

IBPS RRB OFFICER PHASE - I - 154 (SOLUTION)

REASONING

(1-5) :

V - India Today (H)

Q - Outlook (E)

T - Frontline

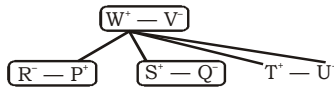
P - Business World / Indian Today (E) / Outlook (H) / Sports Star

S - India Today (E) / Outlook (H)

U - Indian Today (E) / Sports Star

W - Business World / India Today (E) / Outlook (H) / The Wee
/ Sports Star

R - Business World / India Today (E) / Sports Star



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

(6-10) :

- - $P > Q$
- © - $P \geq Q$
- \$ - $P = Q$
- # - $P < Q$
- @ - $P \leq Q$

6. (1) **Statement :**

$T > U > R > Q$

Conclusion :

- I. $T > Q$ (✓) II. $R < T$ (×)

7. (4) **Statement :**

$B > H > J \geq C$

Conclusion :

- I. $B \geq C$ (×) II. $C \leq H$ (×)

8. (2) **Statement :**

$T > Q \geq X < W$

Conclusion :

- I. $W = Q$ (-) II. $X < T$ (✓)

9. (5) **Statement :**

$Z = Y < A < B$

Conclusion :

- I. $A > Z$ (✓) II. $Y < B$ (✓)

10. (3) **Statement :**

$K > L = O \geq N$

Conclusion :

- I. $L > N$ }
II. $N = L$ } Either I or II

(11-15):

The machine rearranges words and numbers in such a way that numbers are arranged from the left side with the smallest number coming first and moving subsequently so that in the last step numbers are arranged in descending order. While the words are arranged from the right side as they appear in English alphabetical order.

Input: 73 word show 19 42 never break heart for 59 21 value 68 99

Step I: 19 73 word show 42 never heart for 59 21 value 68 99 break

Step II: 21 19 73 word show 42 never heart 59 value 68 99 break for

Step III: 42 21 19 73 word show never 59 value 68 99 break for heart

Step IV: 59 42 21 19 73 word show value 68 99 break for heart never

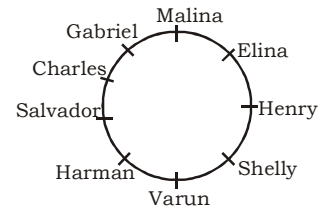
Step V: 68 59 42 21 19 73 word value 99 break for heart never show

Step VI: 73 68 59 42 21 19 word 99 break for heart never show value

Step VII: 99 73 68 59 42 21 19 break for heart never show value word

11. (5) 12. (3) 13. (4)
14. (2) 15. (4)

(16-20) :




16. (1) 17. (4) 18. (3)
19. (2) 20. (5)

(21-25) :

Days	Shop	No. of Motors
Monday	P	6
Tuesday	Q	4
Wednesday	S	12
Thursday	O	18
Friday	R	27
Saturday	N	15
Sunday	M	9

21. (5) 22. (3) 23. (1)
24. (1) 25. (4)

(26-29):

26. (1) From I - 

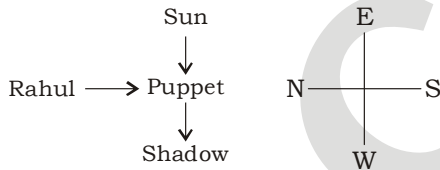
27. (1) From I -
distance b/w A and B in house = $(4 \times 6) \times 3$ km = 30 km

From II -
We conclude that it A's speed is x km/hr, then B's speed = $\frac{x}{2}$ km/hr. But the actual speed of of time of them can not be ascertained.

28. (5)

29. (3) Early morning sun rises in the east and shadow of an object/person at this time fall exactly behind it.

from I, Romesh and puppet are facing each other. The shadow of puppet falls to the right of Romesh and hence to the left of the puppet. thus sun is to the right of puppet. But the sun is in the east so puppet is facing north and thus Romesh is facing south.




From II, Turn left the shadow falls behind Romesh. This mean Romesh faces the sun (i.e east) on turning left. Thus Rahul facing south.

(30-34):

30. (3) 

31. (5) 

32. (3) 

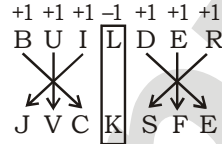
33. (2) 

34. (4) 

(35-39):

System → pi Development → si
and → chi Market → li
settlement → ti Payment → hi
financial → xi Inclusion → ni

35. (4) 36. (1) 37. (5)
38. (4) 39. (1)

40. (5) 

Maths

(41-45):

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

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

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

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

$\Rightarrow \sqrt{?} = \frac{640}{20} = 32$

$\Rightarrow ? = 32 \times 32 = 1024$

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

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

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

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

$\Rightarrow \sqrt[3]{64000} + 327 \approx ? \div 35 + 20$

$\Rightarrow 40 + 327 = \frac{?}{35} + 20$

$\Rightarrow \frac{?}{35} = 367 - 20 = 347$

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

44. (2) 2.31% of 689.03 + 0.37 of 2268.92 = ?

$\Rightarrow ? \approx 2.50\% \text{ of } 688 + 0.50\% \text{ of } 2268$

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

= $17.20 + 11.34 = 28.54 \approx 29$

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

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

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

$$\Rightarrow 66 + 16 + ? = 125$$

$$\Rightarrow ? = 125 - 82 = 43$$

(46-50) :

46. (1) Total no. of employees of KD Defence in the year 2010, 2012 and 2014 = $(4.8 + 5.2 + 7.2) \times 100 = 1720$

and total no of employees joining KD tech over all the year together

$$= (0.75 + 1.2 + 1.8 + 1.65 + 4.25 + 5.2) \times 100 = 1485$$

$$\therefore \text{Required \%} = \left(\frac{1720}{1485} \times 100 \right) \%$$

$$= 115.82\% \approx 116\%$$

47. (3) Total no. employees joining KD publication in the year 2010 and 2012

$$= (4.5 + 6.5) \times 100 = 1100$$

and total no. of employees joining same organisation in the the year 2013 and 2014

$$= (7.8 + 6.2) \times 100 = 1400$$

$$\therefore \text{Required ratio} = 1100 : 1400 = 11 : 14$$

48. (5) Total no. of employees joining Kd campus in the year 2010, 2012 and 2015 = $(2.8 + 4.5 + 6.5) \times 100 = 1380$

$$\therefore \text{Required difference} = 1380 - 425 = 955$$

49. (2)

50. (3) Required average

$$= \frac{(7.8 + 1.65 + 5.2) \times 100}{3}$$

$$= \frac{1465}{3} = 488.33 \approx 488$$

(51-55) :

51. (1) The pattern of given series is :

$$5 \times 1 + 1^2 = 6$$

$$6 \times 2 + 2^2 = 16$$

$$16 \times 3 + 3^2 = 57$$

$$57 \times 4 + 4^2 = 244$$

$$244 \times 5 + 5^2 = \mathbf{1245}$$

52. (3) The pattern of given series is :

$$3 \times 3 - 5 = 4$$

$$4 \times 3 + 5 = 17$$

$$17 \times 3 - 5 = 46$$

$$46 \times 3 + 5 = 143$$

$$143 \times 3 - 5 = \mathbf{424}$$

53. (2) The pattern of given series is :

$$\rightarrow 50$$

$$\rightarrow 31 = 50 - (19 \times 1)$$

$$\rightarrow 88 = 31 + (19 \times 3)$$

$$\rightarrow ? = 88 - (19 \times 5)$$

$$\rightarrow ? = \mathbf{-7}$$

$$\rightarrow 126 = -7 + (19 \times 7)$$

$$\rightarrow -45 = 126 - (19 \times 9)$$

$$\rightarrow 164 = -45 + (19 \times 11)$$

54. (3) The pattern of given series is :

$$-18252$$

$$3042 = -18252 \div (-6)$$

$$-468 = 3042 \div (-6.5)$$

$$? = -468 \div (-6)$$

$$? = \mathbf{78}$$

$$-12 = 78 \div (-6.5)$$

$$2 = -12 \div (-6)$$

$$-0.30 = 2 \div (-6.5)$$

55. (4) The pattern of given series is :

$$20 = (2)^4 + 4$$

$$87 = (3)^4 + 6$$

$$633 = (5)^4 + 8$$

$$2411 = (7)^4 + 10$$

$$? = (11)^4 + 12$$

$$? = 14653$$

$$28575 = (13)^4 + 14$$

56. (3) Let male = x , female = y

According to question,

$${}^Y C_2 = 45$$

$$\frac{Y!}{(Y-2)!2!} = 45$$

$$\frac{Y(Y-1)(Y-2)!}{(Y-2)!} = 45 \times 2 = 90$$

$$Y(Y-1) = 90$$

$$Y = 10$$

also,

$${}^x C_2 = 190$$

$$\frac{x!}{(x-2)!2!} = 190$$

$$\frac{x(x-1)(x-2)!}{(x-2)!} = 380$$

$$x(x-1) = 380$$

$$x = 20$$

No. of games between one male and one

$$\text{female} = {}^{10} C_1 \times {}^{20} C_1 = 200$$

57. (5)

58. (1) Let the rectangle has x and y tiles along its length and breadth respectively

The no. of pink tiles

$$P = 2x + 2(2y - 2) = 2(x + y - 2)$$

and the number of Greentiles

$$G = xy - 2(x + y - 2)$$

According to the questions,

$$\text{Pink tiles} = \text{Green tiles}$$

$2(x + y - 2) = xy - 2(x + y - 2)$
 $4(x + y - 2) = xy$
 or $xy - 4x - 4y = 8$
 $(x - 4)(y - 4) = 8$
 as $(x - 4)$ and $(y - 4)$ both are integers.
 Hence the possibilities are $(x - 4, y - 4)$
 $= (1, 8)$ or $(2, 4)$ with the value of (x, y) as
 $(5, 12)$ or $(6, 8)$
 Hence, the edges can have 5 or 12 or 6 or 8 tiles

59. (4) $\frac{M_1 D_1 H_1}{W_1} = \frac{M_2 D_2 H_2}{W_2}$

$$\Rightarrow \frac{4 \times 10 \times 5}{1} = \frac{2 \times 20 \times H_2}{2}$$

$\Rightarrow H_2 = 10$ hours

60. (3) Initially milk in P = 40 litres
 water in Q = 22 litres
 After 1st operation,
 Milk in P = $40 - 8 = 32$ litres
 Water in Q = 22 litres
 Milk in Q = 8 litres
 \therefore Mixture in container Q = $22 + 8 = 30$ liters

After 2 operation $\frac{22}{5}$ liters of water is taken out

\therefore Milk in container P = $32 + \frac{8}{5} = \frac{168}{5}$

and water in container Q = $22 - \frac{22}{5}$

$= \frac{88}{5}$

\therefore Required Ratio = $\frac{168}{5} : \frac{88}{5} = 21 : 11$

(61 – 65):

61. (1) Required no. of unsold Speakers in the year 2016 = $480 \times \frac{35}{100} = 168$

62. (3) Number of computer manufactured in the year 2017 = $190 \times \frac{110}{100} = 209$

Percentage of computer sold in 2017

$= 90 \times \frac{80}{100} = 72\%$

\therefore No. of unsold computer in 2017

$= 209 \times \frac{28}{100} = 58.52 \approx 59$

63. (4) Required average

$$980 \times \frac{68}{100} + 1280 \times \frac{22}{100} + 880 \times \frac{54}{100} + 440 \times \frac{18}{100}$$

$$= \frac{666.40 + 281.60 + 475.20 + 79.20}{4}$$

$$= \frac{1502.40}{4} = 375.60 \approx 376$$

64. (1) Total no. of unsold Speakers in 2015 and sold Laptops in the year 2014

$$= 520 \times \frac{25}{100} + 300 \times \frac{45}{100}$$

$$= 130 + 135 = 265$$

No. of unsold Mobiles in the year 2013

$$= 980 \times \frac{68}{100} = 666.40$$

\therefore Required % = $\left(\frac{265}{666.40} \times 100 \right) \%$

$= 39.76\% \approx 40\%$

65. (5) Total no. of sold products in the year 2013

$$= 200 \times \frac{70}{100} + 240 \times \frac{75}{100} + 780 \times \frac{96}{100} + 980$$

$$\times \frac{32}{100} = 140 + 180 + 748.80 + 313.60$$

$$= 1382.40$$

Total no. of unsold products in the year 2015

$$= 170 \times \frac{35}{100} + 340 \times \frac{42}{100} + 520 \times \frac{25}{100} + 880$$

$$\times \frac{54}{100} = 59.50 + 142.80 + 130 + 475.20$$

$$= 807.50$$

\therefore Required difference = $1382.40 - 807.50 = 574.90 \approx 575$

(66-70):

66. (2) From statement P,

$x - y = 0$.

From statement Q,

$x + y = 18$

It is possible only when $x = y = 9$.

67. (4) Data are inadequate.

68. (5) From both statements,

Speed of boat in still water

$$= \frac{1}{2}(4 + 6) = 5 \text{ kmph}$$

69. (1) From statement P

Priti's marks in Chemistry = $2 \times 42 = 84$

70. (3) From statement P,

$$\text{Rate} = \frac{\text{S.I} \times 100}{\text{Time} \times \text{Principal}}$$

$$= \frac{1736 \times 100}{6200 \times 2} = 14\% \text{ Per annum}$$

By using C.I.

$$= P \left[\left(1 + \frac{R}{100} \right)^T - 1 \right]$$

we get the required rate of interest.

(71-75) :

71. (3) Required %

$$= \left[\frac{600}{700 + 400 + 1200 + 1200 + 600 + 900 + 900} \times 100 \right] \%$$

$$= \left(\frac{600}{5900} \times 100 \right) \% = 10.16\% \approx 11\%$$

72. (5) In 2004 = 0%

In 2005 = No increase

In 2002 = No increase

In 2007 = 0%

73. (2) Total sales of Cannon printer in the year 2001, 2002 and 2005

$$= 600 + 900 + 1100 = 2600$$

Total sales of Cannon printer in all the years

$$= 600 + 900 + 300 + 600 + 1100 + 1000 + 1100 = 5600$$

$$\therefore \text{Required \%} = \left(\frac{2600}{5600} \times 100 \right) \%$$

$$= 46.42\% \approx 46\%$$

74. (5) Total sales of HP printer in all the years = 700 + 400 + 1200 + 1200 + 600 + 900 + 900 = 5900

and total sales of Canon printer in all the year = 5600

$$\therefore \text{Required \%} = 5900 : 5600 = 59:56$$

75. (1) The sale of HP Printer from the Previous year in

$$\mathbf{2003} = \left(\frac{1200 - 400}{400} \times 100 \right) \%$$

$$= 200\% \text{ more}$$

$$\mathbf{2005} = \left(\frac{1200 - 600}{1200} \times 100 \right) \%$$

= 50% less

$$\mathbf{2002} = \left(\frac{700 - 400}{700} \times 100 \right) \%$$

= 42.85% less

$$\mathbf{2004} = \left(\frac{1200 - 1200}{1200} \times 100 \right) \% = 0\%$$

\therefore Required answer is 2003.

(76-80) :

76. (1) Required no. of ways = ${}^4C_4 \times {}^6C_1 + {}^3C_3 \times$

$${}^4C_2 = 1 \times 6 + 1 \times 6 = 6 + 6 = 12$$

77. (3) Required no. of ways = ${}^3C_2 \times {}^6C_3 = 3 \times 20 = 60$

78. (1) Mixture of acid and water = 60 litres
Volume of water in the mixture = 10% of 60 = 6 litres

Let 'x' litres of water be added in the mixture.

$$(x + 6) = 25\% \text{ of } (x + 60)$$

$$\text{or, } x + 6 = \frac{1}{4} (x + 60)$$

$$\text{or, } 4x + 24 = x + 60$$

$$\text{or, } 4x - x = 60 - 24 = 36$$

$$\text{or, } 3x = 36$$

$$x = 12 \text{ litres}$$

79. (5) Let both the trains travel for x hrs.

A/Q,

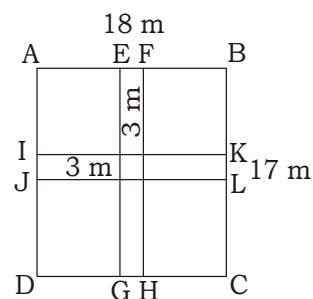
$$60x - 45x = 200 \Rightarrow 15x = 200$$

$$\Rightarrow x = \frac{200}{15}$$

\therefore Distane between Punjab and Delhi

$$= \frac{200}{15} \times (60 + 45) = \frac{200}{15} \times 105 = 1400 \text{ k.m}$$

80. (5)



Area of path

$$= (18 \times 3 + 17 \times 3) - (3 \times 3)$$

$$= 54 + 51 - 9 = 96 \text{ sq. m}$$

\therefore total cost of paving the path at the rate of

$$2.5/\text{sq. m} = 96 \times 2.5 = ₹ 240$$

KD
Campus

KD Campus

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

IBPS RRB OFFICER PHASE - I - 154 (ANSWER KEY)

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