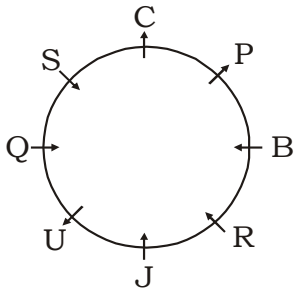
IBPS PO SPECIAL PHASE -I MOCK TEST - 325 (SOLUTION)

Reasoning

(1 - 5) :



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

(6-10) :

Floor	Flat 1	Flat 2	Flat 3
4	G	Q	S
3	I	J	K
2	P	H	L
1	M	R	N

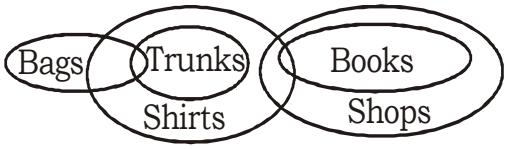
6. (2) 7. (5) 8. (4)
9. (2) 10. (3)

11. (4) $M \geq X \geq Y = Z \geq O < N$
I. $Z < N \rightarrow$ False
II. $M \geq Y \rightarrow$ True
III. $X \geq O \rightarrow$ True
IV. $N > M \rightarrow$ Flase
Hence, Only II and III are true.

12. (2) $T > Q \leq R > M = P$
I. $M < R \rightarrow$ True
II. $R > T \rightarrow$ False
III. $P > T \rightarrow$ False
IV. $P > Q \rightarrow$ false
Hence, only I is true.

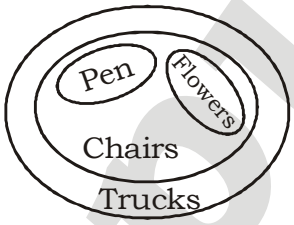
13. (3) $E < D \geq B = C < G \leq F$
I. $F > B \rightarrow$ True
II. $G > B \rightarrow$ True
III. $E < C \rightarrow$ false
IV. $C \geq D \rightarrow$ false
Hence, only I and II are true

14. (5)



I. False II. False
III. True IV. False
Hence, Only III follows

15. (1)

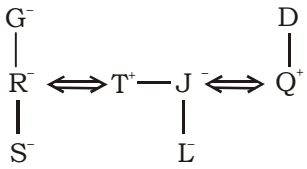


I. True II. False
III. True IV. False
Hence, I and III follow

16. (5)

I. False II. False
III. False IV. True
Hence, Only IV follows

(17-18) :

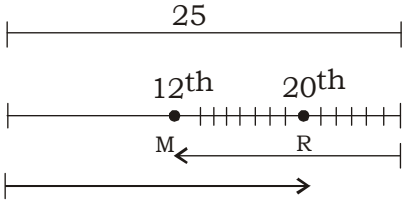


17. (3) 18. (2)

19. (5) From I and II, distance between point x and y is 10 km. both statement necessarily to answer the question.

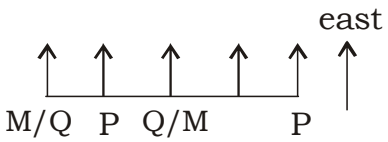
20. (5)

21. (1) from I

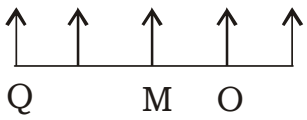


M sits 8th to left of R.
Only statement I to answer the question but statement II is not sufficient to given the answer.

22. (2) From I

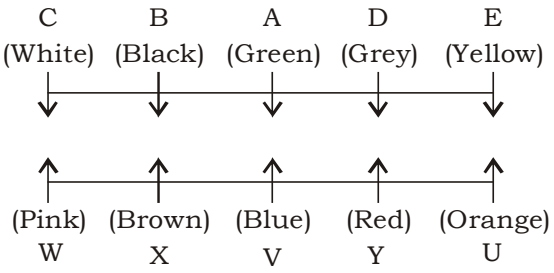


Not sufficient to answer the question from II.



Sufficient to answer the question.

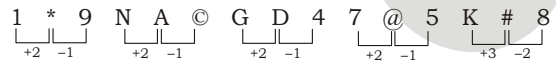
(23-27) :



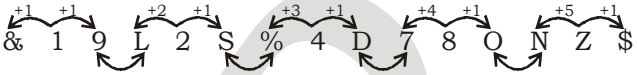
23. (2) 24. (1) 25. (5)
26. (3) 27. (2)

28. (1) New arrangement is :
1 9 L B 2 S 6 E G 4 D **H** 7 5 K 8 Q N A 3 C Z U J.
Hence thirteenth element from the right end is H.

29. (4)



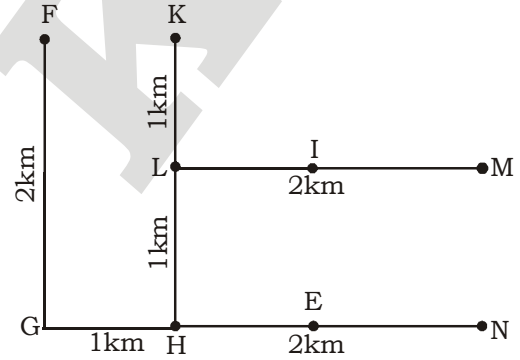
30. (4)



31. (3) Fourth to the right of nineteenth element from the left and is (19 + 4 =) 23rd from left, i.e N.

32. (3) %EG, $UJ

(33-35) :



33. (3) Required distance = GH + HE = 1 + 1 = 2km

34. (1) 1 km 35. (1) 1 km

Maths

36. (5) ATQ,

$$\frac{x}{6+x} = \frac{1}{3}$$

$$\Rightarrow x = 3$$

$$\text{Required probability} = \frac{{}^4C_2 + {}^3C_2 + {}^2C_2}{{}^9C_2}$$

$$= \frac{6+3+1}{36} = \frac{1}{36} = \frac{5}{18}$$

37. (1) Let A, B and C's salary be 6x, 8x and 9x respectively
'A' saves 80% of his salary = saving of A

$$= 6x \times \frac{80}{100} = 4.8x$$

Let saving of A, B and C be 4y, 4y and 3y respectively
But 4y = 4.8x
y = 1.2x

$$\text{Required\%} = \frac{9x - 3y}{9x} \times 100$$

$$= \frac{9x - 3 \times 1.2x}{9x} \times 100$$

$$= \frac{5.4}{9} \times 100 = 60\%$$

38. (4) Let sum invested in scheme 'A' = 200x
Let sum invested in scheme 'B' = 300x
Interest earned from scheme 'A' after 2 years $= \frac{200 \times 20 \times 10}{100} = 40x$

Interest earned from scheme 'B' after 2 years $= \left[\left(1 + \frac{10}{100}\right)^2 - 1\right]$

$$= 300x\left[\frac{21}{100}\right] = 63x$$

$$\text{Required\%} = \frac{63x - 40x}{40x} \times 100$$

$$= \frac{23}{40} \times 100 = 57.5\%$$

39. (4) $l_1 + l_2 = 540$
(l_1 – is length of train A, l_2 – is length of train B)

Speed of train A = $\frac{90}{5}$ = 18 m/sec

Speed of train B = 36 m/sec (since of train A to B = 1 : 2)

Required time = $\frac{540}{54}$ = 10 second

40. (4) Suppose speed of the stream = x km/h
Speed of the boat in still water = 10 km/h
Boat will travel with the stream (down-stream) at (10 + x) km/h
and boat will travel against the stream (up-stream) at (10 – x) km/h
Now, from the equestion,

$\Rightarrow \frac{36}{10+x} + \frac{90}{60} = \frac{36}{10-x}$

x = 2 km/h

41. (4) I. $15x^2 + 5x + 6x + 2 = 0$
$\Rightarrow 5x(3x + 1) + 2(3x + 1) = 0$
$\Rightarrow (5x + 2)(3x + 1) = 0$

$\Rightarrow x = -\frac{2}{5}, -\frac{1}{3}$

II. $24y^2 + 8y + 3y + 1 = 0$
$\Rightarrow 8y(3y + 1) + 1(3y + 1) = 0$
$\Rightarrow (8y + 1)(3y + 1) = 0$

$\Rightarrow y = -\frac{1}{3}, -\frac{1}{8}$

$\Rightarrow x \leq y$

42. (1) I. $x^2 - 13x - 17x + 221 = 0$
$\Rightarrow x(x - 13) - 17(x - 13) = 0$
$\Rightarrow (x - 17)(x - 13) = 0$
$\Rightarrow x = 13, 17$
II. $y^2 - 12y - 5y + 60 = 0$
$\Rightarrow y(y - 12) - 5(y - 12) = 0$
$\Rightarrow (y - 5)(y - 12) = 0$
$\Rightarrow y = 5, 12$
$\Rightarrow x > y$

43. (3) I. $x^2 + 6x + 8 = 0$
$\Rightarrow x^2 + 2x + 4x + 8 = 0$
$\Rightarrow x(x + 2) + 4(x + 2) = 0$
$\Rightarrow (x + 4)(x + 2) = 0$
$\Rightarrow x = -2, -4$
II. $8y^2 + 22y + 15 = 0$
$\Rightarrow 8y^2 + 10y + 12y + 15 = 0$
$\Rightarrow 2y(4y + 5) + 3(4y + 5) = 0$
$\Rightarrow (2y + 3)(4y + 5) = 0$

$\Rightarrow y = -\frac{3}{2}, -\frac{5}{4}$

$\Rightarrow x < y$

44. (2) I. $x^2 - 20x + 96 = 0$
$\Rightarrow x^2 - 8x - 12x + 96 = 0$
$\Rightarrow x(x - 8) - 12(x - 8) = 0$
$\Rightarrow (x - 12)(x - 8) = 0$
$\Rightarrow x = 12, 8$
II. $y^2 - 15y + 56 = 0$
$\Rightarrow y^2 - 7y - 8y + 56 = 0$
$\Rightarrow (y - 7)(y - 8) = 0$
$\Rightarrow y = 7, 8$
$\Rightarrow x \geq y$

45. (5) I. $x^2 + 2x - 35 = 0$
$\Rightarrow x^2 + 7x - 5x - 35 = 0$
$\Rightarrow x(x + 7) - 5(x + 7) = 0$
$\Rightarrow (x - 5)(x + 7) = 0$
$\Rightarrow x = 5, -7$
II. $y^2 + 3y - 10 = 0$
$\Rightarrow y^2 + 5y - 2y - 10 = 0$
$\Rightarrow (y + 5)(y - 2) = 0$
$\Rightarrow y = -5, 2$
No relation can be established between x and y.

46. (5) $27 + 11^3 = 1358$
$1358 - 9^2 = 1277$
$1277 + 7^3 = 1620$
$1620 - 5^2 = 1595$
$1595 + 3^3 = 1622$
$? = 1620 - 5^2 = 1595$

47. (2) $48 \times 1.5 = 72$
$72 \times 2.5 = 180$
$180 \times 4.5 = 810$
$810 \times 7.5 = 6075$
So, $? = 810 \times 7.5 = 6075$

48. (1) 8 288 512 680 792 **848**
+280 +224 +168 +112 +56
–56 –56 –56 –56

49. (4) 57 65 74 138 **163** 379
$+2^3$ $+3^3$ $+4^3$ $+5^3$ $+6^3$

50. (2) 16 **64** 32 128 64 256
×4 ÷2 +4 ÷2 ×4

51. (1) Upstream rate = 35/3.5 = 10 kmph
Downstream rate = 49/3.5 = 14 kmph

The speed of the current = $\frac{14-10}{2}$ kmph

= 2 kmph

52. (2) Let cost of computer one = x,

Sold at 15% profit = $x \times \frac{115}{100}$

Hence 2nd computer cost = 45000 – x,

Sold at 15% loss = $(45000 - x) \times \frac{85}{100}$

In total transaction loss occurred is

$$750 = 45000 - \left(x \times \frac{115}{100} + (45000 - x) \times \frac{85}{100}\right)$$

$$44250 = \frac{30x}{100} + 38250$$

$$x = 6000 \times \frac{100}{30} = 20{,}000$$

Hence Computer 1 Price = 20,000
Computer 2 price = 25,000
If he sold computer 1 at profit 10%

$$= 20{,}000 \times \frac{110}{100} = 22{,}000$$

Then price of computer 2 should be
= 45000 – 22000 = 23000
Hence loss percentage of computer 2

$$= \frac{25000 - 23000}{25000} \times 100 = \frac{2000}{250} = 8\%$$

53. (2) According to question,

$$\text{S.I.} = \frac{P \times R \times T}{100}$$

$$750 = \frac{5000 \times 5 \times T}{100}$$

T = 3 years

$$720 = \frac{6000 \times 3 \times R}{100}$$

R = 4%

54. (3) K I
B : I B : I (B = bronze and I = iron)
5 : 3 5 : 11
Concentration of bronze in K = 5/8
Concentration of bronze in L = 5/16

By allegation

(L) 5/16		(K) 5/8
	1/2	
(5/8–1/2)		(1/2–5/16)
= 2/16		= 3/16

So, the required ratio of K : L = 3 : 2

55. (3) Let the person income is 100
Saving $\rightarrow$ 6% of 100 = 6
And Expenditure $\rightarrow$ = 94
After five years income becomes ?115 (15 % increase)
Saving = 6 $\rightarrow$ Expenditure- 115 – 6 =109

% Increase in expenditure- $\frac{109-94}{94}$

= 15.95%

56. (1) Total number of students qualified in the examination from colleges R and S
= (3250 + 1500) = 4750
Average number of students qualified in the examination from colleges R and S

$$= \frac{4750}{2} = 2375$$

Total number of students appeared in the examination from colleges R and S = (3750 + 2500) = 6250
Average number of students appeared in the examination from colleges R and S

$$= \frac{6250}{2} = 3125$$

$$\therefore \text{ Required percentage} = \left(\frac{2375 \times 100}{3125}\right)$$

= 76%

57. (3) Total number of students appeared in the scholarship exam from R and T
= (3750 + 3000) = 6750
Total number of students qualified in the scholarship exam from R and T = (3250 + 2250) = 5500

$$\therefore \text{ Required ratio} = \frac{6750}{5500} = 27 : 22$$

58. (4) Required ratio = $\frac{2250}{1500} = 3 : 2$

59. (3) Total number of students appeared for the scholarship exam from college S = 2500
Total number of students appeared for the exam from all the colleges = (3500 + 2750 + 3750 + 2500 + 3000) = 15500

$\therefore$ Required percentage = $\frac{2500 \times 100}{15500}$

= 16.12%

60. (1) Total number of students appeared for the exam from all the colleges = (3500 + 2750 + 3750 + 2500 + 3000) = 15500

Average = 15500/5 = 3100

Total number of students qualified for the exam from all the colleges

= (2250 + 1500 + 3250 + 1500 + 2250)

= 10750

Average = $\frac{10750}{5}$ = 2150

$\therefore$ Required difference = (3100 – 2150) = 950

61. (3) 35% of ? = 197.4

$\Rightarrow \frac{35 \times ?}{100} = 197.4$

$\Rightarrow 35 \times ? = 197.4 \times 100 = 19740$

$\Rightarrow ? = \frac{19740}{35} = \frac{3948}{7} = 564$

$\Rightarrow ? = 564$

62. (5) $4\frac{5}{6} - 5\frac{5}{9} = ? - 2\frac{1}{3} + \frac{11}{18}$

$\Rightarrow 1 + \left(\frac{15 - 10 + 6 - 11}{18}\right) = ?$

$\Rightarrow ? = 1 + 0 = 1$

63. (3) 2704 ÷ 2 × ? = 31096

$\Rightarrow$ 1352 × ? = 31096

$\Rightarrow$? = 31096 / 1352 = 15548/676

$\Rightarrow$? = 23

64. (5) (1024 – 362 – 214) ÷ (786 – 730) = ?

$\Rightarrow$ (662 – 214) ÷ (56) = ?

$\Rightarrow$? = 448 ÷ 56

$\Rightarrow$? = 8

65. (1) $\sqrt{625} + \sqrt{484} = ?$

$\Rightarrow$? = 25 + 22

$\Rightarrow$? = 47

(66-70) :

66. (5) Number of people in Teaching profession

$\frac{30}{100} \times 25000 = 7500$

Number of people in Medical profession

$= \frac{10}{100} \times 25000 = 2500$

$\therefore$ Required % = $\frac{7500}{2500} \times 100 = 300\%$

67. (3) Total numbers of males in Banking and Medical professions

$= 25000 \times \frac{20}{100} \times \frac{60}{100} + 25000 \times \frac{10}{100} \times \frac{40}{100} = 3000 + 1000 = 4000$

The total number of females in Medical and Banking profession = 10% of 60% of 25000 + 20% of 40% of 25000 = 1500 + 2000 = 3500

$\therefore$ Required ratio = $\frac{4000}{3500} = \frac{8}{7} = 8 : 7$

68. (3) Females in Engineering professions

$25000 \times \frac{25}{100} \times \frac{70}{100} = 4375$

Males in Banking profession

$25000 \times \frac{20}{100} \times \frac{60}{100} = 3000$

Required% = $\left(\frac{4375}{3000} \times 100\right)\%$

= 145.83 ≈ 146%

69. (3) Number of males in Banking and Medical = 20% of 60% of 25000 + 10% of 40% of 25000 = 3000 + 1000 = 4000

Number of females in Law and Teaching

$\frac{15}{100} \times \frac{20}{100} \times 25000 + \frac{30}{100} \times \frac{60}{100} \times 25000 = 5250$

$\therefore$ Required ratio = $\frac{4000}{5250} = \frac{16}{21} = 16 : 21$

70. (1) Number of females in Engineering profession = 25% of 70% of 25000 = 4375

Number of males in Law profession =15% of 80% of 25000

= 3000

Required % = $\left(\frac{4375 - 3000}{3000} \times 100\right)\%$

= 45.83 ≈ 46%

VOCABULARIES

Word	Meaning in English	Meaning in Hindi
Stand in good stead	To be useful or helpful when needed	काम में आना, उपयोगी होना
Notably	Especially; in particular	विशेष रूप से
Preclude	Prevent from happening; make impossible.	रोक देना
Strife	Angry or bitter disagreement over fundamental issues.	कलह
Endure	Suffer (something painful or difficult) patiently.	टिके रहना
Nihilist	A person who believes in the belief that nothing has any value, especially that religious and moral principles have no value	अधर्मी, अनैतिक
Reluctance	Unwillingness or disinclination to do something.	अनिच्छा
Realpolitik	A system of politics or principles based on practical rather than moral or ideological considerations.	व्यवहारिक राजनीति
Naivete	Lack of experience, wisdom, or judgment.	मासूम, नासमझ
Zionist	A person who supports Zionism	यहूदी
Detrimental	Tending to cause harm	हानिकारक
Discernible	Able to be discerned; perceptible.	प्रत्यक्ष
Sponsoring	Providing funds for (a project or activity or the person carrying it out)	आयोजन
Accounted	Considered or regarded in a specified way	जिम्मेदार
Accumulate	Gather together or acquire an increasing number or quantity of.	संग्रह करना
Ascribes	Attribute something to (a cause)	कारण बताना
Surpassing	Incomparable or outstanding	श्रेष्ठ
Amalgamate	Combine or unite to form one organization or structure.	मिश्रित करना
Genres	A category of artistic composition, as in music or literature, characterized by similarities in form, style, or subject matter.	रचना-पद्धति
Meticulous	Showing great attention to detail; very careful and precise.	सूक्ष्म
Frown	Furrow one's brow in an expression of disapproval, displeasure, or concentration.	असहमति प्रकट करना तुच्छ समझना

IBPS PO SPECIAL PHASE -I MOCK TEST - 325 (ANSWER KEY)

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