IBPS PO PRELIMS SPECIAL - 380 (SOLUTION)

REASONING

(1 – 5) :

Hotel	Person	Level of Rooms
Oberoi	P	Platinum
Park Hyatt	Q	Deluxe
ITC Grand	S	Dimond
Park Plaza	W	Gold
The Gateway	X	Luxury

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

(6–10):

6. (4) $F < J \leq T \geq R$
   I. $F > T \rightarrow$ False II. $F = R \rightarrow$ False
7. (1) $M > K = H \geq L$
   I. $M > L \rightarrow$ True II. $M < H \rightarrow$ False
8. (5) $Q = H < L < F$
   I. $Q < F \rightarrow$ True II. $H < F \rightarrow$ True
9. (2) $D > E \geq I \geq K$
   I. $D \geq I \rightarrow$ False II. $E \geq K \rightarrow$ True
10. (5) $V < W \leq U < R$
    I. $V < R \rightarrow$ True II. $W < R \rightarrow$ True

(11–15) :

FLOOR	PERSON	YEAR
8	F	2004
7	Q	1998
6	R	1985
5	D	2006
4	S	1996
3	E	1988
2	G	2000
1	T	1994

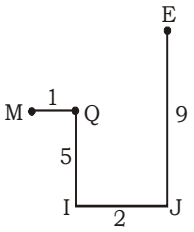
11. (3) 12. (2) 13. (4) 14. (4) 15. (3)

(16-20) : The machine rearranges one word and one number in each step. As for word, the words are arranged in alphabetical order while for numbers, perfect square and non-perfect square come in each alternate step in ascending order.

Input : ink 17 silent 100 burn 15 49 June 25 queen 64 3 firefox 20 time
Step I : burn 25 ink 17 silent 100.15 49 June queen 64 3 firefox 20 time
Step II : burn 25 firefox 3 ink 17 silent 100 15 49 June queen 64 20 time
Step III : burn 25 firefox 3 ink 49 17 silent 100 15 June queen 64 20 time
Step IV : burn 25 firefox 3 ink 49 June 15 17 silent 100 queen 64 20 time
Step V : burn 25 firefox 3 ink 49 June 15 queen 64 17 silent 100 20 time
Step VI : burn 25 firefox 3 ink 49 June 15 queen 64 silent 17 100 20 time
Step VII : burn 25 firefox 3 ink 49 June 15 queen 64 silent 17 time 100 20

16. (2) 17. (2) 18. (2) 19. (1) 20. (2)

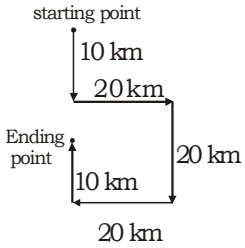
(21–22) :



21. (2) $\sqrt{3^2+4^2}$ = 5 km

22. (4)

23. (2) 20 km, South



24. (3) 25. (4)

(26-30) :

Boy	Visit	Girl	Car
F	Circus	M	BMW / Kwid
G	Movie	P	Maruti
H	Disco	R	Maruti
I	Circus	N	BMW / Kwid
J	Park	Q	Audi
K	Park	O	BMW

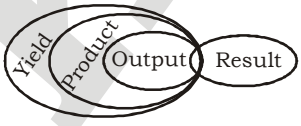
26. (4) 27. (2) 28. (4) 29. (1) 30. (3)

31. (4)

I. False II. False

Neither conclusion I nor conclusion II follow

(32-33) :

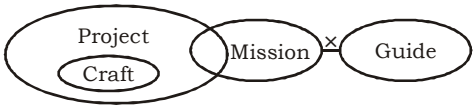


32. (4) I. False II. False

Neither conclusion I nor conclusion II follows

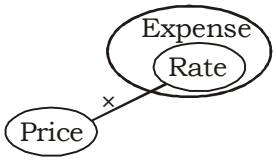
33. (5) I. True II. True

Both conclusion I and conclusion II follows

34. (3) 

I. Can't say II. Can't say

Either conclusion I or conclusion II follows

35. (2) 

I. False II. True

Only conclusion II follows

Maths

36. (1) $? = \frac{6255.22}{18.5 \times 21.4} = 15.8$

37. (2) $? = \frac{1.5 \times 78}{0.5} = 234$

38. (4) $? = 302.46 + 395.72 - 123.47$
$= 698.18 - 123.47 = 574.71$

39. (3) $\sqrt[3]{?} = \sqrt[3]{4096} \div \sqrt[3]{64}$

$\sqrt[3]{?} = \sqrt[3]{16 \times 16 \times 16} \div \sqrt[3]{4 \times 4 \times 4}$

$\sqrt[3]{?} = 16 \div 4 = 4$

$\therefore$ $? = 4 \times 4 \times 4 = 64$

40. (4) $\frac{800 \times ?}{100} = 293 - \frac{750 \times 22}{100}$

$8 \times ? = 293 - 165 = 128$

$? = \frac{128}{8} = 16$

41. (3) Required ratio = 475 : 425 = 19 : 17

42. (4) Total distance covered by all the trucks = $\frac{2375}{5}$ = 475 km

43. (2) Total distance covered by A = 475 km

Time taken = $\frac{475}{47.5}$ = 10 hours

44. (4) Total distance covered by E = 575 km

Total distance covered by B and C together = 350 + 550 = 900 km

Required% = $\frac{575}{900} \times 100 \approx 64\%$

45. (4) Required speed = $\frac{550}{8}$ = 68.75 km/h

(46-50) :

46. (5) The pattern of the number series is :
389 – 117 = 272
525 – 389 = 136
593 – 525 = 68
627 – 593 = 34
∴ ? = 627 + 17 = **644**

47. (4) The pattern of the number series is :
7 + 1 × 4 = 11
11 + (1 + 2) × 4 = 11 + 3 × 4 = 23
23 + (3 + 4) × 4 = 23 + 7 × 4 = 51
51 + (7 + 6) × 4 = 51 + 13 × 4 = 103
103 + (13 + 8) × 4 = 103 + 21 × 4 = **187**

48. (4) The pattern of the number series is :
18 + 9 = 27
27 + (9 + 13) = 49
49 + (9 + 26) = 84
84 + (9 + 39) = 132
132 + (9 + 52) = **193**

49. (2) The pattern of the number series is :
33 + 10 = 43
43 + (10 + 12) = 65
65 + (10 + 24) = 99
99 + (10 + 36) = 145
145 + (10 + 48) = **203**

50. (5) The pattern of the number series is :
$655 - 439 = 216 = 6^3$
$439 - 314 = 125 = 5^3$
$314 - 250 = 64 = 4^3$
$250 - 223 = 27 = 3^3$
∴ $? = 223 - 2^3 = 223 - 8 =$ **215**

(51-55) :

51. (3) Total number of teachers in Banglore = $3360 \times \frac{80}{100} = 2688$

Number of female teachers = 2688 – 1800 = 888

Number of female teachers in the next year = $888 \times \frac{150}{100} = 1332$

Number of female employees in Bangalore = $\frac{3360}{14} \times 6 = 1440$

∴ Required % = $\left(\frac{1332}{1440} \times 100\right)\% = 92.5\ \%$

52. (1) Number of female employees in Bengal = $\frac{2054}{13} \times 6 = 948$

Required % $\left(\frac{948}{2054} \times 100\right)\% = 46.15\%$

Number of female employees in UP = $\frac{2880}{16} \times 5 = 900$

Required % = $\left(\frac{900}{2880} \times 100\right)\% = 31.25\%$

Number of female employees in Banglore = $\frac{3360}{14} \times 6 = 1440$

Required % = $\left(\frac{1440}{3360} \times 100\right)\% = 42.85\%$

Number of female employees in MP = $\frac{2788}{41} \times 21 = 1428$

Required % = $\left(\frac{1428}{2788} \times 100\right)\% = 51.21\%$

Number of female employees in Delhi = $\frac{2568}{12} \times 7 = 1498$

Required % = $\left(\frac{1498}{2568} \times 100\right)\% = 58.33\%$

∴ Required answer is Bengal.

53. (4) Total number of male employees in UP and Banglore together = $\frac{2880}{16} \times 11 + \frac{3360}{14} \times 8$

= 1980 + 1920 = 3900

Total number of teachers in UP and Banglore together = $2880 \times \frac{65}{100} + 3360 \times \frac{80}{100}$

= 1872 + 2688 = 4560

∴ Required ratio = 3900 : 4560 = 65 : 76

54. (1) Average number of teachers in Delhi, UP and Bihar together

$$= \frac{2568 \times \frac{75}{100} + 2880 \times \frac{65}{100} + 3575 \times \frac{60}{100}}{3} = \frac{1926 + 1872 + 2145}{3} = 1981$$

Average number of teachers in MP, Mumbai and Bangalore together

$$= \frac{2788 \times \frac{75}{100} + 3720 \times \frac{55}{100} + 3360 \times \frac{80}{100}}{3} = \frac{2091 + 2046 + 2688}{3} = 2275$$

∴ Required difference = 2275 – 1981 = 294

55. (1) Average number of employees per office in Bihar = $\frac{3575}{22}$ = 162.5

Bagalore = $\frac{3360}{21}$ = 160

Mumbai = $\frac{3720}{24}$ = 155

Delhi = $\frac{2568}{16}$ = 160.5

MP = $\frac{2788}{17}$ = 164

$\therefore$ Required answer is Bihar

56. (3) Total water filled in 1 hour = 42 + 56 – 48 = 50 litres
Water filled in 16 hours = 16 × 50 = 800 litres
Hence the capacity of tank = 800 litres

57. (4)

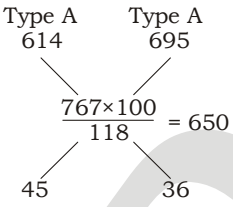
	With stop	:	Without stop
Speed	40	:	50
Time	50	:	40

So, train takes 1 hours extra in every 5 hrs.
So, stop 12 minutes in each hour.

58. (1) Probability of getting sum is four.

Favourable events = (1, 3) (3, 1) (2, 2) = $\frac{Favourable\ events}{Total\ events} = \frac{3}{36} = \frac{1}{12}$

59. (5)



Ratio of A : B = 5 : 4
So, type B sugar will be (7 × 4) = 28 kg

60. (3) Let the total sum be ₹ *x*.

Then, $\frac{2}{3}x \times \frac{12 \times 6}{100} + \frac{1}{3}x\left(1+\frac{10}{100}\right)^2 - \frac{x}{3}$ = ₹1650

$\frac{48x}{100} + \frac{21x}{300}$ = 1650

$\frac{144x + 21x}{300}$ = 1650

$\therefore$ $x = \frac{1650 \times 300}{165}$ = ₹ 3000

(61-65) :

61. (4) I. $4x^2 - 8x + 3 = 0$

$4x^2 - 2x - 6x + 3 = 0$

$2x(2x - 1) - 3(2x - 1) = 0$

$(2x - 3)(2x - 1) = 0$

$\therefore \quad x = \frac{3}{2}$ or $\frac{1}{2}$

II. $2y^2 - 7y + 6 = 0$

$2y^2 - 4y - 3y + 6 = 0$

$2y(y - 2) - 3(y - 2) = 0$

$(2y - 3)(y - 2) = 0$

$\therefore \quad y = \frac{3}{2}$ or 2

Clearly, $x \leq y$

62. (1) I. $2x^2 - 95x + 828 = 0$

$2x^2 - 72x - 23x + 828 = 0$

$2x(x - 36) - 23(x - 36) = 0$

$(2x - 23)(x - 36) = 0$

$\therefore \quad x = \frac{23}{2}, 36$

II. $2y^2 - 13y + 21 = 0$

$2y^2 - 6y - 7y + 21 = 0$

$2y(y - 3) - 7(y - 3) = 0$

$(2y - 7)(y - 3) = 0$

$\therefore \quad y = \frac{7}{2}, 3$

Clearly, $x > y$

63. (1) I. $18x^2 - 21x + 6 = 0$

$18x^2 - 9x - 12x + 6 = 0$

$9x(2x - 1) - 6(2x - 1) = 0$

$(9x - 6)(2x - 1) = 0$

$x = \frac{6}{9}$ or $\frac{1}{3}$

II. $2y^2 + 13y + 21 = 0$

$2y^2 + 6y + 7y + 21 = 0$

$2y(y + 3) + 7(y + 3) = 0$

$(2y + 7)(y + 3) = 0$

$\therefore \quad y = -\frac{7}{2}$ or -3

Clearly, $x > y$

64. (5) I. $x^2 = 256$

$x = +16, -16$

II. $3y^2 + 14y + 16 = 0$

$3y^2 + 6y + 8y + 16 = 0$

$3y(y + 2) + 8(y + 2) = 0$

$(3y + 8)(y + 2) = 0$

$y = -\frac{8}{3}$ or -2

65. (4) I. $8x^2 + 6x + 20 = 25$

$8x^2 + 6x - 5 = 0$

$8x^2 + 10x - 4x - 5 = 0$

$2x(4x + 5) - 1(4x + 5) = 0$

$(2x - 1)(4x + 5) = 0$

$x = \frac{1}{2}$ or $-\frac{5}{4}$

II. $6y^2 - 11y + 10 = 6$

$6y^2 - 11y + 4 = 0$

$6y^2 - 3y - 8y + 4 = 0$

$3y^2(2y - 1) - 4(2y - 1) = 0$

$(3y - 4)(2y - 1) = 0$

$y = \frac{4}{3}$ or $\frac{1}{2}$

Clearly, $x \leq y$

66. (3) $(?)^2 = 63.9872 \times 9449.8780 \div 243.0034$

Taking approximate integral values,

$(?) = 64 \times 9450 \div 240 \approx \frac{64 \times 9450}{240} = 2520 \approx 2500$

$\therefore \quad ? = \sqrt{2500} = 50$

67. (4) $? = 5237.897 - 6629.010 + 7153.999 - 2205.102$

$\approx 5238 - 6629 + 7154 - 2205 = (5238 + 7154) - (6629 + 2205)$

$\approx 12392 - 8834 = 3558$

68. (2) $? = 4985.0346 \div 215.987 - 3768.112 \div 206.868$

$\approx 4985 \div 216 - 3768 \div 207 = 23.078 - 18.202$

$= 4.876 \approx 5$

69. (1) $? = \sqrt{956240} \approx 977.8 \approx 979$

70. (5) ? = 459% of 849.947 + 266% of 6284.012 – 1486.002

$\approx \frac{460 \times 850}{100} + \frac{260 \times 6280}{100} - 1486$

$= 3910 + 16328 - 1486 = 18752$

ENGLISH LANGUAGE

91. (2) Add 'that' before 'the work'.
92. (4) Change 'indicates' into 'indicate'.
93. (3) Change 'to be' into 'being'.
94. (3) Remove 'the' before 'earth'.
95. (1) Change 'life' into 'lives'.
96. (1) Change 'have' into 'has'.
97. (2) Change 'linkage to into' 'linked to'.
98. (1) Change 'easy through' into 'eased through'.
99. (5) No error.
100. (1) Remove 'the' before 'Anglo - saxon'.

VOCABULARIES

Words	Meaning in English	Meaning in Hindi
Burgeoning	increase rapidly	तेजी से बढ़ता हुआ
Substantial	of considerable importance, size, or worth	पर्याप्त
Prosperity	the state of being prosperous	समृद्धि, सम्पन्नता
Attractions	power of evoking interest	आकर्षण
Fever Pitch	a state of extreme excitement	उत्तेजना की चरम सीमा
Sanitation	conditions relating to public health	स्वच्छता
Rendered	provide or give	देना
Lymph tissues	a colorless fluid containing white blood cells	लसीका ऊतक
Aggression	hostile or violent behavior	आक्रमकता
Derive (from)	obtain something from	उत्पन्न होना

IBPS PO PRELIMS SPECIAL - 380 (ANSWER KEY)

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