IBPS PO SPECIAL PHASE - I - 347 (SOLUTION)

REASONING

(1–5) :

Friends	Day	Show
P	Tuesday	Monologue
Q	Thursday	Play
R	Saturday	Debate
S	Monday	Speech
T	Sunday	Music
U	Wednesday	Dance
V	Friday	Mimicry

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

(6-10) :

6. (5)
   I. E > D $\geq$ J $\Rightarrow$ E > J true
   II. H $\geq$ D $\geq$ F $\Rightarrow$ H $\geq$ F true
7. (2)
   I. N > A $\leq$ J $\Rightarrow$ J > N false
   II. C $\geq$ J = B $\Rightarrow$ C $\geq$ B true
8. (4)
   I. U $\leq$ Q $\geq$ P $\Rightarrow$ U < P False
   II. P > T $\geq$ R < W $\Rightarrow$ P > W false
9. (1)
   I. V $\geq$ P > T $\geq$ R $\Rightarrow$ V > R true
   II. U $\leq$ Q $\geq$ P > T $\geq$ R < W $\Rightarrow$ U $\geq$ W false
10. (2) P > B = J $\geq$ K $\geq$ Q = M
   I. P $\geq$ Q, false
   II. B $\geq$ M, true

(11-15) :

11. (2)
12. (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.

13. (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

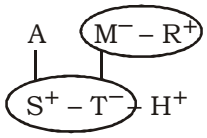
Hence, the total number of days in the month = 29.

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.

14. (3)

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

(16-17) :



16. (2) 17. (2)

(18 – 22) :

Hewitt – Personnel – Table Tennis
Suarez – Administration – Football
Sreejesh – Administration – Hockey
Jordan – Administration – Basketball
Richards – Marketing – Cricket
Giba – Personnel – Volleyball
Sampras – Marketing – Lawn Tennis
Lin Dan – Marketing – Badminton

18. (3) 19. (2) 20. (5) 21. (1) 22. (4)

(23–27) :

$\$ \rightarrow \geq$ $\quad \delta \rightarrow =$ $\quad @ \rightarrow >$ $\quad © \rightarrow \leq$ $\quad \# \rightarrow <$

23. (2) **Statement :**

$H > T < F = E \leq V$

Conclusion :

I. $V \geq F$; true II. $E > T$; True III. $H > V$; Can't say IV. $T < V$; True

Only I, II and IV are true.

24. (5) **Statement :**

$D < R \leq K > F \geq J$

Conclusion :

I. $J < R$; Can't say II. $J < K$; True III. $R < F$; Can't say IV. $K > D$; True

25. (5) **Statetment :**

$N = B \geq W < H \leq M$

Conclusion :

I. $M > W$; True II. $H > N$; Can't say III. $W = N$; Can't say IV. $W < N$; Can't say

But after camparing, we find that either III or IV and I are true.

26. (1) **Statements :**

$R \leq D \geq J < M > K$

Conclusions:

I. $K < J$; Can't say II. $D > M$; Can't say III. $R < M$; Can't say IV. $D > K$; Can't say

None is true.

27. (4) **Statements :**

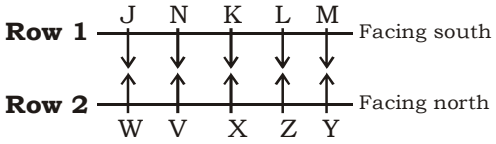
$M \geq K > N \leq R < W$

Conclusions:

I. $W > K$; Can't say II. $M \geq R$; Can's say III. $K > W$; Can't say IV. $M > N$; True

But after comparing we find that either I or III and IV are true.

(28–32) :



28. (3) 29. (4) 30. (1) 31. (3) 32. (3)

(33-35) :

must adapt and change → ki la bx tu

little better than nothing → ex qa fn rm

change a must here → gm tu dr la

here to adapt better → fn bx ms dr

33. (5) better ⇒ fin

and ⇒ fn

and ⇒ ki

The code for 'improved' may be 'yz'.

34. (4) gm ⇒ a

35. (1) must bring change → op la tu

Now,

bring ⇒ op

here ⇒ dr

The code for 'peace' may be 'ov'.

Maths

36. (3) $? \approx 8800 \div 340 \times \sqrt{49}$

$= 25.9 \times 7 = 181.3 \approx 180$

37. (2) $?^2 = \sqrt[3]{54821} \times (303 \div 8)$

$?^2 = \sqrt[3]{54872} \times 38$

$?^2 = 38 \times 38$

$\therefore \; ? = 38$

38. (3) $? = \frac{4011.33 \times 5}{8} + \frac{3411.22 \times 7}{10}$

$\approx \frac{4000 \times 5}{8} + \frac{3400 \times 7}{10}$

$= 2500 + 2380 = 4880 \approx 4890$

39. (5) $? = \frac{6783 \times 23}{100} + \frac{8431 \times 57}{100}$

$\approx \frac{6800 \times 23}{100} + \frac{8400 \times 57}{100}$

$= 1564 + 4788 = 6352 \approx 6360$

40. (1) $? \approx 335 \times 245 \div 55 = 1492.27 \approx 1490$

(41-45) :

41. (4) The total number of tourists in

Varanasi = 1500 + 2500+ 3500 +1000 +1500 + 2500 = 12500

Gaya = 3000 + 2500 + 500 +1500 +3000 + 5000 = 15500

Agra = 2500 + 3500 + 1000 + 4500 +4000+1500 = 17000

Jaipur = 2000 +4000 + 4500 + 5000 + 3500 + 4000 = 23000

Required answer is Jaipur.

42. (2) The number of tourists who came more than once in the year

2007 = $1500 \times \frac{25}{100} + 3000 \times \frac{20}{100} + 2500 \times \frac{10}{100} + 2000 \times \frac{15}{100}$ = 375 + 600 + 250 + 300 = 1525

2008 = $2500 \times \frac{30}{100} + 2500 \times \frac{15}{100} + 3500 \times \frac{20}{100} + 4000 \times \frac{35}{100}$ = 750 + 375+ 700 + 1400 = 3225

2009 = $3500 \times \frac{20}{100} + 500 \times \frac{25}{100} + 1000 \times \frac{30}{100} + 4500 \times \frac{35}{100}$ = 700 + 125 + 300 + 1575 = 2700

2010 = $1000 \times \frac{10}{100} + 1500 \times \frac{25}{100} + 4500 \times \frac{40}{100} + 5000 \times \frac{15}{100}$ = 100 + 375 + 1800 + 750 = 3025

Required answer is 2008.

43. (5) Total no. of tourists who came in Varanasi more than once

$= 1500 \times \frac{25}{100} + 2500 \times \frac{30}{100} + 3500 \times \frac{20}{100} + 1000 \times \frac{10}{100} + 1500 \times \frac{5}{100} + 2500 \times \frac{15}{100}$

$= 375 + 750 + 700 + 100 + 750 + 375 = 3050$

Total no. of tourists who came in Agra more than once

$= 2500 \times \frac{10}{100} + 3500 \times \frac{20}{100} + 1000 \times \frac{30}{100} + 4500 \times \frac{40}{100} + 4000 \times \frac{20}{100} + 1500 \times \frac{30}{100}$

$= 250 + 700 + 300 + 1800 + 800 + 450 = 4300$

$\therefore$ Required difference = 4300 – 3050 = 1250

44. (2) No. of tourists who came in Gaya more than once in the year 2011 = $3000 \times \frac{10}{100}$ = 300

No. of tourists who came in Jaipur more than one in the 2012 = $4000 \times \frac{35}{100}$ = 1400

$\therefore$ Required ratio = 300 : 1400 = 3 : 14

45. (1) Total no. of tourists came in the year 2009 = 4500 + 3500 + 1000 + 500 = 9500
Total no. of tourists came in year 2012 = 5000 + 4000 + 2500 + 1500 = 13000

$\therefore$ Required % $= \left[\frac{(13000-9500)}{9500}\times 100\right]\% = \left(\frac{3500}{9500}\times 100\right)\% = 36.84\% \approx 37\%$

(46-50) :

46. (4) The pattern of the number series is :
3601 ÷ 1 + 1 = 3602
3602 ÷ 2 + 2 = 1801 + 2 = 1803
1803 ÷ 3 + 3 = 601 + 3 = 604
604 ÷ 4 + 4 = 151 + 4 = 155 ≠ **154**
155 ÷ 5 + 5 = 31 + 5 = 36
36 ÷ 6 + 6 = 6 + 6 = 12

47. (2) The pattern of the number series is :
$4 \times 2 + 2^2 = 8 + 4 = 12$
$12 \times 3 + 3^2 = 36 + 9 = 45 \neq$ **42**
$45 \times 4 + 4^2 = 180 + 16 = 196$
$196 \times 5 + 5^2 = 980 + 25 = 1005$
$1005 \times 6 + 6^2 = 6030 + 36 = 6066$

48. (1) The pattern of the number series is :
2 + 4 = 6 ≠ **8**
6 + 6 = 12
12 + 8 = 20
20 + 10 = 30
30 + 12 = 42

49. (5) The pattern of the number series is :

$32 \times \frac{1}{2} = 16$

$16 \times \frac{3}{2} = 24$

$24 \times \frac{5}{2} = 60 \neq$ **65**

$60 \times \frac{7}{2} = 210$

$210 \times \frac{9}{2} = 945$

$945 \times \frac{11}{2} = 5197.5$

50. (4) The pattern of the number series is :
$7 \times 2 - 1 = 14 - 1 = 13$
$13 \times 2 - 1 = 26 - 1 = 25$
$25 \times 2 - 1 = 50 - 1 = 49$
$49 \times 2 - 1 = 98 - 1 = 97$
$97 \times 2 - 1 = 194 - 1 = 193 \neq$ **194**
$193 \times 2 - 1 = 386 - 1 = 385$

51. (4) Let the cost price of a pen and book are ₹ x and ₹ y respectively.

$\therefore$ Selling price of both = 125% of y + 120% of x = ₹ 540

$$\frac{5}{4}y + \frac{6}{5}x = 540$$

$25y + 24x = 540 \times 20$ .....(i)

$\therefore$ Selling price in the second case = 120% of y + 125% of x = ₹ 538

$$\frac{6}{5}y + \frac{5}{4}x = 538$$

$24y + 25x = 538 \times 20$ .....(ii)

Equation (i) × 25 –(ii) × 24, we get

$49\ y = 11760$

y = ₹ 240

Now put the value of y in equation (i), we get

$24x = 540 \times 20 - 25 \times 240 = 4800$

x = ₹ 200

Cost of a book is ₹ 240 and that of a pen ₹ 200.

$\therefore$ Cost of one pen and two book = 200 + (2 × 240) = ₹680

52. (2) Quantity of water in new mixture = $\frac{400}{13 \times 100} = \frac{4}{13}$

Container A Container B

$\frac{5}{13}$ $\frac{2}{7}$

$\frac{4}{13}$

$\frac{4}{13} - \frac{2}{7}$ $\frac{5}{13} - \frac{4}{13}$

$$= \frac{2}{91} : \frac{1}{13} = 2 : 7$$

53. (1) Let the principle be ₹ x.

$$x\left[\frac{6}{100} + \frac{6.5}{100} + \frac{7}{100} + \frac{7.5}{100}\right] = 3375$$

$$\frac{x}{100} \times 27 = 3375$$

$$x = \frac{3375 \times 100}{27}$$

$\therefore$ x = ₹12,500

54. (2) Let the sum be ₹ x and ₹ y

ATQ,

$$\frac{x}{4} = \frac{y}{5}$$

$x : y = 4 : 5$

$x = 4a$

$\frac{4a \times 6 \times 2}{100} \times \frac{5a \times 7 \times 2}{100} = 354$

$48a + 70a = 354 \times 100$

$a = \frac{354 \times 100}{118} = 300$

Total sum = $4a + 5a = 9a = 9 \times 300 = ₹\ 2700$

55. (1) Total possible outcomes = $28_{C_2} = 14 \times 27$

Favorable outcomes = $20_{C_1} \times 8_{C_1} + 8_{C_2} = 188$

Required probability = $\frac{188}{14 \times 27} = \frac{94}{189}$

(56-60) :

56. (1) Total no. of qualified candidates from insitutes P, Q and R together = $8000 \times \left(\frac{16+20+16}{100}\right)$

$= 8000 \times \frac{52}{100} = 4160$

Total no. of appeared candidates from insititures S, T and U together

$= 36000 \times \left(\frac{15+10+25}{100}\right) = 36000 \times \frac{50}{100} = 18000$

∴ Required ratio =4160 : 18000 = 52 : 225

57. (5) No. of qualified candidates from institute T = $8000 \times \frac{12}{100} = 960$

No. of appeared candidates from insititute T = $36000 \times \frac{10}{100} = 3600$

∴ Required% = $\left(\frac{960}{3600} \times 100\right)\% = 26.66\%$

58. (2) Total of qualified candidates from institutes Q and R together = $8000 \times \left(\frac{20+16}{100}\right)$

$= 8000 \times \frac{36}{100} = 2880$

Total no. of appeared candidates from institutes Q and R together = $36000 \times \left(\frac{18+20}{100}\right)$

$= 36000 \times \frac{38}{100} = 13680$

∴ Required % = $\left(\frac{2880}{13680} \times 100\right)\% = 21.05\% \approx 21\%$

59. (1)

60. (3) Total no. of appeared candidates from institutes P, Q and U together = $36000 \times \left(\frac{127+18+25}{100}\right)$

$= 36000 \times \frac{55}{100} = 19800$

$\therefore$ Required average = $\frac{19800}{3} = 6600$

(61-65) :

No. of female = $2500 \times \frac{40}{100} = 1000$

No. of male = 2500 – 1000 = 1500

State	*Male* (1500)	*Female*(1000)
Bihar	$\frac{1500\times35}{100}=525$	240
Punjab	$1500\times\frac{15}{100}=225$	$\frac{18\times1000}{100}=180$
Delhi	345	$\frac{25\times1000}{100}=250$
UP	$1500\times\frac{17}{100}=225$	$\frac{33\times1000}{100}=330$
HP	$1500\times\frac{10}{100}=150$	0

61. (2) Reqd ratio = $\frac{525\times\frac{40}{100}}{250\times\frac{50}{100}} = \frac{210}{125} = 42:25$

62. (2) Reqd difference = [UP + Delhi] – [Bihar + Punjab]
= [330 + 250] – [240 + 180] = 580 – 420 = 160

63. (4) Reqd ratio = $\frac{\frac{225\times25}{100}}{250\times\frac{20}{100}} = 9:8$

64. (1) Total number of employees in Bihar = 525 + 240 = 765

65. (3) Required percentage = $\frac{765}{2500}\times100 = 30.6\%$

(66-70) :

66. (5) I. $8x^2 - 3y = 38$

$8x^2 - 3y - 38 = 0$

$8x^2 + 16x - 19x - 38 = 0$

$8x(x + 2) - 19(x + 2) = 0$

$(8x - 19)(x + 2) = 0$

$x = \frac{19}{8}, -2$

II. $6y^2 + 34 = 29y$

$6y^2 - 29y + 34 = 0$

$6y^2 - 12y - 17y + 34 = 0$

$6y(y - 2) - 17(y - 2) = 0$

$(6y - 17)(y - 2) = 0$

$y = \frac{17}{6}, 2$

67. (3) I. $7x^2 + 15x - 18 = 0$

$7x^2 + 21x - 6x - 18 = 0$

$7x(x + 3) - 6(x + 3) = 0$

$(7x - 6)(x + 3) = 0$

$x = \frac{6}{7}, -3$

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

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

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

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

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

Clearly , $x < y$

68. (1) I. $3x^2 - 15x + 18 = 0$

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

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

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

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

$x = 3, 2$

II. $y^2 + 13y = -42$

$y^2 + 13y + 42 = 0$

$y^2 + 7y + 6y + 42 = 0$

$y(y + 7) + 6(y + 7) = 0$

$(y + 6)(y + 7) = 0$

$y = -6, -7$

Clearly , $x > y$

69. (3) $2x + 3y = 13$ ..... (i)

$4x + y = 6$ ..... (ii)

Now, equation (i) × 2 – equation (ii),

$4x + 6y - 4x - y = 26 - 6$

$5y = 20$

$y = 4$

Put the value of y in equation (ii),

$4x + 4 = 6$

$4x = 2$

$x = \frac{1}{2}$

Clearly , $x < y$

70. (5) I. $x^2 = 529$

$x = +23, -23$

II. $y^2 + 241 = 770$

$y^2 = 770 - 241$

$y^2 = 529$

$y = +23, -23$

ENGLISH LANGUAGE

(91–100):

91. (1) 'witness' repalce with 'witnessed'.
92. (3) 'added' replace with 'add'.
93. (1) 'had' replace with 'has'.
94. (1) 'protest' replace with 'pratests'.
95. (5) No error.
96. (1) 'Being that' Replace with 'since'.
97. (5) No error.
98. (5) No error.
99. (1) 'are trying' replace with 'have been trying'.
100. (3) 'are' replace with 'have been'.

IBPS PO SPECIAL PHASE - I - 347 (ANSWER KEY)

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