IBPS PO PRELIMINARY GRAND TEST : IPP-170627 - HINTS AND SOLUTIONS

ANSWER KEY

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

16. Use ‘later’ in place of ‘lately’. Lately means recently; in the recent past and later means at a time in future.
17. Use ‘for’ in place of ‘with’.
18. Use ‘unfortunate’ in place of ‘unfortunately’. Beings is a noun which will be qualified by an adjective.
19. The sentence is correct.
20. It should be ‘He is the first film producer’ or ‘He is one of the film producers’.
21. ‘many’ of whom, makes the sentence grammatically correct.
22. The subject of the sentence *the relationship* is singular.
23. The sentence is correct.
24. It should be ‘and leaves the’. Here, the subject, a *nuclear testing* is singular and the sentence is in Simple Present Tense.
25. ‘date back to’ is the correct use.

32. (1) $\frac{2}{3}\times x = y^3$ First number = x, Second number = y

$y = \frac{12}{100}\times 50 = 6$

$\Rightarrow \frac{2}{3}\times x = 216 \Rightarrow x = 324$

Sum of 1st and 2nd number = 324 + 6 = 330

33. (3) C.P. of mobile = 12000

S.P. of mobile = $\frac{108}{100}\times 12000 = 12960$

C.P. of refrigerator = 10000

S.P. of refrigerator = $\frac{88}{100}\times 10000 = 8800$

Profit obtained by mobile = 960
Loss obtained by refrigerator = 1200
Loss = 1200 – 960 = 240

34. (2) $\frac{3\times 19 + 3\times 32 + x}{7} = 26$

$\Rightarrow 57 + 96 + x = 182 \Rightarrow x = 29$ yrs.

35. (4) Side of square = S
Length and breadth of rectangle is *l*, b respectively.
Area of rectaqngle (*l*b) = 240
We don’t know length, breadth exactly. So can’t be determined.

36. (5) $\frac{7}{8}\times 1008 - \frac{3}{4}\times 968 = 882 - 726 = 156$

37. (1) First number = x, Second number = y.
(2x + 3y = 100) × 3
(3x + 2y = 120) × 2

$$\begin{array}{r} 6x + 9y = 300 \\ 6x + 4y = 240 \\ \hline 5y = 60 \end{array}$$

$\Rightarrow y = 12$
$\Rightarrow 2x + 36 = 100$
$\Rightarrow 2x = 64 \Rightarrow x = 32$
Largest number = 32

38. (3) Total no. of students = 54 × 30 = 1620
If the students are in a row = 45.

No. of rows = $\frac{1620}{45} = 36.$

39. (5) Anju : Sandhya $\Rightarrow$ 13 : 17

$\frac{13x-4}{17x-4} = \frac{11}{15}$

$\Rightarrow 15(13x-4) = 11(17x-4)$

$\Rightarrow 195x - 60 = 187x - 44 \Rightarrow 8x = 16 \Rightarrow x = 2$
Ratio of their ages after 6 yrs.
(13 × 2) + 6 : (17 × 2) + 6
$\Rightarrow$ 32 : 40 $\Rightarrow$ 4 : 5.

40. (1) $15 \times 16 + 25 \times 4 + x \times 40 = 80 \times 15$
$\Rightarrow 240 + 350 + 40x = 1200$

$\therefore x = \frac{610}{40} = 15.25$

41. (3) Total no. of units manufactured by Company C
$= (2.6 + 2.2 + 2.1 + 2.8 + 2.6) \times 100 = 1230$

42. (5) The no. of units Company E sold in 2007
$= 1.7 \times 100 = 1700$
The no. of units Company E sold in 2006
$= 1.4 \times 100 = 1400$

Required % $= \frac{1700-1400}{1400} \times 100 = 21.4 \cong 21\%$

43. (4) $\frac{\text{No. of units sold by Company D in 2006}}{\text{No. of units manufactured in 2006}} \times 100$

$= \frac{2.2 \times 100}{3 \times 100} \times 100 = 73.33$

44. (5) No. of units manufactured by A & B in 2009 **:**
No. of units sold by A & B in 2009
$\Rightarrow (100 + 240) : (40 + 130)$
$\Rightarrow 30 : 170$
$\Rightarrow 2 : 1$

45. (4) ${}^3C_2 \times {}^6C_3 = 3 \times 20 = 60$ ways

46. (1) ${}^4C_4 \times {}^6C_1 + {}^4C_2 \times {}^3C_3 = 1 \times 6 + 6 \times 1 = 12$ ways

47. Number of boys in Management

$= 3500 \times \frac{16}{100} - 1500 \times \frac{12}{100} = 560 - 180 = 380$

Number of boys in IT

$= 3500 \times \frac{20}{100} - 1500 \times \frac{18}{100} = 700 - 270 = 430$

Total number of boys in both = 380 + 430 = 810

48. Number of girls in Art $= 1500 \times \frac{38}{100} = 570$

Number of boys in Science

$= 3500 \times \frac{22}{100} - 1500 \times \frac{11}{100} = 770 - 165 = 605$

Required ratio = 570 : 605 = 114 : 121.

49. Total number of girls in Science and commerce together

$= 1500 \times \frac{11}{100} = 165$

20% girls from science Merged into Management, then the number of students

$= 3500 \times \frac{16}{100} - 165 \times \frac{20}{100} = 560 + 33 = 593$

50. 20% of girls enrolled in science $= \frac{20}{100} \times \frac{11}{100} \times 1500 = 33.$

No. of students in management $= \frac{16}{100} \times 3500 = 560.$

$\therefore$ After adding 33 girls to management, total students
$= 560 + 33 = 593.$

51. $\frac{?}{576} = \frac{256}{?}$

$\Rightarrow ?^2 = 256 \times 576 \Rightarrow ? = \sqrt{256 \times 576} = 16 \times 24 = 384$

52. Suppose original fraction is $\frac{x}{y}$

$\frac{x + \frac{200x}{100}}{y + \frac{350y}{100}} = \frac{5}{12} \Rightarrow \frac{300x}{100} \times \frac{100}{450y} = \frac{5}{12}$

$\Rightarrow \frac{300x}{450y} = \frac{5}{12} \Rightarrow \frac{2x}{3y} = \frac{5}{12}$

$\Rightarrow \frac{x}{y} = \frac{5}{12} \times \frac{3}{2} \Rightarrow \frac{x}{y} = \frac{5}{8}$

Shortcut :

$\frac{x + 2x}{y + 3.5y} = \frac{5}{12} \Rightarrow \frac{3x}{4.5y} = \frac{5}{12} \Rightarrow \frac{x}{y} = \frac{5 \times 4.5}{3 \times 12} = \frac{5}{8}$

53. $3Y + 9X = 54$ ...(i)

$\Rightarrow \frac{28X}{13Y} = \frac{140}{39}$

$\Rightarrow 1820Y - 1092X = 0$ ...(ii)

From Eqs (i) and (ii), we get
X = 5, Y = 3
$\therefore$ Y – X = 3 – 5 = –2

54. Suppose number is x

$\therefore x \times \frac{4}{5} \times \frac{3}{4} - x \times \frac{2}{5} \times \frac{1}{6} = 648$

$\Rightarrow \frac{12x}{20} - \frac{2x}{30} = 648 \Rightarrow \frac{36x - 4x}{60} = 648$

$\Rightarrow \frac{32x}{60} = 648 \Rightarrow x = \frac{648 \times 60}{32} = 81 \times 15 = 1215$

55. Suppose each child got x sweets.
$\therefore 112 \times x = (112 - 32) \times (x + 6)$
$\Rightarrow 112x = 80x(x + 6)$
$\Rightarrow 112x = 80x + 480 \Rightarrow 112x - 80x = 480$
$\Rightarrow 32x = 480 \Rightarrow x = 15$

56. $\left(6\frac{3}{5} - 3\frac{4}{5}\right) \times 355 = \left(\frac{33}{5} - \frac{19}{5}\right) \times 355$

$= \left(\frac{33-19}{5}\right) \times 355 = \frac{14 \times 355}{5} = 994$

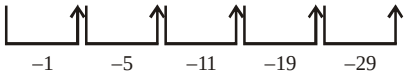
57. Breadth of carpet = 3 m
Length of carpet = 3 × 1.44 = 4.32 m
Original cost of carpet = 3 × 4.32 × 45 = ₹ 583.20

Cost of carpet after increasing of length and breadth

$= 3\times\frac{125}{100}\times 4.32\times\frac{140}{100}\times 45 = 15\times 1.08\times 7\times 9 = ₹\,1020.60$

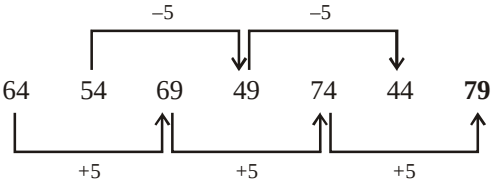
$\therefore$ Increase (Difference) = 1020.60 – 583.20 = ₹ 437.40

58. (3) 587 586 581 570 **551** 522



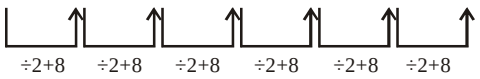
$\Rightarrow$ 570 – 19 = 551

59. (5) 64 54 69 49 74 44 **79**



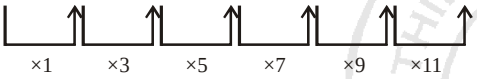
$\Rightarrow$ 74 + 5 = 79

60. (2) 4000 2008 1012 **514** 265 140.5 78.25



$\Rightarrow \frac{1012}{2}+8 = 514$

61. (3) 5 5 15 75 **525** 4725 51975



$\Rightarrow$ 75 × 7 = 525

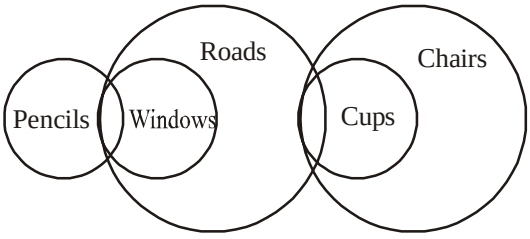
62. (2) $\frac{20}{100}\times 600+\frac{10}{100}\times 900 = 120+90 = 210$

63. (1) $\frac{249\times 299\times 99}{15\times 19\times 14} = 1847 \cong 1850$

64. (3) $(12)^2 - (8)^2 + (6)^2 = 144 - 64 + 216 = 296 \cong 300$

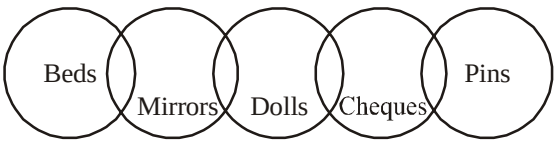
65. (5) $\frac{1200}{15}\times 20+400 = 1600+400 = 2000$

66. (1) According to the statements, venn diagram is as follow.



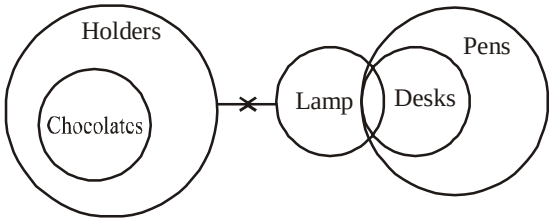
Conclusions : I. ✗ II. ✓ III. ✗ IV. ✗
So, only II follows.

67. (1) According to the statements, venn diagram is as follow.



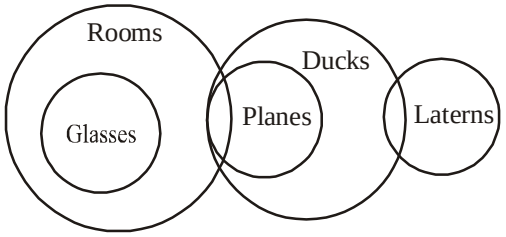
Conclusions : I. ✓ II. ✗ III. ✗ IV. ✓
So, I and IV follow.

68. (1) According to the statements, venn diagram is as follow.



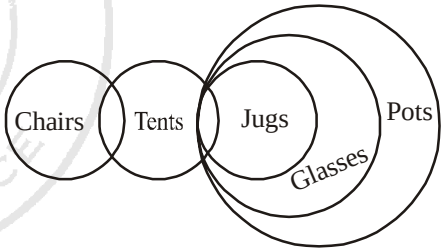
Conclusions : I. ✓ II. ✗ III. ✓ IV. ✗
So, I and III follow.

69. (1) According to the statements, venn diagram is as follow.



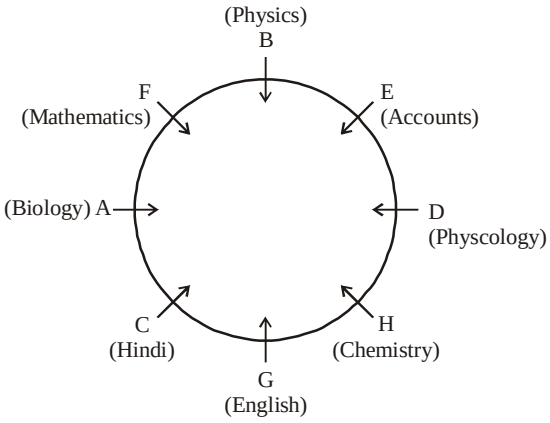
Conclusions : I. ✓ II. ✓ III. ✗ IV. ✗
So, I and II follow.

70. (1) According to the statements, venn diagram is as follow.

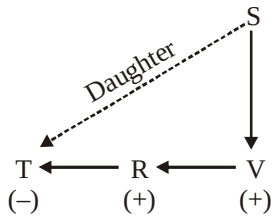


Conclusions : I. ✗ II. ✗ III. ✓ IV. ✓
So, III and IV follow.

71-75.

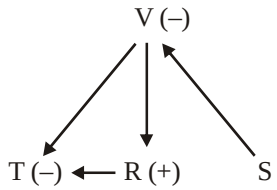


76. Given Expression, T × R + V + S



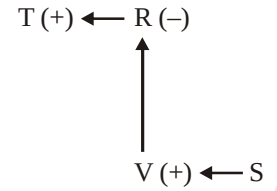
Clearly, T is sister of S's son V., hence T is daughter of S.

77. Given expression, T × R + V – S.



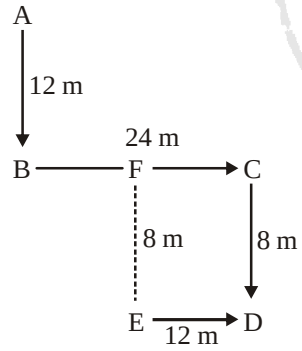
Hence, T is the sister in the given expression

78. Given expression T + R – V + S.



Hence, S is either the nephew or niece of T because six of S is not known.

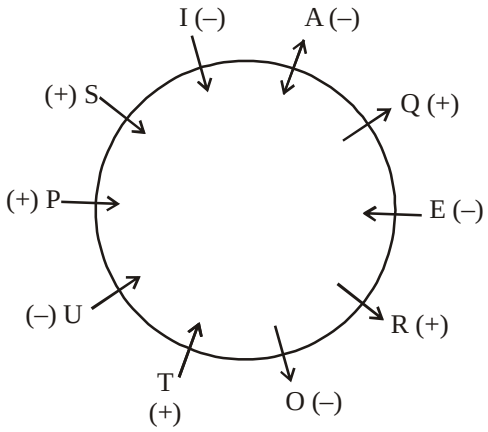
79-80. According to information pictorization of points is as follow



79. Man will pass Point B first.

80. Point F is 12 m West of Point C.

81-85. Boys → (+), Girls → (–)



86-89. colours of the sky = ki la fa so ...(i)
rainbow colours = ro ki ...(ii)
∴ colours = ki ...[from Eqs. (i) and (ii)]
sky high rocket = la pe jo ...(iii)
From Eqs. (i) and (iii), sky = la
the rocket world = pe so ne ...(iv)
From Eqs. (i) and (iv), the = so
and from Eqs, (iii) and (iv), rocket = pe

86. colours sky high = ki la jo

87. 'the'represents only'so',

88. 'pe' represents 'rocket'.

89. ∴ of the sky = la fa so
Since, colours = ki
colours of the sky = ki la fa so
∴ rainbow = ro
Now, we can say of the rainbow sky = la fa so ro and these four codes are in only answer options (4) and (2). But (2) is not correct because the code of 'pe' is 'rocket'.

90. (5) B U I L D E R
J V C K S F E

Similarly S E A L I N G
B F T K H O J

91-95. P © Q → P ≤ Q
P * Q → P ≥ Q
P % Q → P < Q
P $ Q → P > Q
P @ Q → P = Q

91. (3) J > D ≤ K < R
I. R < J (False)
II. R > D (True)
III. K > J (False)

92. (5) M ≥ K = R < N
I. R < M (or) (True)
II. R = M
III. N > K (True)

93. (4) B < H > J ≥ M
I. B < J (False)
II. M < B (False)
III. H > M (True)

94. (5) Z ≤ K < E = R
I. R > K (True)
II. Z < E (True)
III. R > Z (True)

95. (3) W = M ≤ R > F
I. F < M (False)
II. R ≥ W (True)
III. W < F (False)