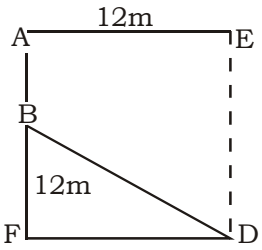
IBPS PO SPECIAL PHASE -I MOCK TEST - 257 (SOLUTION)

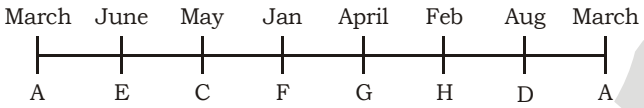
REASONING

(1–2) :



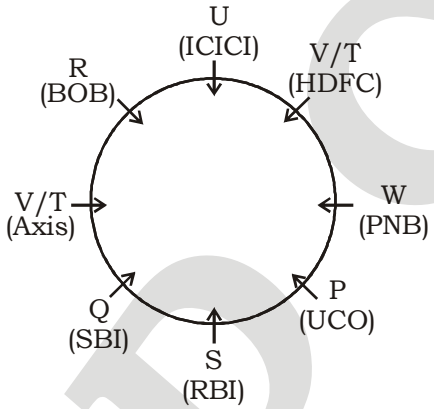
1. (2) Required distance = 12 + 10 = 22 m
2. (1)

(3–7) :



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

(8-12) :



8. (3) 9. (5) 10. (4) 11. (4) 12. (1)

(13-17) :

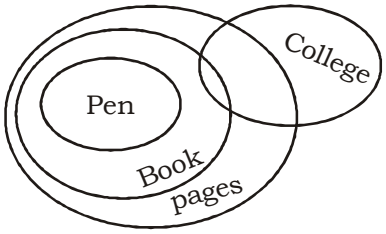
13. (1) $G \geq R > K = L \geq T \geq S$
    I. $L \geq S \rightarrow$ True
    II. $T \leq R \rightarrow$ False
    Only conclusion I is true.
14. (4) $T \geq Q > M = S \leq P < L$
    I. $Q \geq P \rightarrow$ False
    II. $L > T \rightarrow$ False
    Neither conclusion I nor II is true.

15. (5) C = T $\geq$ U $\geq$ V = Z $\geq$ W
I. C $\geq$ Z $\rightarrow$ True
II. T $\geq$ W $\rightarrow$ True
Both conclusion I and II are true.

16. (5) M < L = K < B > C = D $\geq$ E
I. K $\geq$ D $\rightarrow$ True
II. E < B $\rightarrow$ False
Neither conclusion I nor II is true.

17. (1) M $\leq$ R = N $\leq$ L < G = F
I. L $\geq$ M $\rightarrow$ True
II. N < F $\rightarrow$ True
Both conclusion I and II are true.

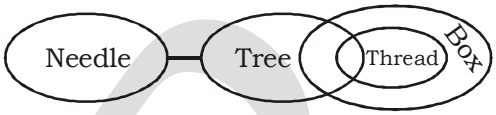
(18-19) :



18. (2) I. False
II. True
Only Conclusion II follows

19. (1) I. True
II. False
Only conclusion I follows

(20-21) :



20. (4) I. False
II. False
Neither conclusion I nor III is true.

21. (5) I. True
II. True
Both conclusion I and II are follow.

22. (4) 

I. False
II. False
Neither conclusion I nor II is true.

(23-27) :

Person	Place	Month	Transportation
Sinha	Mussoorie	Jan / June	Bus
Saini	Rishikesh	December	Rail
Bhagat	Nainital	Jan / Aug / May / June	Flight
Yadav	Shimla	Jan / Aug / May / June	Car
Gupta	Manali	Jan / Aug / May / June	Rail
Mishra	Kullu	Jas / Aug / May / June	Bus

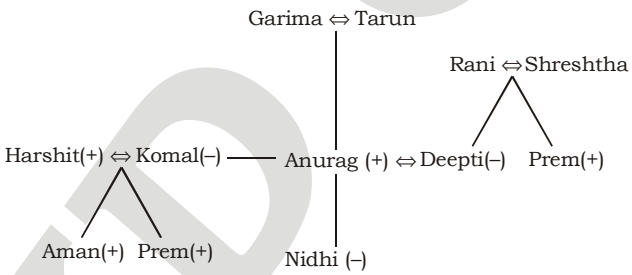
23. (4) 24. (3) 25. (4) 26. (1) 27. (2)

(28-32) :

Floor	Person	Car
6	Anil	Fiat
5	Nikhil	Hyundai
4	Ranjan	Maruti
3	Manish	Mahindra / Tata
2	Karan	Ford
1	Arun	Tata / Mahindra

28. (1) 29. (4) 30. (3) 31. (1) 32. (5)

(33-35) :



33. (1) 34. (2) 35. (3)

MATHS

36. (1) $? \approx \frac{5555}{50} = 111.1 \approx 110$

37. (1) $? \approx (18)^3 = 5832$

38. (3) $? \approx 23 \times 19 \times 8 = 3496 \approx 3500$

39. (4) $? = \frac{9999}{99 \times 9} = 11.22 \approx 11$

40. (2) $? \approx \frac{450 \times 22}{100} = 99 \approx 100$

41. (1) Required average = $\frac{3.34 + 5.83 + 1.69}{3}$ = 3.62 Lac

42. (2) Required ratio = $\frac{2.79}{9.45} = \frac{31}{105}$ = 31 : 105

43. (1) Required % = $\left(\frac{9.45 - 2.79}{2.79} \times 100\right)\%$ = 238.70% ≈ 240%

44. (4)

45. (3) Required % = $\left(\frac{1.44 + 7.84}{5.53} \times 100\right)\%$ = 167.81% ≈ 168%

46. (2) The pattern of the number series is :
8 + 2 = 10
10 + 8 (= 2 × 3 + 2) = 18
18 + 26 (= 3 × 8 + 2) = 44
44 + 80 (=3 × 26 + 2) = 124
124 + 242 (= 3 × 80 + 2) = **366**

47. (4) The pattern of the number series is :
13 + 1 × 12 = 13 + 12 = 25
25 + 3 × 12 = 25 + 36 = 61
61 + 5 × 12 = 61 + 60 = 121
121 + 7 × 12 = 121 + 84 = 205
205 + 9 × 12 = 205 + 108 = **313**

48. (1) The pattern of the number series is :
$\frac{656}{2}$ + 24 = 328 + 24 = 352
$\frac{352}{2}$ + 24 = 176 + 24 = 200
$\frac{200}{2}$ + 24 = 100 + 24 = 124
$\frac{124}{2}$ + 24 = 62 + 24 = 86
$\frac{86}{2}$ + 24 = 43 + 24 = **67**

49. (3) The pattern of the number series is :
454 + 18 = 472
472 – 27 = 445
445 + 18 = 463
463 – 27 = 436
436 + 18 = **454**

50. (2) The pattern of the number series is :
$12 \times 4 - 30 = 48 - 30 = 18$
$18 \times 4 - 36 = 72 - 36 = 36$
$36 \times 4 - 42 = 144 - 42 = 102$
$102 \times 4 - 48 = 408 - 48 = 360$
$360 \times 4 - 54 = 1440 - 54 =$ **1386**

51. (4) Let the ninth person spent ₹ x.

Then, average of all the nine = $\frac{12\times8+x}{9} = \frac{96+x}{9}$

Given, $x = \frac{96+x}{9} + 8$

$9x = 96 + x + 72$

$8x = 168$

$x = 21$

Hence, total money was spent by all of them = 96 + 21 = ₹ 117

52. (2) According to question,
Ratio of milk and water = 3 : 1

Let x L of mixture is taken away, then quantity of milk left = $\left(3-\frac{3x}{4}\right)$

and water left = $\left(1-\frac{x}{4}\right)+x$

Given, $3 - \frac{3x}{4} = 1 - \frac{x}{4} + x$

$3 - 1 = \frac{3x}{4} - \frac{x}{4} + x$

$2 = \frac{6x}{4}$

$x = \frac{4}{3}$

Required percentage = $\frac{4}{3\times4} \times 100 = 33\frac{1}{3}\%$

53. (1) Let the investment made by
Gaurav = ₹ x
Then, investment made by
Lucky = ₹(81600 – x)

$\therefore (81600 - x)\left(1+\frac{4}{100}\right)^2 = x\left(1+\frac{4}{100}\right)^3$

$81600 - x = 1.04x$

$x = \frac{81600}{2.04} =$ ₹ 40000

54. (4) According to the question,

Discount on articles = $\frac{1}{16} \times 100 = 6.25\%$

Overall discount = $-4 - 6.25 + \frac{4 \times -6.25}{100} = -10\%$

Let cost price = ₹ 100, then

Selling price = ₹ 135

So, 90% of marked price = ₹135

Marked price = $\frac{135 \times 100}{90}$ = ₹ 150

Marked price is increased by = $\frac{150-100}{100} \times 100$ = 50%

55. (3) Side of the square = $\sqrt{196}$ = 14 cm

Radius of circle = 2 × 14 = 28 cm

Length of rectangle = 2 × 2 × 28 = 112 cm

Breadth = $\frac{112}{2}$ = 56 cm

Perimeter = 2 (112 + 56) = (2 × 168) = 336 cm

56. (1) Total population of City L = $7000000 \times \frac{21}{100}$ = 1470000

$\text{Female}_L = 1470000 \times \frac{48.9}{100}$ = 718830

57. (3) $\text{Total}_M = 7000000 \times \frac{10.6}{100}$ = 742000

Males are 53.2%,

So females = 100 – 53.2 = 46.8%

Difference = 53.2% – 46.8% = 6.4%

∴ Required answer = $742000 \times \frac{6.4}{100}$ = 47488

58. (4) $\text{Female}_Q = 1526000 \times \frac{(100-49.2)}{100}$ = 775208

$\text{Female}_P = \frac{1526000}{21.8} \times 100 \times \frac{7.5}{100} \times \frac{(100-47.9)}{100}$ = 700 × 7.5 × 52.1= 273525

∴ Required% = $\left(\frac{775208}{273525} \times 100\right)\%$ = 283.41% ≈ 283.5%

59. (2) Total males = $\frac{1526000 \times 100}{21.8 \times 100 \times 100} \times \{21 \times 51.1 + 10.6 \times 53.2 + 23.7 \times 52.9 + 15.4 \times 53.8 + 7.5 \times 47.9 + 21.8 \times 49.2\}$

$= 700 \times \{1073.1 + 563.92 + 1253.73 + 828.52 + 359.25 + 1072.56\}$

$= 700 \times 5151.08 = 3605756$

60. (3) Total population in all six cities = 7000000

Total females in all six cities = 7000000 – 3605756 = 3394244

$\therefore$ Required % = $\left(\frac{3394244}{7000000} \times 100\right)\% = 48.489\% \approx 48.5\%$

61. (3) Let the unit's digit be y and ten's digit be x

Number = $10x + y$

New number after interchange = $10y + x$

As given,

$10y + x - 10x - y = 18$

$9(y - x) = 18$

$y - x = 2$ ....(i)

Again, $x + y = 8$ ...(ii)

From (i) and (ii)

$2y = 10$

$y = 5$

$\therefore$ $x = 3$ [From (i)]

$\therefore$ Required number $= 10x + y = 10 \times 3 + 5 = 35$

62. (4)Let original fraction be $\frac{x}{y}$.

According to the question,

$$\frac{x \times \frac{450}{100}}{y \times \frac{400}{100}} = \frac{9}{22}$$

$$\frac{x \times \frac{9}{2}}{y \times 4} = \frac{9}{22}$$

$$\frac{x}{y} = \frac{9 \times 8}{9 \times 22} = \frac{4}{11}$$

63. (2) (i) choose four questions from first five questions = ${}^5C_4 \times {}^8C_6$

$= 5 \times 28 = 140$

(ii) choose five questions from first five questions = ${}^5C_5 \times {}^8C_5$

$= 1 \times 56 = 56$

Total number of ways = 140 + 56 = 196

64. (4) C.P. of 12 eggs = ₹ 3.75

C.P. of 1600 eggs = $\frac{3.75\times1600}{12}$ = ₹ 500

S.P. of 900 eggs = $\frac{1}{2}\times 900$ = ₹ 450

S.P. of remaining 700 eggs = $\frac{2}{5}\times$ 700 = ₹ 280

Total S.P. = 450 + 280 = ₹ 730

Gain = 730 – 500 = ₹ 230

∴ Gain per cent = $\frac{230}{500}\times$ 100 = 46%

65. (5) According to the question, Distance covered by Sonu in 8 hrs = 6 × 8 = 48 km

Distance covered by Monu in 8 hrs = (114 – 48) km = 66 km

∴ Speed of Monu = $\frac{66}{8}$kmph = $8\frac{1}{4}$ kmph

66. (4) I. $x^2 + 5x + 6 = 0$

$x^2 + 2x + 3x + 6 = 0$

$x(x + 2) + 3(x + 2) = 0$

$(x + 3)(x + 2) = 0$

$x = -3$ or -2

II. $y^2 + 3y + 2 = 0$

$y^2 + 2y + y + 2 = 0$

$y(y + 2) + 1(y + 2) = 0$

$(y + 1)(y + 2) = 0$

$y = -1$ or -2

Clearly, $x \leq y$

67. (2) I. $x^2 - 10x + 24 = 0$

$x^2 - 6x - 4x + 24 = 0$

$x(x - 6) - 4(x - 6) = 0$

$(x - 4)(x - 6) = 0$

$x = 4$ or 6

II. $y^2 - 9y + 20 = 0$

$y^2 - 5y - 4y + 20 = 0$

$y(y - 5) - 4(y - 5) = 0$

$(y - 4)(y - 5) = 0$

$y = 4$ or 5

Clearly, $x \geq y$

68. (4) I. $x^2 = 961 = \pm 31$

II. $y = \sqrt{961} = 31$

69. (5) I. $x^2 - x - 72 = 0$

$x^2 - 9x + 8x - 72 = 0$

$x(x - 9) + 8(x - 9) = 0$

$(x + 8)(x - 9) = 0$

$x = -8$ or 9

II. $y^2 = 64$

$y = \pm 8$

70. (5) I. $x^2 = 463 + 321 = 784$

$x = \pm 28$

II. $y^2 = 308 + 421 = 729$

$y = \pm 27$

VOCABULARIES

Word	Meaning in English	Meaning in Hindi
Erring	Deserving blame	दोषी, दण्डनीय
Apex court	The supreme court within the hierarchy of any legal jurisdictions.	सर्वोच्च न्यायालय
Interest	A reason for wanting something done	हित
Exempt	Free (a person or organization) from an obligation or liability imposed on others.	मुक्त करना
Disclosure	The action of making new or secret information known	रहस्योद्घाटन
Circumspection	The quality of being wary and unwilling to take risks;	सावधानी, एहतियात
Scrutiny	Critical observation or examination.	समीक्षा, छानबीन
Counter-productive	Having the opposite of the desired effect.	विपरीत परिणाम वाला
Commendable	Deserving praise.	सराहनीय
Prerogative	An exclusive right or privilege	विशेषाधिकार
Interference	The action of interfering or the process of being interfered with.	दखलंदाजी, हस्तक्षेप
Constraints	A limitation or restriction.	बाध्यता
Intervene	Come between so as to prevent or alter a result or course of events.	हस्तक्षेप करना, दखल देना
Extorts	Obtain (something) by force, threats, or other unfair means.	फिरौती लेना, छीन कर लेना
Indiscretion	Behavior or speech that is indiscreet or displays a lack of good judgment.	असावधानी, अवैचारिक
Demiurge	Cause	कारण
Credo	A statement of the beliefs or aims that guide someone's actions.	ईमान, श्रद्धा
Paradox	A statement containing two opposite ideas logically unacceptable though true.	विरोधाभास
Surfeit	An excessive amount of something.	अत्याधिक मात्रा में
Recrudescence	A return of something after a period of abatement	पुनः होने की क्रिया
Adumbrate	Report or represent in outline.	रूप रेखा प्रस्तुत करना
Obfuscate	Render obscure, unclear, or unintelligible.	अस्पष्ट करना, भ्रमित करना
Monolithic	Tediously lengthy	अति विस्तृत
Persuasion	The action of persuading someone	अनुनय-विनय
Pre-requisite	Required as a prior condition.	आवश्यक
Exceptional	Unusual; not typical.	असाधारण

IBPS PO SPECIAL PHASE -I MOCK TEST - 257 (ANSWER KEY)

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