IBPS RRB PO PHASE - I - 112 (SOLUTION)

REASONING

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

(6 – 10) :

Day	Person	Bike
Monday	Riya	Passion
Tuesday	Soni	Yamaha
Wednesday	Vibha	Pulsar
Thursday	Tina	Bullet
Friday	Queen	Platinum
Saturday	Uma	Avenger
Sunday	Priya	Splendor

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

(11–12) :

Jack > Ishan > Lehman > Mark > Kevin
          (50)   (25)

11. (4)   12. (1)

(13–16) :

$$I^- \quad G^-\!\!=\!\!H^+$$
$$M^-\!\!=\!\!B^+\!\!-\!\!A^+\!\!=\!\!O^-$$
$$N\!-\!L^-\!-\!K^+$$

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

(17 – 21) :

Floor	Members	Colours	Pets
10	–	–	–
9	Irfan	Black	Cat
8	Kelvin	Red	Jaguar
7	–	–	–
6	Jack	Pink	Turtle
5	Geoge	Yellow	Hamster
4	David	Brown	Gerbil
3	Frank	White	Dog
2	Hob	Blue	Rabbit
1	Edward	Green	Monkey

17. (5)   18. (5)   19. (2)
20. (5)   21. (4)

(22–26):

22. (4) A's father's Birthday may be on 8th or 9th December.

23. (5) **From I :–**
Abhinav > Chintu > Dipesh .... (i)
From II :–
Dipesh > Bipin > Emaan ...... (ii)
From (i) and (ii)
Abhinav > Chintu > Dipesh > Bipin > Emaan
From both of statement, we can find that Emaan is the lightest.

24. (5) From both statement I and II

T sits opposite to R.
Both statement I and II together are necessary to answer the question

25. (5) From both statement I and II

$$C^-$$
$$A^+\!\!=\!\!D^-\!-\!B^-$$

thus we can say that A is brother – in – law of B.
Both statement I and II together are necessary to answer the question

26. (1) From I :
Brown → Red
Red → Orange
From I, we can say that colous of eye is 'Red'.
From II : we can't decide the colour of eye.
only statement I is sufficient to Answer the question

(27–31) :
$* \rightarrow \leq$, $\& \rightarrow <$
$\% \rightarrow =$, $© \rightarrow \geq$
$@ \rightarrow >$

27. (1) $M \geq N > O = Q$
I. $M > Q \rightarrow$ True
II. $N = Q \rightarrow$ false
III. $Q \leq M \rightarrow$ false
Only conclusion I is true.

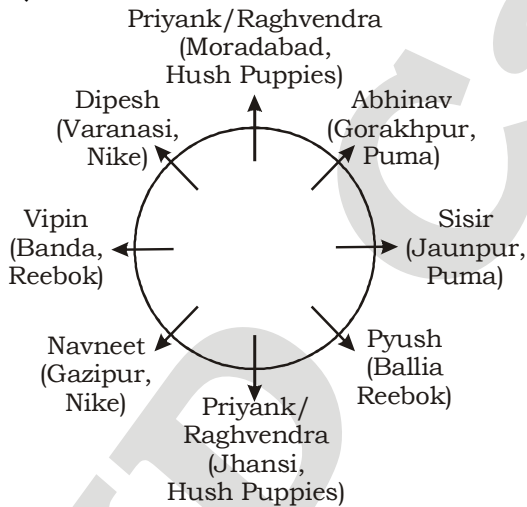28. (4) $M > N \le O \ge P$
   I. $O > M \rightarrow$ false
   II. $P = N \rightarrow$ false
   III. $P \le M \rightarrow$ false
   None conclusion is true.

29. (3) $X < Y > M \ge N$
   I. $N \le Y \rightarrow$ false
   II. $M < X \rightarrow$ false
   III. $Y > X \rightarrow$ True
   Only conclusion III is true.

30. (2) $A = B \le C < D$
   I. $B < D \rightarrow$ True
   II. $C \ge A \rightarrow$ True
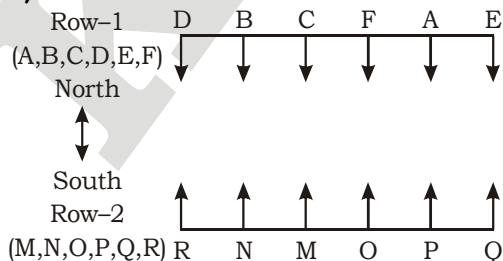   III. $A \le D \rightarrow$ False
   Only conclusion I and II is true.

31. (3) $T > Y \ge G \le W$
   I. $G = T \rightarrow$ false
   II. $T \le G \rightarrow$ False
   III. $T > G \rightarrow$ True
   Only conclusion III is true.

(32–36) :

Priyank/Raghvendra
(Moradabad,
Hush Puppies)

Dipesh
(Varanasi,
Nike)

Abhinav
(Gorakhpur,
Puma)

Vipin
(Banda,
Reebok)

Sisir
(Jaunpur,
Puma)

Navneet
(Gazipur,
Nike)

Pyush
(Ballia
Reebok)

Priyank/
Raghvendra
(Jhansi,
Hush Puppies)

32. (2)   33. (4)   34. (3)
35. (1)   36. (4)

(37–40) :

Row–1   D   B   C   F   A   E
(A,B,C,D,E,F)
North

South
Row–2
(M,N,O,P,Q,R) R   N   M   O   P   Q

37. (4)   38. (3)   39. (2)
40. (3)

MATHS

(41-45):

41. (2) $? = (10.97)^2 + (4.13)^3 \times 3.79$

   $? \approx (11)^2 + (4)^3 \times 4$

   $? = 121 + 256 = 377 \approx 376$

42. (1) $? \approx \dfrac{936 \times 12}{100} + \dfrac{26 \times 1500}{100}$

   $= 112.32 + 390 = 502.32 \approx 500$

43. (2) $? = \sqrt[3]{65} \times 23.93 - 31.04$

   $\approx \sqrt[3]{64} \times 24 - 31$

   $= 4 \times 24 - 31 = 96 - 31 = 65$

44. (5) $? = 1624.12 \times 3.891$

   $\approx 1624 \times 4 = 6496 \approx 6500$

45. (5) $? \approx 3018 \div 3 - 841 = 1006 - 841 = 209$

   ≈ 200

(46–50) :

46. (3) Average no. of students in institute 5

   $= \dfrac{120 + 112 + 124 + 139 + 114 + 127}{6}$

   $= 122.66$

   Average no. of students in institute R

   $= \dfrac{115 + 122 + 132 + 121 + 140 + 148}{6}$

   $= 129.66 - 122.66 = 7$

47. (2) Total no. of students in all the institute together in the year 2002

   $= 126 + 78 + 122 + 112 + 152 + 132$
   $= 722$

   Total no. of students in all the institute together in the year 2006

   $= 142 + 120 + 148 + 127 + 175 + 150$
   $= 862$

   $\therefore$ Required% $= \left(\dfrac{722}{862} \times 100\right)\%$

   $= 83.75\% \approx 84\%$

48. (4) Required ratio

   $= (126+78) : (122 + 112)$

   $= 204 : 234$

   $= 34 : 39$

49. (5) Total no. of students in all the institutes together in
2001 = 147 + 86 + 115 + 120 +140 +136 = 744
2002 = 126 + 78 + 122 + 112 + 152 + 132 = 722
2003 = 136 + 96 + 132 + 124 + 158 + 140 = 786
2004 = 183 + 92 + 121 + 139 + 166 + 126 = 827
2005 = 160 + 107 + 140 +114 + 170 +146 = 837
2006 = 142 + 120 +148 +127 + 175 +150 = 862

50. (3) Increase in the year 2003

$= \left(\dfrac{12}{112} \times 100\right)\% = 10.71\%$

Increase in the year 2004

$= \left(\dfrac{7.5}{124} \times 100\right)\% = 12.03\%$

Decrease in the year 2005

$= \left(\dfrac{25}{139} \times 100\right)\% = 17.98\%$

Increase in the year 2006

$= \left(\dfrac{13}{114} \times 100\right)\% = 11.40\%$

Decrease in the year 2002

$= \left(\dfrac{8}{120} \times 100\right)\% = 6.66\%$

Required answer is 2005

(51–55) :

51. (1) The pattern of the number series is :
21 × 0.5 = 10.5
10.5 × 1 = **10.5**
10.5 × 1.5 = 15.75
15.75 × 2 = 31.50
31.50 × 2.5 = 78.75

52. (2) The pattern of the number series is :
6 + 1 × 13 = 6 + 13 = 19
19 + 3 × 13 = 19 + 39 = 58
58 + 5 × 13 = 58 + 65 = **123**
123 + 7 × 13 = 123 + 91 = 214
214 + 9 × 13 = 214 + 117 = 331

53. (3) The pattern of the number series is :
14 + 1 × 2 = **16**
16 + 3 × 4 = 16 + 12 = 28
28 + 5 × 6 = 28 + 30 = 58
58 + 7 × 8 = 58 + 56 = 114
114 + 9 × 10 = 114 + 90 = 204

54. (4) The pattern of the number series is :
13.76 + 1 × 1.15 = 14.91
14.91 + 2 × 1.15 = 14 + 2.30 = 17.21
17.21 + 3 × 1.15 = 17.21 + 3.45 = 20.66
20.66 + 4 × 1.15 = 20.66 + 4.60 = **25.26**
25.26 + 5 × 1.15 = 25.26 + 5.75 = 31.01

55. (5) The pattern of the number series is :
$15 + 1^2 = $ **16**
$16 + 2^3 = 16 + 8 = 24$
$24 + 3^2 = 24 + 9 = 33$
$33 + 4^3 = 33 + 64 = 97$
$97 + 5^2 = 97 + 25 = 122$

56. (1) Amount remaining after

1 year = $4000\left(1 + \dfrac{7.5}{100}\right) - 1500 = ` 2800$

2 years = $2800\left(1 + \dfrac{7.5}{100}\right) - 1500 = ` 1510$

3 years = $1510\left(1 + \dfrac{7.5}{100}\right) - 1500 = ` 123.25$

57. (3) Let the number of students appeared in school X = 100

∴ Number of students qualified in school X = 70

∴ According to question,
Number of students appeared in School Y = 120

Number of students qualified in School Y
= 70 + 50% of 70 = 70 + 35 = 105

∴ Required percentage

$= \dfrac{105 \times 100}{120} = 87.5\%$

58. (1) $\dfrac{^5C_2}{^7C_2} = \dfrac{10}{21}$

59. (3) Four years ago,
A : B = 3 : 4
After four years,

$\dfrac{3x+8}{4x+8} = \dfrac{5}{6}$

$\Rightarrow 20x + 40 = 18x + 48$

$\Rightarrow 2x = 48 - 40 = 8$

$\Rightarrow x = \dfrac{8}{2} = 4$

∴ A's present age = 3x + 4
= 3 × 4 + 4 = 16 years

60. (1) According to question,

SI for 10 years = $\dfrac{1000 \times 5 \times 10}{100}$ = ₹ 500

Now, P = ₹ 1500, A = ₹ 2000

∴ SI = ₹ 500

Now, $T = \dfrac{500 \times 100}{1500 \times 5} = 6\dfrac{2}{3}$ years

∴ Total time = $16\dfrac{2}{3}$ years

(61–65) :

61. (1) Required total

$$= \left[2.05 \times \dfrac{14.5}{100} + 2.25 \times \dfrac{15.3}{100} + 1.95 \times \dfrac{16.4}{100} + 2 \times \dfrac{16.2}{100} + 1.75 \times \dfrac{18.2}{100} + 1.7 \times \dfrac{22.4}{100}\right]$$

= 0.29725 + 0.34425 + 0.3198 + 0.324 + 0.3185 + 0.3808

= 1.9846 lakh

= 1,98,460

62. (3) Spent on shopping by

A = $2.05 \times \dfrac{14.6}{100}$ = ₹ 0.2993 lakh

B = $2.25 \times \dfrac{14.6}{100}$ = ₹ 0.2993 lakh

C = $1.95 \times \dfrac{16.6}{100}$ = ₹ 0.3237 lakh

F = $1.75 \times \dfrac{12.8}{100}$ = ₹ 0.224 lakh

∴ Required answer is B.

63. (4) Total amount spent by A on food items and entainment together

= $\dfrac{2.05}{100} \times (21.8 + 20.4)$

= $\dfrac{2.05}{100} \times 42.2$ = 0.8651 lakh

Total amount spent by C on food items and entertainment together

= $\dfrac{1.95}{100} \times (14.3 + 18.5)$

= $\dfrac{1.95}{100} \times 32.8$ = ₹ 0.6396 lakh

Required ratio

= 0.8651 : 0.6396

= 211 : 156

64. (2) Amount spent by F on helth

= $1.7 \times \dfrac{18.2}{100}$ = ₹ 0.3094 lakh

Total amount spent by all the people together on health

= $2.05 \times \dfrac{16.4}{100} + 2.25 \times \dfrac{11.4}{100} + 1.95 \times \dfrac{21.5}{100} + 2 \times \dfrac{21.5}{100} + 1.75 \times \dfrac{21}{100} + 1.7 \times \dfrac{18.2}{100}$

= 0.3362 + 0.2565 + 0.41925 + 0.43 + 0.3675 + 0.3094

= ₹ 2.11885 lakh

∴ Require% = $\left(\dfrac{0.3094}{2.11885} \times 100\right)$%

= 14.60% ≈ 15%

65. (5) Per annum income of all the pcaples together

= 2.05 + 2.25 + 1.95 + 2 + 1.75 + 1.2

= ₹ 11.7 lakh

Required% = $\left(\dfrac{1.75}{11.7} \times 100\right)$%

= 14.95% ≈ 15%

(66-70):

66. (4) Time taken in crossing each other

= $\dfrac{\text{Total length of trains}}{\text{Relative speed}}$

The information given in both statements is not sufficient length of train L and individual speed of each train are required.

67. (4) Area of rectangle = Area of triangle.

From the information given in both the statements, we can find area of triangle or area of rectangle. For finding lenght breadth is required, which is not known.

68. (3) From the statement I,

$r = \dfrac{100 \times 100}{1000}$ = 10%

Thus we have,

P = Rs. 1000, r = 10%,

t = 3 years

Hence, C.I. can be determined

From the statement II.

S.I = $\dfrac{100 \times r \times 2}{100}$ = 20r

$$CI = 1000\left[\left(1+\frac{r}{100}\right)^2 - 1\right]$$

∴ C.I. - S.I.

$$= 1000\left[\frac{200r + r^2}{10000}\right] - 20r$$

$\Rightarrow$ $2000r + r^2 - 200r = 100$

$\Rightarrow$ $r = 10\%$

Hence, C.I. can be determined

69. (5) Let the unit's digit be x and ten's digit be y and $x < y$.

∴ Number = $10y + x$

From statement I,

$y - x = 5$ ...(i)

From statement II,

$y + x = 7$ ...(ii)

From (i) and (ii), x, y can be calculated and two digit number can be found.

70. (4) Let the distance between J ard K be z km.

Again, let speed of boat in still water be x kmph and that a stream be y kmph.

∴ Rate downstream = $(x + y)$ kmph

Rate upstream = $(x - y)$ kmph

From statement I,

$$= \frac{z}{x+y} = 2$$

From statement II,

$$\frac{z}{x-y} = 4$$

(71–75) :

71. (2) Clearly,

9 × 360 children = 18 × 72 men

= 12 × 162 women

$\Rightarrow$ 45 children = 18 men = 27 women

$\Rightarrow$ 5 children = 2 men = 3 women

Now, 4 men +12 women +10 children

= 4 men + 8 men + 4 men = 16 men

∵ 18 men can complete the work in 72 days.

∴ 16 men can complete the same work

$$= \frac{18 \times 72}{16} = 81 \text{ days}$$

72. (3) Let the speed of boat in still water be x kmph and that of current be y kmph.

$$\therefore \quad x + y = \frac{4.8}{\frac{8}{60}} = \frac{4.8 \times 60}{8}$$

$\Rightarrow$ $x + y = 36$ ....(i)

$$\text{and, } x - y = \frac{4.8}{\frac{9}{60}} = \frac{4.8 \times 60}{9}$$

$\Rightarrow$ $x - y = 32$ ....(ii)

By equation (i) − (ii),

$x + y - x + y = 36 - 32 = 4$

$\Rightarrow$ $2y = 4 \Rightarrow y = \frac{4}{2} = 2$ kmph

73. (3) Let the amount be ₹ x

Investment is done as given below.

Amount left = $x - \frac{40}{100}x = \frac{60x}{100}$

$\frac{40}{100}x$ at 15% p.a

$\frac{50}{100}$ of $\frac{60x}{100} = \frac{30x}{100}$ at 10% p.a

Rest amount

$= x - \frac{40x}{100} - \frac{30x}{100} = \frac{30x}{100}$ at 18% p.a

Interest earned by each at end of 1 year

By 1st $\Rightarrow \frac{15}{100} \times \frac{40x}{100} = \frac{60}{1000}x$

By 2nd $\Rightarrow \frac{10}{100} \times \frac{30x}{100} = \frac{30}{1000}x$

By 3rd $\Rightarrow \frac{18}{100} \times \frac{30x}{100} = \frac{54}{1000}x$

Total interest = $\frac{144}{1000}x$

∴ Rate% = $\frac{\frac{144x}{1000}}{x} \times 100 = 14.4\%$

74. (1) C's present age = 85 − 7 = 78 years

B's present age = 78 − 12 = 66 years

∴ A's present age = $\frac{3}{11}$ × 66 = 18 years

∴ A's father's present age = 25 + 18 = 43 years

75. (3) According to question,

CP of 20 articles = SP of x articles = 1 (let)

∴ CP of 1 articles = $\dfrac{1}{20}$

SP of 1 articles = $\dfrac{1}{x}$

Profit per cent = $\dfrac{\dfrac{1}{x} - \dfrac{1}{20}}{\dfrac{1}{20}}$ = $\dfrac{25}{100}$

⇒ $\dfrac{20 - x}{x} = \dfrac{1}{4}$

⇒ $80 - 4x = x$

⇒ $5x = 80$

⇒ $x = 16$

(76–80) :

76. (5) I. $x^2 + 8x + 15 = 0$

⇒ $x^2 + 5x + 3x + 15 = 0$

⇒ $x (x + 3) + 3 (x + 3) = 0$

⇒ $(x + 3) (x + 5) = 0$

⇒ $x = -3, -5$

II. $y^2 + 6y + 8 = 0$

⇒ $y^2 + 2y + 4y + 8 = 0$

⇒ $y (y + 2) + 4 (y + 2) = 0$

⇒ $(y + 4) (y + 2) = 0$

⇒ $y = -4, -2$

77. (1) I. $3x^2 - 16x + 16 = 0$

⇒ $3x^2 - 12x - 4x + 16 = 0$

⇒ $3x (x - 4) - 4 (x - 4) = 0$

⇒ $(3x - 4) (x - 4) = 0$

⇒ $x = \dfrac{4}{3}, 4$

II. $3y^2 + 7y + 2 = 0$

⇒ $3y^2 + 6y + y + 2 = 0$

⇒ $3y (y + 2) + (y + 2) = 0$

⇒ $(3y + 1) (y + 2) = 0$

⇒ $y = \dfrac{1}{3}, -2$

Clearly, $x > y$

78. (3) I. $4x^2 - 5x + 1 = 0$

⇒ $4x^2 + 4x - x + 1 = 0$

⇒ $4x (x - 1) - 1 (x - 1) = 0$

⇒ $(4x - 1) (x + 1) = 0$

⇒ $x = \dfrac{1}{4}, 1$

II. $25y^2 - 1 = 0$

⇒ $y^2 = \dfrac{1}{25}$

⇒ $y = +\dfrac{1}{5}, -\dfrac{1}{5}$

Clearly, $x > y$

79. (1) I. $5x^2 + 13x + 21 = 0$

⇒ $5x^2 - 15x - 3x + 9 = 0$

⇒ $5x (x - 3) - 3 (x - 3) = 0$

⇒ $(5x - 3) (x - 3) = 0$

⇒ $x = \dfrac{3}{5}, 3$

II. $20y^2 - 13y + 2 = 0$

⇒ $20y^2 + 5y + 8y + 2 = 0$

⇒ $5y (4y - 1) - 2 (4y - 1) = 0$

⇒ $(5y - 2) (4y - 1) = 0$

⇒ $y = \dfrac{2}{5}, \dfrac{1}{4}$

Clearly, $x > y$

80. (5) I. $x^2 + 29x = -210$

⇒ $x^2 + 29x + 210 = 0$

⇒ $x^2 + 15x + 14x + 210 = 0$

⇒ $x (x + 15) + 14 (x + 15) = 0$

⇒ $(x + 14) (x + 15) = 0$

⇒ $x = -14, -15$

II. $y^2 + 28y = -195$

⇒ $y^2 + 28y + 195 = 0$

⇒ $y^2 + 15y + 13y + 195 = 0$

⇒ $(2y + 11) (y + 3) = 0$

⇒ $y (y + 15) + 13 (y + 15) = 0$

⇒ $(y + 13) (y + 15) = 0$

⇒ $y = -13, -15$

IBPS RRB PO PHASE - I - 112 (ANSWER KEY)

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

Note:- If you face any problem regarding result or marks scored, please contact 9313111777

Note:- Whatapp with Mock Test No. and Question No. at 7053606571 for any of te doubts. Join the group and you may also share your suggestions and experience of sunday Mock Test.

Note:- If your opinion differs regarding any answer, please message the mock test and question number to 8860330003