IBPS PO SPECIAL PHASE - I - 357 (SOLUTION)

REASONING

(1-5) :

Person	Bank	State
L^+	Axis	Maharashtra
M^-	HDFC	Bihar
N^-	ICICI	Assam
O^-	BOB	Telangna
A^+	Andhra Bank	UP
B^+	SBI	Tamilnadu
C^+	BOM	Jharkhand

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

(6-10) :

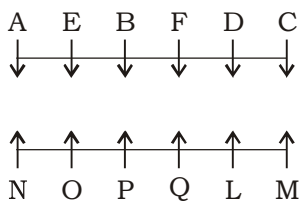| Floor	Name	City
7	Vivek	Mumbai
6	Ashu	Delhi
5	Lucky	Pune
4	Abhi	Kolkata
3	Javed	Jaipur
2	Rajan	Goa
1	Kamal	Indore

6. (4)　　7. (1)　　8. (3)　　9. (5)　　10. (2)

(11-12) :
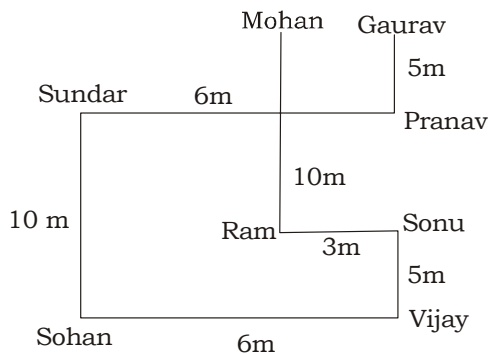
11. (2)　　12. (4)

(13-18) :

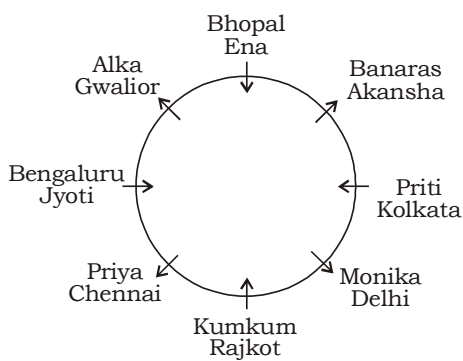13. (3)　　14. (5)　　15. (2)　　16. (1)　　17. (5)

(18-22) :

18. (1) $Y \leq B > A$

I. $Y < A \rightarrow$ False

$T \geq B = U \geq P$

II. $T > P \rightarrow$ Doubt

Neither conclusion I nor II is true.

19. (5) $A > K > M$

I. $A > M \rightarrow$ True

$I \leq P = K \geq O$

II. $O \leq I \rightarrow$ False

Only conclusion I is true.

20. (4) $S < K \geq Z > P \geq O \leq I$

I. $O < S \rightarrow$ False

II. $K > P \rightarrow$ True

Only conclusion II is true.

21. (4) $R \geq Z \geq P < Q$

I. $R \geq P \rightarrow$ True

II. $Z \geq Q \rightarrow$ False

Only conclusion I is true.

22. (4) $T > N < M$

I. $T > M \rightarrow$ False

$O \geq N < T$

II. $O \geq T \rightarrow$ False
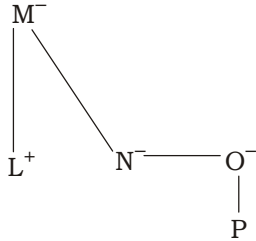
Neither conclusion I nor II is true.

(23-27) :

23. (3)   24. (3)   25. (2)   26. (5)   27. (1)

(28-30) :

X

W → 70 words/minutes

V

Y → 40 words/minutes

Z

28. (3)   29. (1)   30. (3)
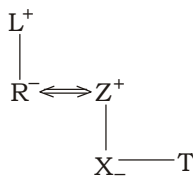
(31-35) :

31.   (1)   L ÷ M % N × O % P

$$M^-$$

$$L^+ \qquad N^- \quad O^-$$

$$P$$

'×' should come in place of question mark.

32.   (2)   From option 2,

$$L^+$$

$$R^- \Longleftrightarrow Z^+$$

$$X^- \text{——} T$$

Hence, X is the daughter of Z.

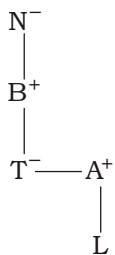33.   (2) P^+

$$Q^- \Longleftrightarrow T^+$$

$$R^- \text{——} S^+$$
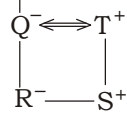
Hence R is the daughter of Q and S is son of T.

Q and T are couple.

∴   T is the son-in-law of P is definitely true.

34.   (5) N^-

$$B^+$$

$$T^- \text{——} A^+$$

$$L$$

Except (5), all options are not are not safisfactory. In option (5), A is grandson of W.

35.   (4)   T % L × C **$** Z + T

$$T^-$$

$$L^- \text{——} C^- \Longleftrightarrow Z^+$$

$$T$$
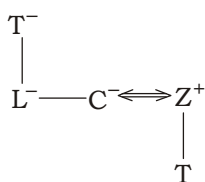
$ should come in place of question mark.

MATHS

36. (2) $\sqrt{2024.99} \times \sqrt{255.95} \times \sqrt{398.99} \times \sqrt{?} = 34.01 \times 39.95$

$\sqrt{2025} \times \sqrt{256} + \sqrt{400} \times \sqrt{?} \approx 34 \times 40$

$45 \times 16 + 20 \times \sqrt{?} = 1360$

$20 \times \sqrt{?} = 1360 - 720$

$\sqrt{?} = \dfrac{640}{20} = 32$

$? = 32 \times 32 = 1024$

37. (4) $\sqrt{120.96} \times \sqrt{168.87} + 8.05 \times 12.12 = ?$

$? \approx \sqrt{121} \times \sqrt{169} + 8 \times 12$

$= 11 \times 13 + 96 = 143 + 96 = 239$

38. (3) $\sqrt[3]{64100} + 326.89 = ? \div 34.98 + 20.02$

$\sqrt{64000} + 327 \approx ? \div 35 + 20$

$40 + 327 = \dfrac{?}{35} + 20$

$\dfrac{?}{35} = 367 - 20 = 347$

$? = 347 \times 35 = 12145 \approx 12140$

39. (2) 2.31% of $689.03 + 0.37$ of $2268.92 = ?$

$? \approx 2.50\%$ of $688 + 0.50\%$ of 2268

$= \dfrac{2.50}{100} \times 688 + \dfrac{0.50}{100} \times 2268$

$= 17.20 + 11.34 = 28.54 \approx 29$

40. (1) $\sqrt{7748} \times \dfrac{3}{4} + (3.96)^2 + ? = (5.02)^3$

$\sqrt{7744} \times \dfrac{3}{4} + (4)^2 + ? \approx (5)^3$

$88 \times \dfrac{3}{4} + 16 + ? = 125$

$66 + 16 + ? = 125$

$? = 125 - 82 = 43$

(41-45) :

41. (5) Let expenditure of company A in the year 2012 = 100

Income $= 100 \times \dfrac{130}{100} = 130$

Expenditure of company B in the year 2015 = 130

$\therefore$ Required ratio $= 100 \times \dfrac{30}{100} : 130 \times \dfrac{50}{100} = 30 : 65 = 6 : 13$

42. (3) Let expenditure of company A in the year 2015 = ₹100

Income = $100 \times \dfrac{140}{100}$ = ₹140

Expenditure of company A in the year 2016 = ₹140

Income = $140 \times \dfrac{150}{100}$ = ₹210

∴ Required ratio = 140 : 210 = 2 : 3

43. (3) Percentage profit increased over the previous year is as follows :

$2012 = \left[\dfrac{20-15}{15} \times 100\right]\%$ = 33.33%

$2013 = \left[\dfrac{30-20}{20} \times 100\right]\%$ = 50%

$2014 = 0\%$

$2015 = \left[\dfrac{50-30}{30} \times 100\right]\%$ = 66.66%

$2016 = \left[\dfrac{60-50}{50} \times 100\right]\%$ = 20%

∴ Required answer is 2015.

44. (2) Expenditure of company A in the year 2011 = ₹40 crore

∴ Income = $40 \times \dfrac{120}{100}$ = 48 crore

45. (4)

(46-50):

46. (2) The Pattern of the number series is :

$18 \times 1 + 1^2 = 19$

$19 \times 2 + 2^2 = 42$

$42 \times 3 + 3^2 = 135$

$135 \times 4 + 4^2 = 556$

$556 \times 5 + 5^2 = $ **2805**

47. (4) The Pattern of the number series is :

$4 \times 1 + 10 = 14$

$14 \times 2 + 8 = 36$

$36 \times 3 + 6 = 114$

$114 \times 4 + 4 = 460$

$460 \times 5 + 2 = $ **2302**

48. (3) The Pattern of the number series is :

$17 \times 3 + 1 = 52$

$52 \times 3 + 2 = 158$

$158 \times 3 + 3 = 477$

$477 \times 3 + 4 = $ **1435**

$1435 \times 3 + 5 = 4310$

49. (3) The Pattern of the number series is :
$(1)^3 + 1 = 2$
$(2)^3 + 1 = 9$
$(3)^3 + 1 = 28$
$(4)^3 + 1 = 65$
$(5)^3 + 1 = \mathbf{126}$

50. (3) The Pattern of the number series is :
$4 \times 1.5 = 6$
$6 \times 2 = 12$
$12 \times 2.5 = 30$
$30 \times 3 = 90$
$90 \times 3.5 = 315$
$315 \times 4 = \mathbf{1260}$

51. (1) Let he purchase $2x$ number of toffees

Total C.P = $x \times \dfrac{1}{25} + x \times \dfrac{1}{20} = \dfrac{4x+5x}{100} = ₹ \dfrac{9x}{100}$

Total S.P = $2x \times \dfrac{2}{45} = ₹ \dfrac{4x}{45}$

Loss = $\dfrac{9x}{100} - \dfrac{4x}{45} = \dfrac{81x-80x}{900} = ₹ \dfrac{x}{900}$

∴ Loss% = $\left(\dfrac{x}{900} \times \dfrac{100}{9x} \times 100\right)\% = \dfrac{100}{81}\% = 1\dfrac{19}{81}\%$

52. (2) Let the average of runs made by other 6 batsmen be x.
Runs made by the captain = $x + 30$
$x + 30 + 6x = 310$
$7x = 280$
$x = 40$
∴ Number of runs scored by the captain = $40 + 30 = 70$

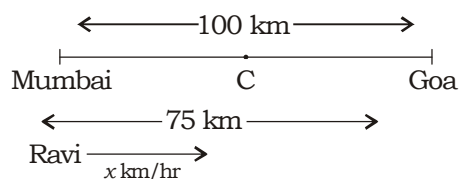53. (5) Let the length and breadth of the original rectangle be x m and y m respectively.
After increasing the length by 20% and decreasing the breadth by 20%, then the area would be 192 m².
ATQ,
$1.2x \times 0.8y = 192$
$0.96xy = 192$
$xy = 200$ m²

54. (4)

←————100 km————→
Mumbai   C   Goa
←———75 km———→
Ravi →
x km/hr

Let the original speed of Ravi be x km/hr and scheduled time = t hours
Let the distance between Mumbai and Goa is 100 km.
He covers 75% of the distance in scheduled time.
$xt = 75$ ....(i)
$x(t + 3) = 100$ ....(ii)

From (i) and (ii),

$x = \dfrac{25}{3}$ km/hr

t = 9 hour

Let he doubles his speed after n hours.

Then,

$n \times \dfrac{25}{3} + \dfrac{50}{3} \times (9 - n) = 100$

$\dfrac{25}{3}\left[n + 18 - 2n\right] = 100$

$-n + 18 = 12$

∴ n = 6 hours.

55. (3) Salary spends in Household's item = 50%

Transport = 50% of remaining salary

Entertainment and sports = (10 + 5)% = 15%

Remaining salary Household's item = 50%

Transport = 50%

Entertainment and sports = 85%

Now, $\dfrac{1}{2} \times \dfrac{1}{2} \times \dfrac{17}{20} \times$ total salary = 1020

Total salary = ₹ 4800

Expenditure on transport = $4800 \times \dfrac{1}{2} \times \dfrac{1}{2}$ = ₹ 1200

(56-60):

56. (2) No. of student qualified in the year 2015 = $36000 \times \dfrac{40}{100}$ = 14400

∴ Required ratio = 5000 : 14400 = 25 : 72

57. (1) No. of students qualified in the year

2008 = $5000 \times \dfrac{35}{100}$ = 1750

2009 = $15000 \times \dfrac{40}{100}$ = 6000

2012 = $32500 \times \dfrac{35}{100}$ = 11375

2014 = $24000 \times \dfrac{35}{100}$ = 8400

Required answer is 2008. We can answer the question only after see the bar graph and line graph.

58. (5) No. of student qualified in the year 2013 = $40000 \times \dfrac{25}{100}$ = 10000

No. of students qualified in the year 2014 = $24000 \times \dfrac{35}{100}$ = 8400

$\therefore$ Required % = $\left[\dfrac{(10000-8400)}{10000} \times 100\right]\%$ = $\left(\dfrac{1600}{10000} \times 100\right)\%$ = 16%

59. (2) Required average = $\dfrac{24000 \times \dfrac{35}{100} + 36000 \times \dfrac{40}{100}}{2}$ = $\dfrac{8400+14400}{2}$ = $\dfrac{22800}{2}$ = 11400

60. (1) No. of students qualified in the year 2010 = $25000 \times \dfrac{30}{100}$ = 7500

Required % = $\left(\dfrac{7500}{15000} \times 100\right)\%$ = 50%

61. (3) Let A, B work for x days and C work for y days.
Now,

$x \times \left(\dfrac{1}{10} + \dfrac{1}{15}\right) + y \times \dfrac{1}{20}$ = 1   .....(i)

Ratio of their efficiency = $\dfrac{x}{10} : \dfrac{x}{15} : \dfrac{y}{20}$ = $6x : 4x : 3y$

ATQ,

$\dfrac{4x}{6x+4x+3y} \times 24000 = \dfrac{3y}{6x+4x+3y} \times 24000 + 8000$

$\dfrac{4x-3y}{6x+4x+3y} \times 24000 = 8000$

$\dfrac{4x-3y}{10x+3y} = \dfrac{8000}{24000}$

$\dfrac{4x-3y}{10x+3y} = \dfrac{1}{3}$

$12x - 9y = 10x + 3y$
$2x = 12y$
$x = 6y$ .....(ii)
Put the value of x in Equation (i)

$6y \times \left(\dfrac{1}{10} + \dfrac{1}{15}\right) + \dfrac{y}{20}$ = 1

$6y \times \dfrac{1}{6} + \dfrac{y}{20}$ = 1

$y + \dfrac{y}{20}$ = 1

$y = \dfrac{20}{21}$ .....(iii)

Now, Put the value of y in equation (ii)

$x = 6 \times \dfrac{20}{21} = \dfrac{120}{21}$ days $= \dfrac{40}{7}$ days $= 5\dfrac{5}{7}$ days

62. (5) The difference between CI and SI is three years $= \dfrac{\text{Sum} \times r^2\,(300 + r)}{100^3}$

$381.888 \times 100^3 = \text{Sum} \times r^2\,(300 + r)$

or, Sum $= \dfrac{381888 \times 1000}{144\,(300 + 12)}$

Sum $= \dfrac{381888 \times 1000}{144 \times 312} = ₹\,8{,}500$

Shortcut : C.I – S.I = 381.88 (Given)

Rate of Interest for 3 year at simple interest = 39 = 12 × 3 = 36%

Rate of Interest for 3 years at compound interest $= 3a.3\underline{a}^2/\underline{a}^3 = 40.4928\%$

ATQ,

$(40.4928 - 36)\% \rightarrow 381.888$

∴ $100\% \rightarrow \dfrac{381.888}{4.4928} \times 100 = ₹8500$

63. (4) Let salary of Alka and Ena be $4x$ and $5x$ respectively and expenses be $6y$ and $7y$ respectively.

Savings of Alka = $4x - 6y$

Savings of Ena = $5x - 7y$

ATQ,

$4x - 6y = 5x \times \dfrac{1}{4}$

$4x - 6y = \dfrac{5x}{4}$

$16x - 24y = 5x$

$11x = 24y$

$x = \dfrac{24}{11}y$

Required ratio $= (4x - 6y):(5x - 7y) = \left(4 \times \dfrac{24}{11}y - 6y\right):\left(5 \times \dfrac{24}{11}y - 7y\right)$

$= \dfrac{30}{11}y : \dfrac{43}{11}y = 30:43$

64. (3) Simple Interest for 2 years = 325 – 300 = ₹25

Simple Interest for 4 year $= ₹\left(\dfrac{25}{2} \times 4\right) = ₹\,50$

Principal $= ₹\,(300 - 50) = ₹\,250$

∴ R % $= \dfrac{50 \times 100}{250 \times 4} = 5\%$

65. (1) R = 7.5% = $\dfrac{75}{1000}$ = $\dfrac{3}{40}$

40	_____	43
40	_____	43
40	_____	43

Now, 40 unit → 8000

43 unit → $\dfrac{8000}{40}$ × 43 = ₹ 8600

After first year of repayment of loan, money owe to bank = 8600 – 3000 = ₹ 5600

Again, 40 unit → 5600

48 unit → $\dfrac{5600}{40}$ × 43 = ₹ 6020

After second year of repayment of loan, money owe to bank = 6020 – 3000 = ₹ 3020

Again 40 unit → 3020

43 unit → $\dfrac{3020}{40}$ × 43 = ₹ 3246.50

Finally after third year of repayment of loan, money owe to bank = 3246.50 – 3000

= ₹ 246.50

(66-70) :

66. (2) I. $x^2 - 11x + 24 = 0$

$x^2 - 8x - 3x + 24 = 0$

$x(x - 8) - 3(x - 8) = 0$

$(x - 3)(x - 8) = 0$

$x = 3$ or 8

II. $2y^2 - 9y + 9 = 0$

$2y^2 - 6y - 3y + 9 = 0$

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

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

∴ $y = \dfrac{3}{2}$ or 3

Clearly, $x \geq y$

67. (3) I. $x^3 \times 13 = x^2 \times 247$

$x = \dfrac{247}{13} = 19$

II. $y^{\frac{1}{3}} \times 14 = 294 \div y^{\frac{2}{3}}$

$y^{\frac{1}{3} + \frac{2}{3}} = \dfrac{294}{14}$

$y = 21$

Clearly, $x < y$

68. (4) I. $\dfrac{12 \times 4}{x^{\frac{4}{7}}} - \dfrac{3 \times 4}{x^{\frac{4}{7}}} = x^{\frac{10}{7}}$

$48 - 12 = x^{\frac{10}{7} + \frac{4}{7}}$

$x^2 = 36$

$x = +6, -6$

II. $y^3 + 783 = 999$

$y^3 = 216$

$y = 6$

Clearly, $x \leq y$

69. (3) I. $\sqrt{576}\, x + \sqrt{400} = 0$

$24\, x = -20$

$x = -\dfrac{20}{24} = -\dfrac{5}{6}$

II. $\sqrt{361}\, y + (196)^{\frac{1}{2}} = 0$

$19y = -14$

$y = -\dfrac{14}{19}$

Clearly, $x < y$

70. (1) I. $(17)^2 + 144 \div 18 = x$

$289 + 8 = x$

$x = 297$

II. $(26)^2 - 18 \times 21 = y$

$576 - 378 = y$

$y = 198$

Clearly, $x > y$

ENGLISH LANGUAGE

81. (4) Replace 'patiently" with 'patient'. 'Listening' is noun here and to qualify a noun, an adjective is needed.

82. (3) Replace 'is' with 'has been', because in the sentence, 'for + time' is given.

83. (4) Replace 'Would' with 'could'.

84. (5) No error.

85. (4) Replace 'with' with 'for'. (Responsible for)

86. (1) Replace 'are' with 'have', because subject or doer is present (we) and thus, the sentence should be in active.

87. (2) Replace 'what' with 'why'.

88. (1) Replace 'had' with 'is' (is + adjective). Here 'was' cannot be used because then other verb will have to be changed into past as well.

89. (5) No error.

90. (3) Replace 'convenient' (adjective) with 'convenience' (noun). 'The + noun'. is used.

VOCABULARIES

Words	Meaning in English	Meaning in Hindi
Pruning	the act of making something smaller by removing parts	छटाई
Counterparts	equivalent	समकक्ष
Impediments	a hindrance or obstruction	बाधा, अवरोध
Viability	the fact that something can be done and can be successful	व्यवहार्यता
Status quo	the situation as it is now, or as it was before a recent change	यथास्थिति
Rejuvenation	more lively or more modern	नई उमंग
Indelible	impossible to forget or remove	पक्का, जो मिट न सके
Sought after	in demand	लोकप्रिय
Striking	interesting and unusual enough to attract attention	विचित्र
Spiritualism	a system of belief	अध्यात्मवाद
Tangible	that you can touch and feel	वास्तविक, स्पर्श योग्य

IBPS PO SPECIAL PHASE - I - 357 (ANSWER KEY)

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