IBPS PO SPECIAL PHASE - I - 358 (SOLUTION)
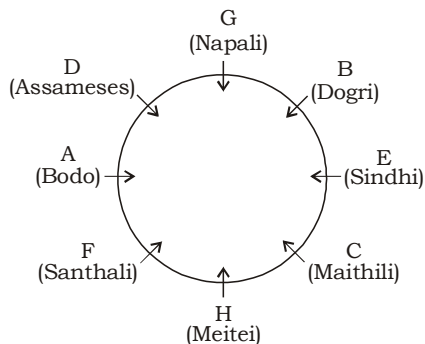
REASONING

(1-5) :

Person	Level	Row	Sport
P	National	1	Tennis
Q	State	1	Badminton
R	State	4	Badminton
S	National	4	Tennis
T	State	3	Tennis
U	State	2	Badminton
V	National	2	Tennis
W	National	3	Badminton

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

(6-10) :

6. (1)   7. (2)   8. (4)   9. (2)   10. (3)

(11-15) :

#	$\Rightarrow$	>	*	$\Rightarrow$	<
$	$\Rightarrow$	$\leq$	%	$\Rightarrow$	$\geq$
@	$\Rightarrow$	=			

11. (3) $A \geq B > C = D \leq E < F$
I. $A > C \rightarrow$ True
II. $D \leq F \rightarrow$ False
Check all the option, $A > C$, $D \leq F$ – Definitely not true in option (3).

12. (2) Check all options and find in which both or at least one of $C \leq E$ and $B \geq E$ is True. (Because 'or' is given between C $ E or B % E.
$A > B < C \leq D = E > F \rightarrow$ in $C \leq E$ is true. In all other option, both are false.

13. (4) $A \geq B \geq C < D = E \leq F$
I. $A > D \rightarrow$ False
II. $C < F \rightarrow$ True
III. $B > D \rightarrow$ False
IV. $D > F \rightarrow$ False
Only (i), (ii) and (iv) not true.

14. (2) $A < D \leq B < C = E > F$

   $A < C \rightarrow$ True

   $E > B \rightarrow$ True
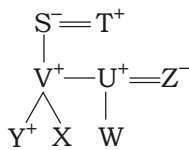
   In option (2) both are true

15. (3) Check all the option and find in which both $A \geq B$ and $D < F$ are false. In option (3), both are false

   $A < B \geq C = D \leq E \leq F$

   $A \geq B \rightarrow$ False

   $D < F \rightarrow$ False

(16-18) :

$$S^- = T^+$$
$$|$$
$$V^+ - U^+ = Z^-$$
$$\wedge \quad |$$
$$Y^+ \ X \quad W$$

16. (5)   17. (2)   18. (4)

(19-22) :

19. (5) from statement I and II

   she [was] (selected) → Su (Pi) [Ka]

   he [was] /rejected/ → /de/ [ka] fr

   (Team) (selected) him → (pi) or (er)

   (Team) /rejected/ her → /de/ (er) gg

   She $\rightarrow$ Su,   her $\rightarrow$ gg

   he $\rightarrow$ fr,   him $\rightarrow$ or

   So, both statement I and II together are neccessary to answer the question.

20. (2) Statement II along is sufficient to answer the question.

21. (5) From statement I and II

   F > C,   A > C

   F > B,   E > B (E is not highest)

   D < B,   E > A

   Decending order of mark

   F > E > A > C > B > D

   So both statement I and II together are neccesary to anser the question.

22. (3) **From statement I :**

   Bhanu is 12th from the right end, so Amit is 10th from the right end so $(15 - 10 + 1) \rightarrow 6$ th from left end.

   From II : Chunky is 8th from right end means before changing position, Amit was at 8th position from right, So $(20 - 8 + 1) = 13$ th from the left end.

   either statement I alone or II alone give the answer the question.

(23-27) :

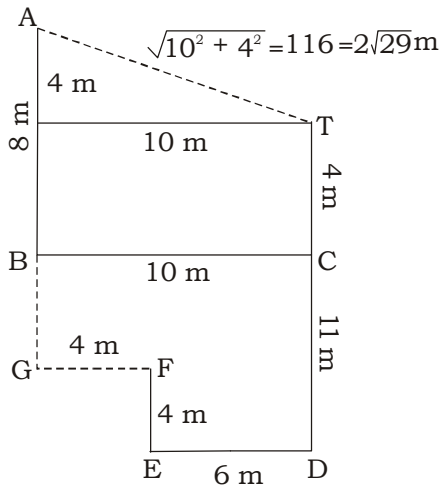| Floor	People	City
7	Sonia	Chennai
6	Queen	Patna
5	Varsha	Lucknow
4	Pammi	Mumbai
3	Usha	Kolkata
2	Tanvi	Bangluru
1	Rahul	Delhi

23. (1)   24. (2)   25. (4)   26. (1)   27. (2)

(28-29) :

28. (4)   29. (2)

(30-35) :

30. (4)   31. (1)   32. (3)   33. (3)   34. (2)   35. (2)

MATHS

(36-40) :

36. (2) 63251 × 82 = ? × 42105

$$? = \frac{63251 \times 82}{42105} = 123.182 \approx 123$$

37. (4) $\sqrt{84111} = 290.01 \approx 290$

38. (1) $(54.78)^2 = 3000.84 \approx 3000$

39. (5) $(7171 + 3854 + 1195) \div (892 + 214 + 543) = 12220 \div 1649 = 7.41 \approx 7$

40. (3) $? = \left(\dfrac{816 \times 562}{100}\right) + 1449 = 4585.92 + 1449 = 6034.92 \approx 6035$

(41-45) :

41. (3) Total no. of teachers in Banglore = $3360 \times \dfrac{80}{100} = 2688$

    No. of female teachers = $2688 - 1800 = 888$

    No. of female teachers in the next year = $888 \times \dfrac{150}{100} = 1332$

    and the no. of female employees in Bangalore = $\dfrac{3360}{14} \times 6 = 1440$

    $\therefore$ Required % = $\left(\dfrac{1332}{1440} \times 100\right)\% = 92.5 \,\%$

42. (1) No. of female employees in Bengal = $\dfrac{2054}{13} \times 6 = 948$

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

    No. of female employees in UP = $\dfrac{2880}{16} \times 5 = 900$

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

    No. of female employees in Banglore = $\dfrac{3360}{14} \times 6 = 1440$

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

    No. of female employees in MP = $\dfrac{2788}{41} \times 21 = 1428$

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

    No. of female employees in Delhi = $\dfrac{2568}{12} \times 7 = 1498$

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

    $\therefore$ Required answer is Bengal.

43. (4) Total no. of male employees in UP and Banglore together = $\dfrac{2880}{16} \times 11 + \dfrac{3360}{14} \times 8$

    = 1980 + 1920 = 3900

    Total no. of teachers in UP and Banglore together = $2880 \times \dfrac{65}{100} + 3360 \times \dfrac{80}{100}$

    = 1872 + 2688 = 4560

    $\therefore$ Required ratio = 3900 : 4560 = 65 : 76

44. (1) Average no. of teachers in Delhi, UP and Bihar together

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

Average no. of teachers in MP, Mumbai and Bangalore together

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

∴ Required difference = 2275 – 1981 = 294

45. (1) Average no. of employees per office in

Bihar = $\dfrac{3575}{22}$ = 162.5

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

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

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

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

∴ Required answer is Bihar.

(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 :

$655 - 439 = 216 = 6^3$

$439 - 314 = 125 = 5^3$

$314 - 250 = 64 = 4^3$

$250 - 223 = 27 = 3^3$

$\therefore$? $= 223 - 2^3 = 223 - 8 =$ **215**

51. (2) Let the length of candles be 1 unit and after t hours, the ratio of their length be 3 : 4.

ATQ,

$$\frac{1 - \frac{1}{7}t}{1 - \frac{1}{9}t} = \frac{3}{4}$$

$$\frac{7 - t}{9 - t} \times \frac{9}{7} = \frac{3}{4}$$

$t = 4\frac{1}{5}$ hr = 4 hr 12 minutes

52. (2) ATQ,

Let time = x minutes

1 page has 23 lines

$$\frac{(100 - 8) \times 20}{10}$$

$$= \frac{\left(100 \times \frac{128}{100} \times 8\right) \times 23 \times 40}{x}$$

x = 450 min = 7 hr 30 min

53. (3) Required no. of way = $\dfrac{11!}{3! \times 4! \times 2! \times 2!}$ = 63900

54. (3) Let the speed of Car be x km/h and actual time taken is t hrs.

In first case, distance = $(x + 6)(t - 6)$ km

.... (i)

In second case, distance = $(x - 6)(t + 6)$

.... (ii)

Also distance = xt from (i) and (ii)

$(x + 6)(t - 4) = (x - 6)(t + 6)$ .... (iii)

$$\frac{x + 6}{x - 6} = \frac{t + 6}{t - 4}$$

$$\frac{x}{6} = \frac{2t + 2}{10}$$

$$\frac{x}{6} = \frac{t + 1}{5}$$

$5x = 6t + 6$

$5x - 6t = 6$

$t = \dfrac{5x - 6}{6}$

Putting the value of 't' in eqn. (iii) we get,

$x = 30$ km/hr

$\therefore$ $t = 25$ hr

Thus, distance = 30 × 24 = 720

55. (1) Let the price per kg of Orange, Mangoes, Bananas and Grapes be ₹ O, ₹ M, ₹ B and ₹ G respectively.

Given that

5 O + 2 M = 310 .... (i)

3 M + 3.5B = 230 .... (ii)

1.5 B + 5 G = 610 .... (iii)

Now, (i), (ii), (iii) we get

5 O + 5 M + 5 B + 5 G = 700

$\therefore$ 10 O + 10 M + 10 B + 10 G = 2 × 700 = ₹ 1400

(56-60) :

56. (1) S.P of HCL Laptops = 32000 + 4000 = ₹ 36000

Profit % = $\left(\dfrac{4000}{32000} \times 100\right)\%$ = 12.5%

57. (3) C.P of Apple Laptop = $\dfrac{33000}{110}$ × 100 = ₹ 30,000

C.P of Dell Laptop = 30000 × $\dfrac{3}{5}$ = ₹ 18,000

Now, Profit = 22000 – 18000 = ₹ 4,000

$\therefore$ Profit % = $\left(\dfrac{4000}{18000} \times 100\right)\%$ = $22\dfrac{2}{9}\%$

58. (5) Profit of Lenovo Laptop = 3500 + 500 = ₹ 4,000

Profit % = $\left(\dfrac{4000}{28000} \times 100\right)\%$ = $14\dfrac{2}{7}\%$

SP = 28000 + 4000 = ₹ 32,000

59. (3) Profit earned on Acer Laptop = 53000 × $\dfrac{14}{100}$ = ₹ 7,420

60. (2) S.P of HP Laptop = 35000 + 3500 = ₹ 38,500

$\therefore$ Required ratio = 35000 : 38500 = 10 : 11

61. (3) P do the work for 3 days + 3 days = 6 days, Q work for 3 days and R work for 3 days.

$\dfrac{6}{18} + \dfrac{3}{12} + \dfrac{3}{R} = 1$

$\dfrac{3}{R} = 1 - \dfrac{1}{3} - \dfrac{1}{4}$

Three days work of R = $\dfrac{3}{R}$ = $\dfrac{12 - 4 - 3}{12}$

$$P : Q : R = \frac{6}{18} : \frac{3}{12} : \frac{5}{12}$$

Ratio of share = 12 : 9 : 15 = 4 : 3 : 5

Share of R = $\frac{5}{12}$ × 24000 = ₹ 10,000

62. (2) Labelled price = ₹ 1600

As, the reduction price is 10% lower than the labelled price,

Reduced price = 90% of 1600 = ₹ 1440

Now, the price at which Priti bought it is 20% lower than the reduced price, the selling price = 84% of 1440 = ₹ 1152

63. (2) $\frac{Ram}{Sohan} = \frac{100}{90}$ also $\frac{Sohan}{Sunil} = \frac{100}{75}$

Then, $\frac{Ram}{Sunil} = \frac{40}{27}$

So in a race of 40m, Ram beats Sunil by 13m

In a race of 100m, Ram beats Sunil by 32.5 m

So, Sunil cover 32.5 m in 10 sec.

Speed of Sunil = 3.25 m/sec

Perimeter of circle = 3.25 × 100 = 325 m

Area = $\frac{325^2}{4\pi}$ = 8401 (approximately)

64. (5) $d = \frac{t_1 - t_2}{60} \times \frac{s_1 s_2}{(s_2 - s_1)} = \frac{14 - 8}{60} \times \frac{45 \times 50}{50 - 45}$

$= \frac{6}{60} \times \frac{45 \times 50}{5}$ = 45 km

65. (4) Total balls initially in the bag = 4 + 5 + 6 = 15

There are 4 red balls

If on first draw, red balls comes out then 6 more red balls are added

The probability of red balls on first draw = $\frac{4}{15}$

Due to withdraw of one red balls now there are only 3 red balls is left.

Also, there is no replacement done so, total number of balls becomes 14.

After adding 6 new red balls total number of balls becomes = 14 + 6 = 20

And total number of red balls = 3 + 6 = 9

Now, if on the 2nd draw, red balls is drawn, then,

The probability of red balls on 2nd draw = $\frac{9}{20}$

As there is no replacement done so, total number of balls becomes 19

And total number of red balls = 9 – 1 = 8

Now, if on the 3rd draw, red balls is drawn then

The probability of red balls on 3rd draw = $\dfrac{8}{19}$

Final probability if on both the draws red balls is drawn = $\dfrac{4}{15} \times \dfrac{9}{20} \times \dfrac{8}{19} = \dfrac{24}{475}$

Hence, $\dfrac{24}{475}$ is the probability of all the 3 balls drawn are of red ball.

(66-70) :

66.   (2) I. $5x^2 - 87x - 378 = 0$

$5x^2 - 105x + 18x - 378 = 0$

$5x(x - 21) + 18(x - 21) = 0$

$(5x + 18)(x - 21) = 0$

$x = -\dfrac{18}{5}$, 21

II. $3y^2 - 49y + 200 = 0$

$3x^2 - 24y - 25y + 200 = 0$

$3y(y - 8) - 25(y - 8) = 0$

$(3y - 25)(y - 8) = 0$

$y = \dfrac{25}{3}$, 8

Clearly, $x < y$

67.   (2) I. $(x + 1)(x + 18) = -66$

$x^2 + 18x + x + 18 + 66 = 0$

$x^2 + 19x + 84 = 0$

$x^2 + 12x + 7x + 84 = 0$

$x(x + 12) + 7(x + 12) = 0$

$(x + 7)(x + 12) = 0$

$x = -7, -12$

II. $\sqrt{(y-3)(y-27)} = 9$

$(y - 3)(y - 27) = 81$

$y^2 - 27y - 3y + 81 - 81 = 0$

$y^2 - 30y = 0$

$y(y - 30) = 0$

$y = 0, 30$

Clearly, $x < y$

68.   (1) I. $\dfrac{15}{x} + \dfrac{16}{y} = 1$ .... (i)

II. $\dfrac{3}{x} - \dfrac{7}{y} = 5$ .... (ii)

equation (i) – (ii) × 5, we let

$\dfrac{15}{x} + \dfrac{16}{y} - \dfrac{15}{x} + \dfrac{35}{y} = 1 - 25$

$\dfrac{51}{y}$ = –24

$y = \dfrac{-51}{24}$

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

$\dfrac{15}{x} + \dfrac{16}{-51} \times 24 = 1$

$\dfrac{15}{x} = 1 + \dfrac{128}{17} \Rightarrow \dfrac{15}{x} = \dfrac{145}{17}$

$x = \dfrac{15 \times 17}{145} = \dfrac{255}{145}$

Clearly, $x > y$

69. (2) I. $17x^2 + 48x = 9$
$17x^2 + 48x – 9 = 0$
$17x^2 + 51x – 3x – 9 = 0$
$17x(x + 3) – 3(x + 3) = 0$
$(17x – 3)(x + 3) = 0$

$x = \dfrac{3}{17}, -3$

II. $13y^2 + 12 = 32y$
$13y^2 – 32y + 12 = 0$
$13y^2 – 26y – 6y + 12 = 0$
$13y(y – 2) – 6(y – 2) = 0$
$(13y – 6)(y – 2) = 0$

$y = \dfrac{6}{13}, 2$

Clearly, $x < y$

70. (5) I. $4x + 7y = 209$ .... (i)
II. $12x – 14y = – 38$ .... (ii)
equation (i) × 2 + (ii), we get
$8x + 14y + 12x – 14y = 418 – 38$
$20x = 380 \Rightarrow x = 19$
Now, put the value of x in equation (ii)
$12 \times 19 – 14y = –38$
$14y = 228 + 38$

$14y = 266 \Rightarrow y = \dfrac{266}{14} = 19$

Clearly, $x = y$

ENGLISH LANGUAGE

(86-90) :

86. (3) 'will be going' replace with 'went' because sentence is in past tense.
87. (2) 'as like' replace with 'like'.
88. (5) 'No error'.
89. (4) 'to be performed' (passive) replace 'to perform' (Active)
90. (1) 'to make' replace with 'make'.

VOCABULARIES

Words	Meaning in English	Meaning in Hindi
Ailment	an illness, Typically a minor one, Disease	रोग
Apathetic	having no interest	उदासीन, रूचि का अभाव
Carry out	to complete or fulfill, to execute	पूरा करना
Conspicuous	easily seen, Remarkable	स्पष्ट
Deprived (of)	without the basic necessities	सुविधाहीन
Disposal	act of getting rid of something	ठिकाने लगाने या छुटकारा पाने की प्रक्रिया
Enlist	to obtain something as help or support	समर्थन पाना
Envigour	to make something lively or energetic	ऊर्जावान बना देना
Hostile	aggressive, full of animosity	शत्रुतापूर्ण
Hygienic	clean and disease free	स्वास्थ्यकर
Indigenous	native or belonging to own country	स्वदेशी
Inexplicable	that cannot be explained	अवर्णनीय
Muster	to succeed in creating in self or in others (courage, will)	जुटाना (कोई भाव)
Sanitation	system intended to protect health	साफ-सफाई
Trivial	Unimportant (matter, issue)	महत्वहीन
Entrench	To make something establish strongly	मजबूती से स्थापित होना

IBPS PO SPECIAL PHASE - I - 358 (ANSWER KEY)

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