IBPS PO SPECIAL PHASE -I MOCK TEST - 282 (SOLUTION)
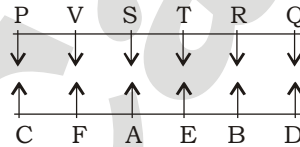
(1–5) :
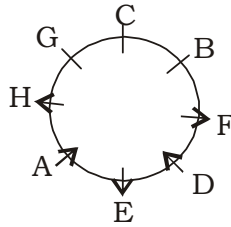
| 1. (4) | 2. (3) | 3. (2) | 4.(1) | 5. (2) |

(6–10) :

6. (5)

7. (1) **From II :** B's gender is not clear. Thus, It may be father or mother.
    From I : B is wife of A. Thus, She is mother.

8. (4) Statement I eliminates R, while statement II eliminates P and Q, we are not sure whether it is T or V.

9. (3) **From I :** B > A and B > C and D
    B is the tallest
    From II : A > D and
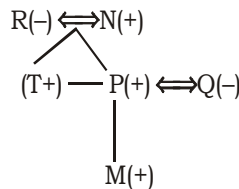   B > A, C
    So, B > D
    Hence, B is the tallest.

10. (4)

(11–15) :

| 11. (4) | 12. (1) | 13. (2) | 14. (2) | 15. (3) |

(16–17) :

Family Tree

16. (5)   17. (1)

(18–22) :

18. (1) Combining the statements, we get
    L < P $\geq$ N = S < R < Q
    Thus, we can't compare L and Q.
    and T $\geq$ P > L
    ∴ T > L is true.
    Hence conclusion I is true.

19. (5) Combining both the statements, we get
    M $\leq$ R $\leq$ N = B < S $\leq$ K
    Thus, K > R is true. Again, M < S is true.
    Hence, conclusion Both I and II are true.

20. (1) Combining the state-ments, we get
    W > U = T $\geq$ B
    Thus, W > T is true.   We can't compare U and J.
    Hence, only conclusion I is true.

21. (4) Combining the statements,
B < U = T > X = P
Thus, we can't compare B and P.
We can't compare W and M.
Hence, neither conclusion I nor II is true.

22. (5) Combining both the statements, we get
G $\geq$ H > K $\geq$ L > R $\geq$ Q
Thus, G > R is true.
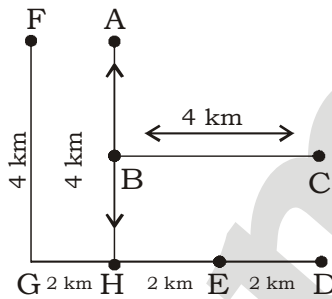Again, H > Q is true. Hence, both conclusions I and II are true.

23. (2)   24. (3)   25. (2)   26. (4)   27. (1)

28. (3)   4 |2| 5 1 |6| 9 8
        1 |2| 4 5 |6| 8 9

(29-30) :

29. (5)   30. (1)

(31–35) :

Person	Cities	Specialisation
M	Jaipur	Acting
N	Bangalore	IT
O	Lucknow	Designing
P	Delhi	Science
Q	Chennai	Choreography
R	Mumbai	Literature
S	Kolkata	Economics
T	Pune	Marketing

31. (3)   32. (5)   33. (2)   34. (3)   35. (5)

Maths

36. (4) The series is +7, +11, +13, +17, +19, ...
i.e.

53   60   71   84   101   120
   +7   +11   +13   +17   +19

Hence there should be 101 in place of 100.

37. (2) The series is 3 × 1 + (1 × 7) = 10,
10 × 2 + (2 × 6) = 32,
32 × 3 + (3 ×5) = 111,
111 × 4 + (4 × 4) = 460,
460 × 5 + (5 × 3) = 2315, ...
Hence there should be 111 in place of 110.

38. (3) The series is ×11, ×9, ×7, ×5, ×3, ...
i.e.

4   44   396   2772   13860   41580
   ×11   ×9   ×7   ×5   ×3

Hence there should be 44 in place of 45.

39.(1) The series is :

$(36)^2, (38)^2, (40)^2, (42)^2, (44)^2, (46)^2,$

1296, 1444, 1600, 1764, 1936, 2116

Hence there should be 1444 in place of 1369.

40.(4) The series is $3 \times 1 + 1 = 4$,

$4 \times 2 + 2 = 10, 10 \times 3 + 3 = 33,$

$33 \times 4 + 4 = 136, 136 \times 5 + 5 = 685, ...$

Hence there should be 136 in place of 135.

41.(2) $? = \dfrac{180}{100} \times 25501 + \dfrac{50}{100} \times 28999 - 7634.97$

$= \dfrac{9}{5} \times 25500 + \dfrac{1}{2} \times 29000 - 7635$

$= 9 \times 5100 + 14500 - 7635$

$= 45900 + 14500 - 7635 = 60400 - 7635$

$= 52765 \approx 52770$

42.(5) $174.995 \times 14.995 + 25 + ? + 86.93 \times 3.004 = 495$

or, $175 \times 15 + 25 + ? + 87 \times 3 \approx 495$

or, $105 + ? + 261 = 495$

or, $? = 495 - 366 = 129 \approx 130$

43.(3) 140% of $56 + 56\%$ of $140 - \sqrt{2026} - ?$

$= 40$

or, $(56 + 56)\%$ of $140 - \sqrt{2026} - ? = 40$

or, 112% of $140 - 45 - ? \approx 40$

or, $? = 1.12 \times 140 - 45 - 40 = 156.80 - 85$

or, $? \approx 157 - 85 = 72 \approx 70$

44.(5) $5687.285 + 4872.35 \div 12 \times 6.989 = 5 \times (3699.98 - ?)$

or, $5687 + \dfrac{4872}{12} \times 7 = 5 \times (3700 - ?)$

or, $5687 + 406 \times 7 = 18500 - 5 \times ?$

or, $\dfrac{18500 - 5687 - 2842}{5} = \dfrac{9971}{5}$

$= 1994.2 \approx 2000$

45.(1) $1325 \times \sqrt{17} + 20\%$ of $? - 83.99 \times \dfrac{3}{4}$

$= 5500$

or, $1325 \times 4.12 + ? \times \dfrac{1}{5} - 84 \times \dfrac{3}{4} \approx 5500$

or, $5459 + \dfrac{?}{5} - 63 \approx 5500$

or, $\dfrac{?}{5} \approx 5500 + 63 - 5459 = 5563 - 5459 = 104$

$\therefore ? \approx 104 \times 5 = 520$

(46-50):

Let males and females who use their coupons in Haircutting be $13x$ and $7x$ respectively.

Males who use their coupons in Pedicure = $7x + 72$

Then Females who use their coupons in Pedicure = $450 - 13x - 7x - 7x - 72$

= $378 - 27x$

Predicure	
Males	**Females**
7x + 72	378 – 27x
Haircutting	
Males	**Females**
13x	7x

ATQ,

$7x + 72 + 13x - (7x + 378 - 27x)$

= 174

$40x - 306 = 174$

$40x = 480$

$x = 12$

Predicure	
Males	**Females**
156	54
Haircutting	
Males	**Females**
156	84

46. (2) Required % = $\left(\dfrac{156}{156} \times 100\right)\%$ = 100%

47. (2) Required Ratio = $\dfrac{156+54}{156+84} = \dfrac{210}{240} = \dfrac{7}{8}$

48. (3) Required difference = 84 – 54 = 30

49. (4) Number of males who use their coupons in Haircutting which doesn't belongs to city A = 156 × $\dfrac{75}{100}$ = 117

50. (1) Males who use their coupons in Spa

   = 156 × $\dfrac{5}{4}$ = 195

   Females who use their coupons in Spa

   = 84 × $\dfrac{11}{6}$ = 154

   Total number of people who use their coupon in Spa = 195 + 154 = 349

51. (1) 2A   30
      3B   20   60
      6C   10
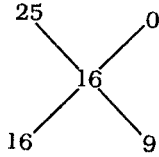   ABC discharge chemical in 1 min = 6 + 3 + 2 = 11.

   So, proportion of R = $\dfrac{6 \times 3}{11 \times 3} = \dfrac{6}{11}$

52.(3)   Selling price of mixture = ₹ 20
   Cost price of mixture

   = $\dfrac{100}{125} \times 20$ = ₹16

By the rule of alligation,

So, required ratio = 16 : 9

53. (5) Side of the square = $\sqrt{1024}$ = 32 cm.

∴ Length of rectangle = 2 × 32 = 64 cm. Breadth of rectangle = 32 – 12 = 20 cm.

∴ Required ratio = 64 : 20 = 16 : 5

54. (1) $\dfrac{{}^5C_2}{{}^7C_2} = \dfrac{10}{21}$

55. (3) Four years ago,
Shyam : Ram = 3 : 4
After four years,

$\dfrac{3x+8}{4x+8} = \dfrac{5}{6}$

⇒ 20x + 40 = 18x + 48

⇒ 2x = 48 – 40 = 8

⇒ $x = \dfrac{8}{2} = 4$

∴ Shyam's present age = 3x + 4
= 3 × 4 + 4 = 16 years

56. (1) According to question,

SI for 10 years = $\dfrac{1000 \times 5 \times 10}{100}$ = ₹ 500

Now, P = ₹ 1500, A = ₹ 2000

∴ SI = ₹ 500

Now, $T = \dfrac{500 \times 100}{1500 \times 5} = 6\dfrac{2}{3}$ years

∴ Total time = $16\dfrac{2}{3}$ years

57. (3) 2 kmph = $\left(\dfrac{2 \times 5}{18}\right)$ m/s.

$= \dfrac{5}{9}$ m/s.

and 4 kmph = $\dfrac{4 \times 5}{18}$ m/s.

$= \dfrac{10}{9}$ m/s.

Let the length of the train be x m and its speed be y m/s. Then,

$\dfrac{x}{y - \dfrac{5}{9}} = 9$

⇒ 9y – 5 = x

$\therefore \quad 9y - x = 5$ .... (i)

and $= \dfrac{x}{y - \dfrac{10}{9}} = 10$

$\Rightarrow \quad 10\,(9y - 10) = 9x$

$\Rightarrow \quad 90y - 9x = 100$ .... (ii)

By equation (i) × 10 – equation (ii), we have

$90y - 10x = 50$

$90y - 9x = 100$

$\underline{\quad - \quad + \quad - \quad}$

$\qquad - x\ = -50$

$\Rightarrow \quad x = 50$ m

58. **(2)** Clearly,

   9 × 360 children = 18 × 72 men

   = 12 × 162 women

   $\Rightarrow$ 45 children = 18 men = 27 women

   $\Rightarrow$ 5 children = 2 men = 3 women

   Now, 4 men + 12 women + 10 children

   = 4 men + 8 men + 4 men = 16 men

   $\because$ 18 men can complete the work in 72 days.

   $\therefore$ 16 men can complete the same work

   $= \dfrac{18 \times 72}{16} = 81$ days

59. **(3)** Let the speed of boat in still water be x kmph and that of current be y kmph.

   $\therefore \quad x + y = \dfrac{4.8}{\dfrac{8}{60}} = \dfrac{4.8 \times 60}{8}$

   $\Rightarrow \quad x + y = 36$ ....(i)

   and, $x - y = \dfrac{4.8}{\dfrac{9}{60}} = \dfrac{4.8 \times 60}{9}$

   $\Rightarrow \quad x - y = 32$ ....(ii)

   By equation (i) – (ii),

   $x + y - x + y = 36 - 32 = 4$

   $\Rightarrow \quad 2y = 4 \Rightarrow y = \dfrac{4}{2} = 2$ kmph

60. **(3)** Let the amount be ₹ x

   Investment is done as given below.

   Amount left $= x - \dfrac{40}{100}x = \dfrac{60x}{100}$

   $\dfrac{40}{100}x$ at 15% p.a

   $\dfrac{50}{100}$ of $\dfrac{60x}{100} = \dfrac{30x}{100}$ at 10% p.a

   Rest amount

   $= x - \dfrac{40x}{100} - \dfrac{30x}{100} = \dfrac{30x}{100}$ at 18% p.a

Interest earned by each at end of 1 year

By 1st $\Rightarrow \dfrac{15}{100} \times \dfrac{40x}{100} = \dfrac{60}{1000}x$

By 2nd $\Rightarrow \dfrac{10}{100} \times \dfrac{30x}{100} = \dfrac{30}{1000}x$

By 3rd $\Rightarrow \dfrac{18}{100} \times \dfrac{30x}{100} = \dfrac{54}{1000}x$

Total interest = $\dfrac{144}{1000}x$

$\therefore$ Rate% = $\dfrac{\dfrac{144x}{1000}}{x} \times 100$ = 14.4%

61. (1) Marks obtained by Meera in total subjects

$= \dfrac{100 \times 60}{100} + \dfrac{80 \times 40}{100} + \dfrac{130 \times 50}{100}$

$+ \dfrac{150 \times 90}{100} + \dfrac{120 \times 90}{100} + \dfrac{80 \times 60}{100}$

$= 448$

62. (4) Marks obtained by all the seven students

$= \dfrac{40}{100}(80 + 70 + 70 + 60 + 90 + 60 + 80)$

$= \dfrac{40}{100} \times 510 = 204$

$\therefore$ Average marks = $\dfrac{204}{7}$ = 29.14

63. (2) Only two students, Kunal and Soni have got 60% or above marks in all subjects.

64. (3) Total marks obtained by Kunal

$= \dfrac{60 \times 90}{100} + \dfrac{40 \times 70}{100} + \dfrac{130 \times 60}{100} +$

$\dfrac{150 \times 90}{100} + \dfrac{120 \times 70}{100} + \dfrac{80 \times 70}{100}$

= 54 + 28 + 78 + 135 + 84 + 56 = 435

Total marks = 60 + 40 + 130 + 150 + 120 + 80 = 580

$\therefore$ Required percentage = $\dfrac{435}{580} \times 100 = 75$

65. (1)

66. (1) I. $84x^2 + 188x + 105 = 0$

$\Rightarrow 84x^2 + 98x + 90x + 105 = 0$

$\Rightarrow 14x(6x + 7) + 15(6x + 7) = 0$

$\Rightarrow (14x + 15)(6x + 7) = 0$

$\Rightarrow x = \dfrac{-15}{14}, \dfrac{-7}{6}$

II. $42y^2 + 151y + 135 = 0$

$\Rightarrow 42y^2 + 70y + 81y + 135 = 0$

$\Rightarrow 14y(3y + 5) + 27(3y + 5) = 0$

$\Rightarrow (14y + 27)(3y + 5) = 0$

$\Rightarrow y = \dfrac{-27}{14}, \dfrac{-5}{3}$

Clery, x > y

67. (2) I. $x^2 - 1369 = 0$
    $\Rightarrow x^2 = 1369$
    $\Rightarrow x = +37, -37$
    II. $y^3 + 50653 = 0$
    $\Rightarrow y^3 = -50653$
    $\Rightarrow y = -37$
    Clery, $x \geq y$

68. (5) I. $51x^2 - 79x - 2310 = 0$
    $\Rightarrow 51x^2 + 306x - 385x - 2310 = 0$
    $\Rightarrow 51x(x + 6) - 385(x + 6) = 0$
    $\Rightarrow (51x - 385)(x + 6) = 0$

    $\Rightarrow x = \dfrac{385}{51}, -6$

    II. $48y^2 - 177y - 4788 = 0$
    $\Rightarrow 48y^2 - 576y + 399y - 4788 = 0$
    $\Rightarrow 48y(y - 12) + 399(y - 12) = 0$
    $\Rightarrow (48y + 399)(y - 12) = 0$

    $\Rightarrow y = \dfrac{-399}{48}, 12$

69. (4) I. $x^2 - 1296 = 0$
    $\Rightarrow x^2 = 1296$
    $\Rightarrow x = +36, -36$
    II. $y^3 = 46656$
    $\Rightarrow y = 36$
    cleary, $x \leq y$

70. (5) I. $37x^2 - 49x - 186 = 0$
    $\Rightarrow 37x^2 - 111x + 62x - 186 = 0$
    $\Rightarrow 37x(x - 3) + 62(x - 3) = 0$
    $\Rightarrow (37x + 62)(x - 3) = 0$

    $\Rightarrow x = \dfrac{-62}{37}, 3$

    II. $148y^2 + 61y - 155 = 0$
    $\Rightarrow 148y^2 - 124y + 185y - 155 = 0$
    $\Rightarrow 4y(37y - 31) + 5(37y - 31) = 0$
    $\Rightarrow (4y + 5)(37y - 31) = 0$

    $\Rightarrow y = \dfrac{-5}{4}, \dfrac{31}{37}$

English Language

(96-100):

96. (4) Replace 'their' with 'its' as it is used for 'airline', which is singular.
97. (1) Replace 'began' with 'begun' as the 3rd form of verb is used in Present Perfect Tense.
98. (3) Replace 'confident' with 'confidence'.
99. (1) Replace 'Inspite' with 'Despite the fact'.
100. (4) Replace 'invested' with 'investing'.

VOCABULARIES

Words	Meaning in English	Meaning in Hindi
Conceive	in your mind; to imagine something	कल्पना करना
Potent	having great power, influence, or effect	प्रबल, प्रभावयुक्त
Inducing	succeed in persuading or influencing (someone) to do something	प्रेरित करना
derogative	showing a critical or disrespectful attitude	अपमानजनक
Augmenting	to increase the amount, value, size of something	वृद्धि करना
Venture	a risky or daring journey or undertaking	उद्यम करना
Apparent	clearly visible or understood; obvious	स्पष्ट रूप से
Plague	a contagious bacterial disease characterized by fever and delirium	प्लेग
Enormous	very large in size, quantity, or extent	विशाल

IBPS PO SPECIAL PHASE -I MOCK TEST - 282 (ANSWER KEY)

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