will take 35 days to do the whole

The total work be 140 units (LCM of 20,35).

F = 4 units/day

50% more efficiency means

= 6 units/day

So, the required answer is =  $\frac{140}{6}$ 

- $= 23.33 \, days$
- 66. (2)  $\simeq (17)^2 \times (2)^3 + (9)^3 \times (5)^2$

$$\simeq$$
 289 × 8 + 729 × 25

$$\simeq~2312$$
 + 18225  $\simeq~20537$ 

- 67. (4)  $\simeq \left(\frac{360 \times 75}{100}\right) \times \left(\frac{4}{7} \times 140\right) \div 8$  $\simeq 270 \times 80 \div 8$  $\simeq~2700$
- 68. (1)  $768 \div 24 \times 15 30 = ? \times 9$  $\Rightarrow$  ? × 9 = 450
- ? = 5069. (4)  $\simeq 55 \times 55 + 5$
- $\simeq~3030$
- 70. (1) 23 + 9 ? = 23? = 32 - 23 = 9



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# E VOCABULARIES E

Words	Meaning in English		Meaning in Hindi
Inevitable	Certain to happen; unavoidal	ble	अपरिहार्य
Apparent	Clearly visible or understood;	obvious	स्पष्ट
Vulnerable	Susceptible to physical or en	otional attack or harm	चपेट में
Pitfalls	Loss		नुकसान
Confronted	Meet (someone) face to face	with hostile or	सामना
	argumentative intent		
Enormous	Very large in size, quantity, o	or extent	विशाल
Stern	(of a person or their manner)	serious and unrelenting,	कठोर
	especially in the assertion of	authority and exercise	
	of discipline		
Exploit	A bold or daring feat		शोषण, अनुचित लाभ उठाना
Stimulus	A thing or event that evokes	a specific functional	प्रोत्साहन
	reaction in an organ or tissu	le	
Fiercer	Having or displaying an inter	ase or ferocious	भयंकर
	aggressiveness		
Plagiarism	The practice of taking someo	ne else's work or ideas	साहित्यिक चोरी
	and passing them off as one's	own	
Discerning	Having or showing good judge	ment	विवेकी
Tackling	Make determined efforts to d	eal with	से निपटने
	(a problem or difficult task)		
Demagogue	A political leader who seeks s	upport by appealing to	दुर्जनों का नेता
	popular desires and prejudice	s rather than by using	
	rational argument		
Barbarity	Extreme cruelty or brutality		बर्बता



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# IBPS PO PHASE - I - 187 (ANSWER KEY)

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

Note:- If you face any problem regarding result or marks scored, please contact 9313111777

Note:- Whatapp with Mock Test No. and Question No. at 7053606571 for any of te doubts. Join the group and you may also share your suggestions and experience of sunday Mock Test.

Note:- If your opinion differs regarding any answer, please message the mock test and question number to 8860330003