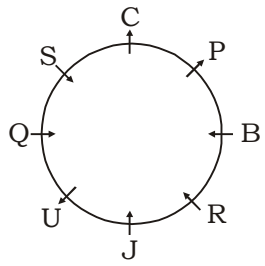
IBPS PO SPECIAL PHASE-I MOCK TEST- 315 (SOLUTION)

REASONING

(1 - 5) :



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

(6-10) :

6. (2)

7. (1) **From I :** Suppose the marks obtained is $(10x + y)$ a, two-digit number. {Note that the possibility of getting 100 marks is ruled out because in case of 100 marks interchanges of digits will not decrease 100 by 81.}

Now, $10x + y - (10y + x) = 81$

Therefore $x - y = \frac{81}{9} = 9$

Thus, the unit's digit will be 9 less than the digit at ten's place. Hence, the only such digit is 90. Hence, marks obtained by Kishore = 90

From II: There are several such numbers sum of digits of which and the difference of the digits are same, ie 10, 20, 30, 40, 50, 60, 70, 80 and 90.

8. (3) **From I:** We get 1st day of the next month is Saturday. This implies that last day of the month under consideration is Friday. And thus we get :

Date	Ist	8th	15th	22nd	29th	31st
Day	Fri	Fri	Fri	Fri	Fri	Sun

Hence, the total number of days in the month = 29.

From II: With the information of the last day of the month and the first day of the month (as mentioned in question part), we can find out the number of days in the month by the same method as discussed above, i.e, 31 days.

9. (3)

10. (4) It is not mentioned that Nidhi is towards left of Ranjan or right of Ranjan.

(11-15) : The given trend of sample of Input and its steps indicate that the given problem is of the type of shifting. Also, the given sample indicates that it is three-type shifting.

There three changes are repeated in successive steps. If all the elements of the input are denoted by a different letter from left to right, the successive steps according to the above change become as follows:

	1	2	3	4	5	6
Input	**A**	**B**	**C**	**D**	**E**	**F**
Step I	E	F	C	D	A	B
Step II	F	E	D	C	B	A
Step III	D	E	F	A	B	C
Step IV	B	C	F	A	D	E
Step V	C	B	A	F	E	D
Step VI	**A**	**B**	**C**	**D**	**E**	**F**
Step VII	E	F	C	D	A	B
Step VIII	F	E	D	C	B	A
Step IX	D	E	F	A	B	C

On the basis of the above chart answer the questions.

11. (1) **Step II :** 10 13 17 91 49 86
(F) (E) (D) (C) (B) (A)
Step V : (C) (B) (A) (F) (E) (D)
91 49 86 10 13 17

12. (4) **Step IX :** 9 16 62 55 38 37
(D) (E) (F) (A) (B) (C)
Input : (A) (B) (C) (D) (E) (F)
55 38 37 9 16 62

13. (5) First time input gets repeated in Step VI. Next time it would be repeated in step XII.

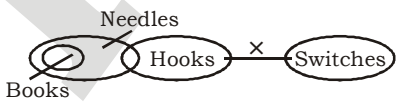
14. (2) **Step V:** 22 33 44 39 29 19
(C) (B) (A) (F) (E) (D)
Step VII: (E) (F) (C) (D) (A) (B)
29 39 22 19 44 33

15. (5) After changing the series becomes as follows.
E F G H A B C D M N O P I J **K** L U V W X Q R S T Z Y
Now, the required element is (19-7 =) 12th element from right.

(16-20) :

✓ → True × → False
– → Can't say

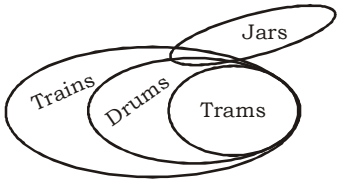
16. (4) **Statement :**



Conclusions :

I. – II. – III. ✓ IV. –

17. (3) **Statement :**



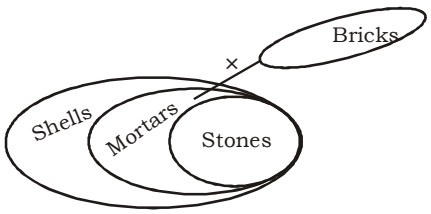
Conclusions :

I. ✓

II. –
III. – } either I or III follows

IV. –

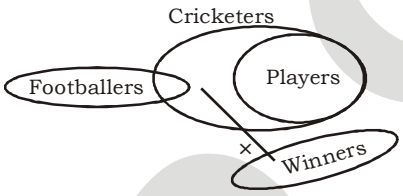
18. (2) **Statement :**



Conclusions :

I. ✓ II. × III. ✓ IV. ×

19. (5) **Statement :**

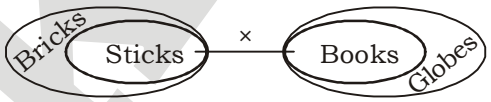


Only III follows

Conclusions :

I. × II. × III. ✓ IV. –

20. (5) **Statement :**



Conclusions :

I. –
II. – } either I or II follows

III. ×

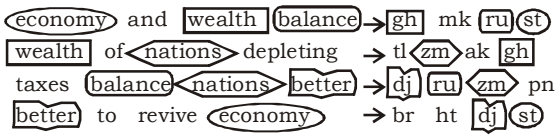
IV. ×

(21-25) :

Day	People	Game
Monday	D	Valleyball
Tuesday	A	Football
Wednesday	G	Cricket
Thursday	B	Kho-Kho
Friday	F	Hockey
Saturday	C	Tennis
Sunday	E	Squash

21. (4) 22. (1) 23. (5) 24. (4) 25. (1)

(26-30) :



26. (2) 27. (3) 28. (1) 29. (3) 30. (1)

From 31 - 35, first of all we understand the meanings of symbols given in the questions.

A $ B means A < B

A # B means A ≥ B

A % B means A = B

A © B means A > B

A @ B means A ≤ B

31. (4) Here,

L = T.....(i); T ≤ J....(ii); J ≥ K .... (iii)

Combining (i) and (ii), we get

J ≥ T = L.....(iv)

Now, from (iii) and (iv) we can't relate

(a) L and K

(b) T and K

Hence, neither conclusion I (L > K) nor conclusion II (T ≤ K) is neccessarily true.

32. (1) Here,

D < L.....(i); L ≤ V....(ii); V ≥ W .... (iii)

Combining (i) and (ii), we get

V ≥ L > D.....(iv)

Now, from (iv) we get

D < V. Hence,

conclusion I (D < V) is true.

Again, from (iii) and (iv), we can't relate D and W.

Therefore, conclusion II (D ≤ W) is not necessarily true.

33. (4) Here,

$G \leq K$.....(i); $K \leq F$....(ii); $F < M$ .... (iii)

Combining (i), (ii) and (iii), we get

$M > F \geq K \geq G$.....(iv)

Now, from (iv) we get $G \leq F$ and $K < M$,

Hence, neither conclusion I ($G > F$) nor conclusion II ($K \leq M$) is true.

34. (4) Here,

$M \geq T$.....(i); $T > H$....(ii); $F \leq H$ .... (iii)

Combining all, we get

$M \geq T > H \geq F$ .....(iv)

Now, from (iv) we get, $T > H$.

Hence, neither conclusion I ($H \leq T$) nor conclusion II ($H > T$) is true.

35. (2) Here,

$V \geq F$...(i); $F > J$...(ii); $J = D$...(iii)

Combining all, we get

$V \geq F > J = D$...(iv)

Now, from (iv), we get

$V > D$ and $F > D$.

Hence, conclusion II ($F > D$) is true but conclusion I ($V \geq D$) is not true.

MATHS

36. (2) $? = \dfrac{623898 \times 99}{60000} = 1029.43 \approx 1030$

37. (3) $? = \dfrac{4}{3} \times \dfrac{3}{7} \div \dfrac{6}{7} \div \dfrac{5}{9}$

$= \dfrac{4}{5} \times \dfrac{3}{7} \times \dfrac{7}{6} \times \dfrac{9}{5} = \dfrac{18}{25}$

38. (1) $(399.98)^2 = ?$

$? \approx (400)^2 = 160000$

39. (3) $\sqrt{624.9995} + (4.9989)^2 = ? \div \dfrac{1}{4.9900865}$

$\sqrt{625} + (5)^2 \approx ? \div \dfrac{1}{5}$

$25 + 25 = ? \times 5$

$? = \dfrac{50}{5} = 10$

40. (3) $989.001 + 1.00982 \times 76.792 = ?$

$? \approx 989 + 1 \times 77$

$= 989 + 77 = 1066 \approx 1065$

41. (1) Amount remaining after

1 year = $4000\left(1+\frac{7.5}{100}\right) - 1500$ = ₹ 2800

2 years = $2800\left(1+\frac{7.5}{100}\right) - 1500$ = ₹ 1510

3 years = $1510\left(1+\frac{7.5}{100}\right) - 1500$ = ₹ 123.25

42. (3) Let the number of students appeared in school X = 100
Number of students qualified in school X = 70
According to question,
Number of students appeared in School Y = 120
Number of students qualified in School Y = 70 + 50% of 70 = 70 + 35 = 105

$\therefore$ Required percentage = $\frac{105\times100}{120}$ = 87.5%

43. (4) Required number of items = $\frac{(3000+1000)}{(60-40)} = \frac{4000}{20}$ = 200

44. (1) Let the speed of train C be x kmph.
Speed of train B relative to C = (120 – x) kmph

$= \left[(120-x)\times\frac{5}{18}\right]$ m/sec = $\left(\frac{600-5x}{18}\right)$

Distance covered = 100 + 200 = 300m

$$\frac{300}{\left(\frac{600-5x}{18}\right)} = 120$$

$$300 = \frac{120(600-5x)}{18}$$

$10 \times 9 = 2\,(600 - 5x)$

$90 = 1200 - 10x$

$10x = 1200 - 90$

$x = \frac{1110}{10} = 111$

Hence, the speed of train C is 111 kmph.

45. (2) (1) If one green ball in a box, then number of ways = 6
(2) If two green balls in a box, then number of ways = 5
(3) If three green balls in a box, then the number of ways = 4
(4) If four green balls in a box, then number of ways = 3
(5) If five green balls in a box, then number of ways = 2
(6) If six green balls in a box, then number of ways = 1

$\therefore$ Total number of ways = 6 + 5 + 4 + 3 + 2 + 1 = 21

46. (1) Total IR rays received in 1 minute = $3600 \times \frac{10}{100} = 360$ units

Time taken to receive 8750 units of IR = $\frac{8750}{360}$ minutes = 24.3 minutes

47. (3) Amount of UV rays in 5 minutes = $3600 \times \frac{18}{100} \times 5 = 3240$ units

Amount of IR rays received in 2 minutes = $3600 \times \frac{10}{100} \times 2 = 720$ units

Amount of UV rays in 5 minutes of sun rays is $\left(\frac{3240}{720}\right)$ = 4.5 times the amount of IR rays received in 2 minutes.

48. (2) The amount of Gamma rays received when the ozone layer cover completely disappears = 100%

The amount of Gamma rays received in one minute if the ozone layer were to completely disappear = $3600 \times \frac{12}{100}$ units = 432 units

49. (4) Amount of Microwaves received in 4 minutes = $3600 \times \frac{15}{100} \times 4 = 2160$ units Amount of Alpha rays received in 3 minutes = $3600 \times \frac{8}{100} \times 3 = 864$ units

∴ Amount of Microwavers received in 4 minutes is (2160 – 864) units = 1296 units more than the amount of Alpha rays received in 3 minutes.

50. (4) Given that the body requires 40 units of vitamin D every day.

To generate 1 unit of vitamin D, requirement of Beta rays = 30 units

To generate 40 units of vitamin D, requirement of Beta rays = (30 × 40) = 1200 units

Now, in 1 minute $3600 \times \frac{5}{100} = 180$ units

Beta rays are received.

∵ 180 units Beta rays are received in 1 minute

∴ 1200 units Beta rays are received in $\frac{1}{180} \times 1200 = \frac{120}{18} = 6\frac{2}{3}$ minutes

51. (4) The pattern of the number series is :

325 – 1 × 11 = 314
314 – 2 × 11 = 292
292 – 3 × 11 = 259
259 – 4 × 11 = 215
215 – 5 × 11 = 160

52. (2) The pattern of the number series is :

45 × 1 + 1 = 46
46 × 1.5 + 1 = 70
70 × 2 + 1 = 141
141 × 2.5 + 1
= 352.5 + 1 = 353.5

53. (3) The pattern of the number series is :
$620 + 1 \times 12 = 632$
$632 - 2 \times 12 = 608$
$608 + 3 \times 12 = 644$
$644 - 4 \times 12 = 596$
$596 + 5 \times 12 = |656|$

54. (5) The pattern of the number series is :
$15 \times 2 - 1 \times 5 = 25$
$25 \times 2 - 2 \times 5 = 40$
$40 \times 2 - 3 \times 5 = 65$
$65 \times 2 - 4 \times 5 = 110$
$110 \times 2 - 5 \times 5 = 195$

55. (5) The pattern of the number series is :
$120 \times 2.5 + 20 = 320$
$320 \times 2.5 + 20 = 820$
$820 \times 2.5 + 20 = 2070$
$2070 \times 2.5 + 20 = 5195$

56. (4) From statement I,
$3 \times 5 = 15$; $5 \times 9 = 45$ (An odd number)
It is also obvious from statement II.

57. (5) The answer is not possible with the help of even both the statements. We need more information like sum or average of their ages or ratio of their after some time or before sometime etc.

58. (2) $A + B + C + D = ₹ (4 \times 62880)$
From statement II,
$A + C + D = ₹ (3 \times 61665)$
$\therefore$ B's salary = (A + B + C + D)'s salary – (A + C + D)'s salary

59. (3) From statement I,
The three digit number is divisible by 9.
From statement II,
Number = 6× 6
A number is divisible by 9 if sum of its digits is divisible by 9.
Clearly, * = 6
because $666 \div 9 = 74$

60. (4) From statement I,
Let CP of 1 printer = ₹ 1
$\therefore$ CP of 5 printers = ₹ 5
and SP of 5 printers = ₹ 6
$\therefore$ Gain % = $\frac{1}{5} \times 100 = 20\%$
$\therefore$ CP = $\frac{100}{120} \times 3000 = ₹ 2500$
$\therefore$ Gain = ₹ (3000 – 2500) = ₹ 500
From statement II, we can also find the answer.

61. (2) I. $4x^2 - 32x + 63 = 0$

$\Rightarrow 4x^2 - 14x - 18x + 63 = 0$

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

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

$\Rightarrow x = \frac{7}{2}$ or $\frac{9}{2}$

II. $2y^2 - 11y + 15 = 0$

$\Rightarrow 2y^2 - 6y - 5y + 15 = 0$

$\Rightarrow 2y(y - 3) - 5(y - 3) = 0$

$\Rightarrow (y - 3)(2y - 5) = 0$

$\Rightarrow y = 3$ or $\frac{5}{2}$

Clearly, $x > y$

62. (2) I. $x^3 = (216)^{\frac{1}{3}\times 3} = 216$

$\Rightarrow x = \sqrt[3]{216} = 6$

II. $6y^2 = 150$

$\Rightarrow y^2 = \frac{150}{6} = 25$

$\Rightarrow y = \pm 5$

Clearly, $x > y$

63. (1) I. $12x^2 + 17x + 6 = 0$

$\Rightarrow 12x^2 + 9x + 8x + 6 = 0$

$\Rightarrow 3x(4x + 3) + 2(4x + 3) = 0$

$\Rightarrow (4x + 3)(3x + 2) = 0$

$\Rightarrow x = -\frac{3}{4}$ or $-\frac{2}{3}$

II. $6y^2 + 5y + 1 = 0$

$\Rightarrow 6y^2 + 2y + 3y + 1 = 0$

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

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

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

Clearly, $x < y$

64. (3) I. $20x^2 + 9x + 1 = 0$

$\Rightarrow 20x^2 + 5x + 4x + 1 = 0$

$\Rightarrow 5x(4x + 1) + 1(4x + 1) = 0$

$\Rightarrow (4x + 1)(5x + 1) = 0$

$\Rightarrow x = -\frac{1}{4}$ or $-\frac{1}{5}$

II. $30y^2 + 11y + 1 = 0$

$\Rightarrow 30y^2 + 6y + 5y + 1 = 0$

$\Rightarrow 6y(5y + 1) + 1(5y + 1) = 0$

$\Rightarrow (5y + 1)(6y + 1) = 0$

$\Rightarrow y = -\frac{1}{5}$ or $-\frac{1}{6}$

Clearly, $x \leq y$

65. (4) I. $x^2 + 17x + 72 = 0$

$\Rightarrow x^2 + 8x + 9x + 72 = 0$

$\Rightarrow x(x + 8) + 9(x + 8) = 0$

$\Rightarrow (x + 9)(x + 8) = 0$

$\Rightarrow x = -9$ or -8

II. $y^2 + 19y + 90 = 0$

$\Rightarrow y^2 + 10y + 9y + 90 = 0$

$\Rightarrow y(y + 10) + 9(y + 10) = 0$

$\Rightarrow (y + 9)(y + 10) = 0$

$\Rightarrow y = -9$ or -10

Clearly, $x \geq y$

66. (1) In 2010, profit of Company M = 4.5 crore

Profit of Company (P + N) = (4 + 3) = 7 crore

$\therefore$ Reqd% = $\frac{4.5}{7} \times 100 = 64.28\%$

67. (4) Expenditure of Company M in the year 2011 is 75 crore.

Profit of Company M in year 2011 is 4 crore.

$\therefore$ Income of Company M in year 2011 is 75 + 4 = 79 crore

Now, expenditure of Company P in the year 2011 is 68 crore.

Profit of Company P in the year 2011 is 7 crore.

Income of Company P in the year 2011 is (68 + 7) = 75 crore

$\therefore$ Reqd ratio = 79 : 75

68. (2) In the year 2012 profit of Company M = 6 crore

$\therefore$ Expenditure = $6\left(1+\frac{50}{100}\right)$ = 9 crore

Income = (9 + 6) = 15 crore

Profit of Company N in the year 2012 = 6.5 crores

$\therefore$ Expenditure = $6.5\left(1+\frac{60}{100}\right) = 6.5 \times \frac{8}{5} = 1.3 \times 8 = 10.4$ crore

Hence, Income = (6.5 + 10.4) = 16.9 crore Again, Profit of Company P in the year 2012 = 5 crore

$\therefore$ Expenditure = $5\left(1+\frac{80}{100}\right) = 5 \times \frac{9}{8}$ = 9 crore

Hence, Income = (9 + 5) = 14 crore

Now, average income of all three companies

$= \frac{1}{3}(15 + 16.9 + 14) = \frac{45.9}{3} = 15.3$ crore

69. (3) Profit of Company N in the year 2009 = 2 crore
Profit of Company N in the year 2012 = 6.5 crore
Increase = (6.5 – 2) = 4.5 crore

$$\% \text{ increase} = \frac{4.5}{2} \times 100 = 225\%$$

70. (5) Income of Company P in the year 2010 = 40 crore

$$\text{Income of Company M in the year 2010} = 40\left(1+\frac{20}{100}\right) = 48 \text{ crore}$$

Now, profit of Company M in the year 2010 = 4.5 crore

∴ Expenditure of Company M in the year 2010 = (48 – 4.5) crore = 43.5 cror

ENGLISH LANGUAGE

71. (2) "India, Israel and the US are today the three leading targets of terror in the world and will remain so in the foreseeable future."

75. (1) "Witness the remarkable turnaround post 9/11, in the American stand on the so-called 'freedom struggle' being waged against India in Kashmir."

76. (3) "A close bond with Israel must necessarily come at the expense of the larger Muslim world."

77. (5) "Misguided reluctance on the part of India's leadership to do bussiness with the Zionist state."

(91-95) : BCFDAE

91. (3) 92. (5) 93. (2)
94. (2) 95. (1)

96. (3) Replace 'apart at' by 'apart from'.

97. (3) Replace 'intend' by 'intends'.

98. (4) Replace 'staying' by 'stayed'.

99. (2) Remove 'by' before 'gifted'.

100. (2) Replace 'swung' by 'swinging in'.

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 - 315 (ANSWER KEY)

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