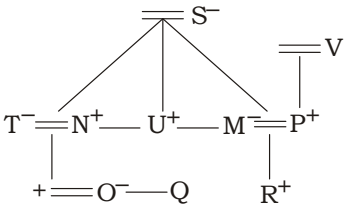
IBPS PO PHASE-I - 163 (SOLUTION)

REASONING

(1-3) :



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

(4-8) :

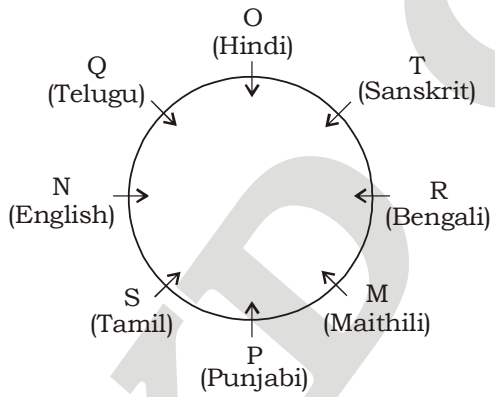
4. (2) 5. (1) 6. (4)
7. (1) 8. (5)

(9-11) :

Boy	Visit	Girl	Car
A	*Circus*	*M*	*Benz / Kwid*
B	*Movie*	*P*	*Maruti*
C	*Beach*	*R*	*Maruti*
D	*Circus*	*N*	*Benz / Kwid*
E	*Play*	*Q*	*Nano*
F	*Park*	*O*	*Benz*

9. (3) 10. (4) 11. (3)
12. (4) 13. (1) 14. (3)
15. (5)

(16-21) :



16. (1) 17. (3) 18. (4)
19. (2) 20. (3) 21. (3)

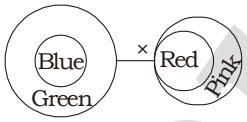
(22-25) :

Floor	Person
7	*B*
6	*Vacant*
5	*A*
4	*E*
3	*D*
2	*F*
1	*C*

22. (1) 23. (5) 24. (2)
25. (1)

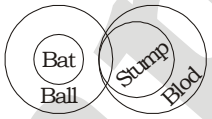
(26-30) :

26. (3)



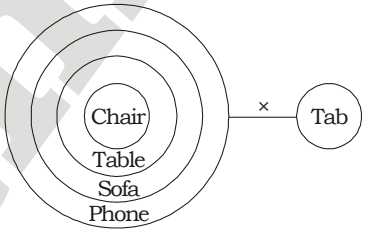
Either conclusion I or III follow.

27. (3)



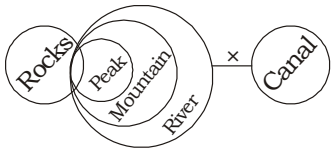
Only conclusion III follow.

28. (3)



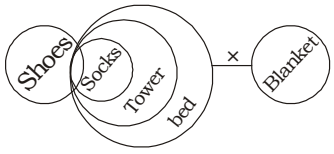
Only conclusion III follow.

29. (5)



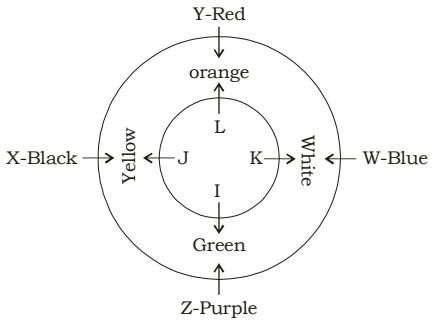
None follows.

30. (4)



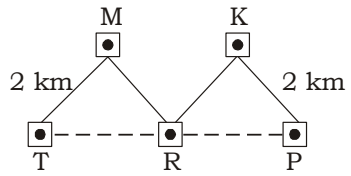
All conclusions follow.

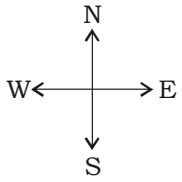
(31-33) :



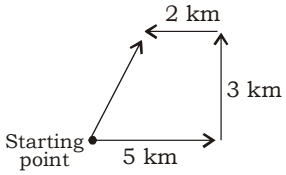
31. (2) 32. (4) 33. (3)

34. (3)





35. (3)



MATHS

(36-40) :

36. (2) 23.6% of 1254 – 16.6% of 834
= 295.944 – 138.444
= 157.5

37. (1) $3^{8.9} \times 27^{7.2} - 81^{4.6} = 3^{?}$
$\Rightarrow 3^{8.9} \times 3^{21.6} - 3^{18.4} = 3^{?}$
$\Rightarrow ? = 8.9 + 21.6 - 18.4$
$\Rightarrow ? = 12.1$

38. (2) $\frac{(14)^2 + 132 \div 4}{25} = \frac{196 + 33}{25} = \frac{229}{25} = 9.16$

39. (5) $(15 \times 0.40)^4 \div (1080 \div 30)^4 \times (24 \times 8)^4 = (3 \times 2)^{? + 5}$
$\Rightarrow (6)^4 \div (36)^4 \times (216)^4 = (6)^{? + 5}$
$\Rightarrow (6)^4 \div (6)^8 \times (6)^{12} = (6)^{? + 5}$
$\Rightarrow ? + 5 = 6 - 8 + 12$
$\Rightarrow ? + 5 = 10$
$\Rightarrow ? = 5$

40. (1) $567 - 4824 \div 134 = ? \times 9$
$\Rightarrow 567 - 36 = ? \times 9$
$\Rightarrow ? \times 9 = 531$
$\Rightarrow ? = \frac{531}{9} = 59$

(41-45) :

41. (2) Female employees in KD Publication
$\left(5000 \times \frac{20}{100} - 3500 \times \frac{25}{100}\right) = 125$
Male employees in KD Publication
$= 3500 \times \frac{25}{100} = 875$
Required ratio = 875 : 125 = 7 : 1

42. (1) Female employees in KD Tech
$= 5000 \times \frac{15}{100} - 3500 \times \frac{15}{100}$
$= 750 - 525 = 225$
Male employees in LA Attire
$= 3500 \times \frac{8}{100} = 280$
Required difference = 280 – 225 = 55

43. (4) Male employees in KD CA $= 3500 \times \frac{10}{100}$
= 350
No. of female employees in KD CA
$= 5000 \times \frac{12}{100} - 350 = 250$
Required % $= \left[\frac{350 - 250}{250} \times 100\right]\%$
$= \left(\frac{100}{250} \times 100\right)\% = 40\%$ more

44. (1) No. of female employees in
KD Tech $= 5000 \times \frac{15}{100} - 3500 \times \frac{15}{100}$
= 225
LA Attire $= 5000 \times \frac{8}{100} - 3500 \times \frac{8}{100}$
= 120
Rishta Milega $= 5000 \times \frac{5}{100} - 3500 \times \frac{7}{100} = 5$
KD Campus $= 5000 \times \frac{40}{100} - 3500 \times \frac{35}{100}$
= 775
KD Publication $= 5000 \times \frac{20}{100} - 3500 \times \frac{25}{100} = 125$
KD CA $= 5000 \times \frac{12}{100} - 3500 \times \frac{10}{100} = 250$
Required answer is Rishta Milega.

45. (3) Central angle of all the employees of KD Campus $= \frac{40}{100} \times 360^\circ = 144^\circ$
Central angle of Male employees of KD Campus $= \frac{35}{100} \times 360^\circ = 126^\circ$
Required difference = 144° – 126° = 18°

(46-50) :

46. (3) The pattern of the number se ries is :
28 + 11 = 39
39 + (11 + 13) = 63
63 + (24 + 15) = 102
102 + (39 + 17) = 158
158 + (56 + 19) = **233**

47. (5) The pattern of the number series is :
$7 + 3^2 = 7 + 9 = 16$
$16 + 5^3 = 16 + 125 = 141$
$141 + 7^2 = 141 + 49 = 190$
$190 + 9^3 = 190 + 729 = 919$
$919 + 11^2 = 919 + 121 =$ **1040**

48. (3) The pattern of the number series is :
$12 + 5 \times 1 = 17$
$17 + 5 \times 3 = 32$
$32 + 5 \times 5 = 57$
$57 + 5 \times 7 = 92$
$92 + 5 \times 9 =$ **137**

49. (4) The pattern of the number series is :
$19 + 2 \times 3 = 19 + 6 = 25$
$25 + 4 \times 5 = 25 + 20 = 45$
$45 + 6 \times 7 = 45 + 42 = 87$
$87 + 8 \times 9 = 87 + 72 = 159$
$159 + 10 \times 11 = 159 + 110 =$ **269**

50. (5) The pattern of the number series is :
$83 + 41 \times 1 = 124$
$124 + 41 \times 2 = 124 + 82 = 206$
$206 + 41 \times 4 = 206 + 164 = 370$
$370 + 41 \times 8 = 370 + 328 = 698$
$698 + 41 \times 16 = 698 + 656 =$ **1354**

51. (3) According to question,
Required probablity = probability that ball from bag A is red and both the balls from bag B are black
Or
probability that ball from bag *A* is black and one black and one red is drawn from bag B.

$$= \frac{{}^4C_1}{{}^9C_1} \times \frac{{}^7C_2}{{}^{10}C_2} + \frac{{}^5C_1}{{}^9C_1} \times \frac{{}^3C_1 \times {}^7C_1}{{}^{10}C_2}$$

$$= \frac{4}{9} \times \frac{7}{15} + \frac{5}{9} \times \frac{7}{15} = \frac{7}{15}$$

52. (2) Price of home after 3 years

$$= 10,00,000 \times \left(1 + \frac{20}{100}\right)^3$$

$$= 10,00,000 \times \left(\frac{6}{5}\right)^3$$

$$= 10,00,000 \times \frac{216}{125} = ₹17,28,000$$

Price of car after 3 years

$$= 16,00,000 \times \left(1 + \frac{25}{100}\right)^3$$

$$= 16,00,000 \times \left(\frac{3}{4}\right)^3$$

$$= 16,00,000 \times \frac{27}{64} = ₹\,6,75,000$$

$\therefore$ Required difference
= 17,28,000 – 6,75,000 = ₹ 10,53,000

53. (1) Time = $\frac{\text{Distance}}{\text{Speed}}$

Let the speed of the boat be x km/hr and speed of the stream be y km/hr.
Relative speed of boat while going upstream = $(x + y)$ km/hr
Given, A man rows to a place 90 km away and back to the starting point in 9 hours 36 minutes.

Time taken = $(9 + \frac{36}{60})$ hrs = 9.6 hours

$$\therefore \frac{90}{x-y} + \frac{90}{x+y} = 9.6$$

$$\Rightarrow \frac{1}{x-y} + \frac{1}{x+y} = \frac{8}{75} \quad \text{..... (i)}$$

Also the time taken to travel 5 km downstream is equal to time taken to travel 3 km upstream.

$$\therefore \frac{5}{x+y} = \frac{3}{x-y}$$

$\Rightarrow 5x - 5y = 3x + 3y$
$\Rightarrow x = 4y$
Substituting value of x in equation (i), we get

$$\Rightarrow \frac{1}{3y} + \frac{1}{5y} = \frac{8}{75}$$

$$\Rightarrow \frac{8}{15y} = \frac{8}{75}$$

$\Rightarrow y = 5$ km/hr
$\therefore x = 4 \times 5 = 20$ km/hr
Time taken for the boat to cover a distance of 60 km in still water = $\frac{60}{20}$
= 3hrs

54. (1) The quantity of milk in the mixture

$= 30 \times \frac{7}{10} = 21$ litres

The quantity of water in the mixture

$= 30 \times \frac{3}{10} = 9$ litres

Now, let the quantity of water added to the mixture be x litres. Then water becomes 40% of the total quantity of mixtre.

So, $\frac{21}{9+x} = \frac{3}{2}$

or, $27 + 3x = 42$

or, $3x = 15$

$\therefore \quad x = \frac{15}{3} = 5$ litres

55. (5) Let the sum be P

Then, $\frac{p \times 7.5 \times 15}{12 \times 100} - \frac{p \times 12.5 \times 8}{12 \times 100} = 3250$

$\Rightarrow$ $112.5\,P - 100P = 3250 \times 100 \times 12$

$\therefore \quad P = \frac{32500 \times 100 \times 12}{12.5} = ₹\,3,12,000$

(56-60) :

56. (2) Actual C.P. of Cup = 50 + 15 = ₹ 65

$\therefore$ S.P of Cup = $65 \times \frac{115}{100} = ₹\,74.75$

57. (4) Actual C.P. of Chair = 200 + 50 = ₹ 250

$\therefore$ S.P. of Chair = 250 + 25= ₹ 275

Actual C.P. of Table = 520 + 50 ₹ 570

$\therefore$ Required % = $\left[\frac{(570-275)}{275} \times 100\right]\%$

$= \left(\frac{295}{275} \times 100\right)\% = 107.27\% \approx 107\%$ less

58. (1) C.P. of Pillow = $\frac{120}{80} \times 100 = ₹\,150$

$\therefore$ Loss on Pillow = 150 – 120 = ₹ 30

Actual C.P. of Bedsheet = 240 + 20

= ₹ 260

$\therefore$ Profit on Bedsheet = $260 \times \frac{12}{100} = ₹\,31.20$

$\therefore$ Required ratio = 30 : 31.20

= 25 : 26

59. (3) Actual C.P. of Bedsheet = 240 + 20

= ₹ 260

$\therefore$ S.P of Bedsheet = $260 \times \frac{112}{100}$

= ₹ 291.20

C.P of Pillow = $\frac{120}{80} \times 100 = ₹\,150$

$\therefore$ Required difference = 291.20 – 150

= ₹ 141.20

60. (2) Actual C.P of Cup = 50 + 15 = ₹ 65

S.P of Cup = $65 \times \frac{90}{100} = ₹\,58.5$

Required difference

$= \left[\frac{(520-58.5)}{520} \times 100\right]\% = 88.75\%$

61. (1) First selling price = $64000 \times \frac{92}{100}$

= ₹ 58,880

Second selling price = $58,880 \times \frac{110}{100}$

= ₹ 64,768

$\therefore$ Profit = ₹ 64,768 – ₹ 64,000 = ₹ 768

62. (5) Total number of possible outcomes

$= {}^{14}C_3 = \frac{14 \times 13 \times 12}{3 \times 2} = 364$

Now, according to the question, none is green

$\therefore$ Total no. of favouable outcomes

= Selection of 3 marbles out of 5 blue, 2 red and 3 yellow marbles

$= {}^{10}C_3 = \frac{10 \times 9 \times 8}{3 \times 2} = 120$

$\therefore$ Required probability = $\frac{120}{364} = \frac{30}{91}$

(63-65) :

63. (3) From statement A,

Let the length of true is 2 m.

ATQ, $\frac{l}{t} = \frac{100 + l}{m}$

$lm = 100t + lt$

$\Rightarrow lm - lt = 100t$

$\Rightarrow l(m - t) = 100t$

$\Rightarrow l = \left(\frac{100t}{m-t}\right)$

From statement B,

$l = 80 \times \frac{5}{18} \times t$

Therefore, either statement A alone or statement B alone is sufficient to answer the question.

64. (5) Using both the statement, since Lucky got less than 83% in Science and still got admission, he must have got more than 88% in Mathematics.
Hence, both the statements are necessary to answer the question.

65. (3) From statement A,

$\therefore$ 32 boys = $32 \times \frac{3}{4}$ = 24 men

Let 20 men do the work in x days.
$\because$ $20x = 24(x - 10)$
$\therefore$ $x = 60$ days
20 men can do the job in $60 \times 2 = 120$ days.
Hence, statement I alone is sufficient to answer the question.
From statement B,
$\because$ 1 women = 1 boy
$\because$ 1 man, 1 woman and 1 boy = 1 man and 2 boys
$\because$ 1 boy completes the work in 70 days.
$\because$ 2 boys completes the work in 35 days.
And 1 man and 2 boys work for 7 days.

1 man will take $\left(\frac{35 \times 7}{35 - 7}\right)$ days, i.e $\frac{35}{4}$

$= 8\frac{3}{4}$ days

$\therefore$ 10 men will do the same job in $\frac{\frac{35}{4}}{10}$

$= \frac{35}{40}$ days

Therefore, statement B alone also can give the answer,
Hence, either A alone or B alone can answer the question.

(66-70) :

66. (1) I. $7x^2 - 51x + 92 = 0$
$\Rightarrow 7x^2 - 28x - 23x + 92 = 0$
$\Rightarrow 7x^2 (x - 4) - 23(x - 4) = 0$
$\Rightarrow (7x - 23)(x - 4) = 0$

$\Rightarrow x = \frac{23}{7}, 4$

II. $13y^2 - 12y - 81 = 0$
$\Rightarrow 13y^2 - 39y + 27y - 81 = 0$
$\Rightarrow 13y(y - 3) + 27(y - 3) = 0$
$\Rightarrow (13y + 27)(y - 3) = 0$

$\Rightarrow y = -\frac{27}{13}, 3$

Clearly, $x > y$

67. (5) I. $87x^2 + 183x + 18 = 0$
$\Rightarrow 87x^2 + 174x + 9x + 18 = 0$
$\Rightarrow 87x(x + 2) + 9(x + 2) = 0$
$\Rightarrow (87x + 9)(x + 2) = 0$

$\Rightarrow x = -\frac{9}{87}, -2$

II. $y^2 - 1369 = 0$
$\Rightarrow y^2 = 1369$
$\Rightarrow y = +37, -37$

68. (5) I. $23x^2 + 23x - 1288 = 0$
$\Rightarrow 23x^2 + 184x - 161x - 1288 = 0$
$\Rightarrow 23x(x + 8) - 161(x + 8) = 0$
$\Rightarrow (23x - 161)(x + 8) = 0$

$\Rightarrow x = \frac{161}{23}, -8$

II. $18y^2 + 351y + 1620 = 0$
$\Rightarrow 2y^2 + 39y + 180 = 0$
$\Rightarrow 2y^2 + 24y + 15y + 180 = 0$
$\Rightarrow 2y(y + 12) + 15(y + 12) = 0$
$\Rightarrow (2y + 15)(y + 12) = 0$

$\Rightarrow y = -\frac{15}{2}, -12$

69. (3) $13x + 27y = 63$ .....(i)
$9x + 16y = 20$ .....(ii)
equation (i) $\times$ 9 – equation (ii) $\times$ 13, we get
$117x + 243y - 117x - 208y = 567 - 260$
$\Rightarrow 35y = 307$

$\Rightarrow y = \frac{307}{35}$

Put the value of y in equation (i),

$13x + 27 \times \frac{307}{35} = 63$

$\Rightarrow 13x = 63 - \frac{8289}{35}$

$\Rightarrow x = \frac{6084}{35 \times 13}$

Clearly, $x < y$

70. (5) I. $2\sqrt{2}\,x^2 + 49x + 136\sqrt{2} = 0$

$\Rightarrow 2\sqrt{2}\,x^2 + 32x + 17x + 136\sqrt{2} = 0$

$\Rightarrow 2\sqrt{2}\,x(x + 8\sqrt{2}) + 17(8 + \sqrt{2}) = 0$

$\Rightarrow (2\sqrt{2}\,x + 17)(8 + 8\sqrt{2}) = 0$

$\Rightarrow x = -\frac{17}{2\sqrt{2}}, -8\sqrt{2}$

II. $3y^2 + 211 = 5758$
$\Rightarrow 3y^2 = 5547$
$\Rightarrow y^2 = 1849$
$\Rightarrow y = +43, -43$

ENGLISH LANGUAGE

91. (1) 'interesting' replace with 'interested'.
92. (2) 'comprising' replace with 'comprises'.
93. (3) 'of' replace with 'than'.
94. (4) 'Approximate' replace with 'approximately'.
95. (5) No error.
96. (1) Use 'of' just after 'worthy'.
97. (4) 'with' replace with 'in'.
98. (3) 'of' replace with 'than'.
99. (2) 'No' replace with 'any' because. No and failed both are Negative word.
100. (2) Remove 'of' from the sentence.

VOCABULARIES

Words	Meaning in English	Meaning in Hindi
Combat	To fight or counter	सामना करना
Debacle	Defeat	पराजय
Dodge	a sudden quick movement to avoid someone or something	चकमा/धोखा देना
Infirmity	Physical/Mental weekness	कमजोरी
Insuregency	Rebellion	विद्रोह
Reinforcement	Extra soliders sent to a place	अतिरिक्त सैन्य
Seasoned	To rescue from a bad condition	बुरी परिस्थितियों से बाहर निकलना
Surge	growth in number	तेज बढ़ोत्तरी
Throwaway	Expressed in a casual or understated way	बिना सोचे या विचार किए
Asserment	Evaluation	मूल्यांकन
Commensurate	corresponding in size or degree or in proportion	अनुरूप/समतुल्य
Perception	the ability to see, hear, or become aware of something through the sense	अवधारणा
Morate	in confidence	आत्मविश्वास
Onlooking	a nonparticipating observer	दर्शक

IBPS PO PHASE-I - 163 (ANSWER KEY)

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

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

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