

IBPS RRB Office Asst. Preliminary Grand Test –IRP-180711

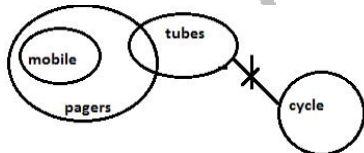
HINTS & SOLUTIONS

ANSWER KEY

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

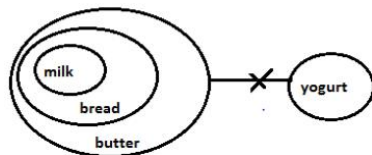
HINTS & SOLUTIONS

1. (2)



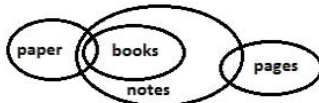
For I – Since, there is no direct relation between element tubes & mobiles. Hence, Conclusion I can't be concluded.
For II – Since some pagers are tubes and no tube is cycle therefore some pagers are not cycle will be true. Hence, Conclusion II can be concluded.

2. (2)



For I – From Venn diagram it is clear that milk cannot be yogurt. Hence, Conclusion I cannot be concluded.
For II – Since, all bread is butter and no butter is yogurt therefore some yogurt is not bread will hold true. Hence, Conclusion II can be concluded.

3. (3)



For I – Since there is no direct relation between element pages and paper. Hence, Conclusion I will not hold true.

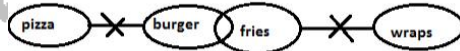
For II – Since no negative conclusion can be drawn from positive statements therefore Conclusion II cannot be concluded.
Since the elements are same and some & some not case is mentioned. Therefore, "Either –Or" case will be concluded

4. (1)



For I – Since, there is no direct relation between element wine and scotch, therefore possibility case will hold true. Hence, Conclusion I can be concluded.
For II – Since, there is a direct relation between rum and vodka, therefore possibility case will not hold true. Hence, Conclusion II cannot be concluded.

5. (4)



For I – Since there is no direct relation between burger and wraps we cannot conclude that Some burgers are Wraps. Hence, Conclusion I cannot be concluded.
For II – Since, no conclusion can be drawn from two negative statements. Hence, Conclusion II cannot be concluded.

6. (2)

First half in reverse order :-
5 ● PM \$ G Δ 6 × 4 □ CB
Second half in reverse order :-
ZA × 9 S 7 I V ÷ ⊕ + R %
Right = 3rd
Right = 16th
Right = 13th

7. (1)

Right = 4th
Left = 5th
Left = 9th
2nd = C
11th = P
20th = I
22nd = S

9. (3)

In each group the second element is one gap after the first element while third element is two gaps after second element. The first element of next group is just before the third element of the previous group, i.e. % + V.

10. (5)



11-15.

Day	Subject
Monday	Mathematics
Tuesday	Psychology
Wednesday	Chemistry
Thursday	Computer
Friday	Biology
Saturday	Physics
Sunday	English

11. (5)

12. (1)

13. (3)

14. (1)

15. (3)

16-20.

M lives on floor number 5. N lives on floor number 3. Two persons live between M and L. O lives immediately above P. Three persons live between P and Q. There will be two possibilities

Case1		Case2	
Floor	Person	Floor	Person
9		9	O
8	L	8	P
7	O	7	
6	P	6	
5	M	5	M
4		4	Q
3	N	3	N
2	Q	2	L
1		1	

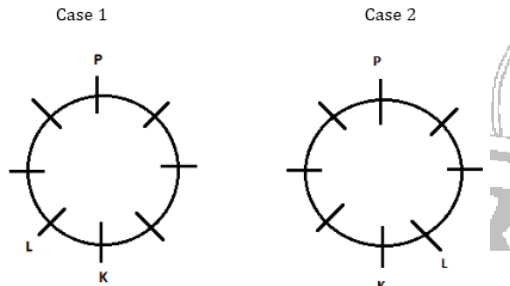
O lives on one of the floor below vacant floor. This will eliminate Case 2, R lives in one of the floor above S. So the final arrangement will be

Floor	Person
9	Vacant
8	L
7	O
6	P
5	M
4	R
3	N
2	Q
1	S

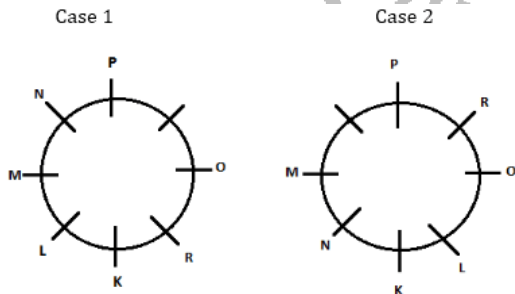
16. (5)
18. (2)

17. (1)
19. (4)
20. (3)

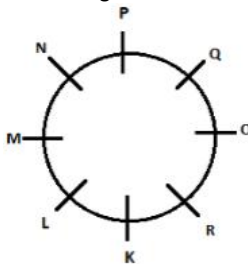
21-25. L is an immediate neighbor of K, who faces P. We get two possibilities



O sits second to the right of K. R is an immediate neighbor of O and faces N. M is an immediate neighbor of N.



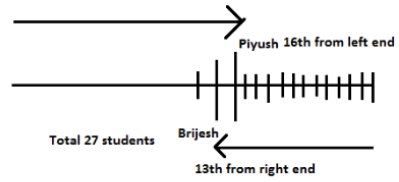
L is not an immediate neighbor of O. This will eliminate Case 2 and the final arrangement will be:



21. (2)
23. (4)

22. (3)
24. (2)
25. (5)

26. (5)
27. (2) Niece
28. (4)



No one sits between them.

29. (4) $(10 \times 3 + 16 \div 4 - 2) = 32$
30. (1) No pairs of letters in the word "CAPSULE".
31. (5) I. $E < B$ (True) II. $G > E$ (True)
32. (1) I. $Q > P$ (True) II. $V < R$ (False)
33. (2) I. $T \leq P$ (False) II. $N < L$ (True)
34. (4) I. $M < B$ (False) II. $W < X$ (False)
35. (3) I. $F > K$ (False) II. $K = F$ (False)

36-40.

Proper	po
Practice	do
Gives	la
Base	pu
Class	mu
Result	ha
Is/excellent	mo/lu
Revision	du
Before/exam	ma/hu

36. (3)
37. (3)
38. (1)
39. (2)
40. (1)

41. (3) $6^2 - 12, 5^3 - 10, 4^3 - 8, 3^3 - 6, 2^3 - 4, 1^3 - 2 \dots \dots \dots 3^3 - 6 = 21$
42. (3) $\times 2.5, \times 3, \times 3.5, \times 4 \dots \dots \dots$
 $472.5 \times 4 = 630$
43. (4) $\times 2 + 6, \times 2 + 10, \times 2 + 14, \times 2 + 18 \dots \dots \dots$
 $(2290 \times 2) + 14 = 4594$
44. (1) $\times 2 + 2^2, \times 3 + 3^2, \times 4 + 4^2 \dots \dots \dots$
 $(72 \times 3) + 3^2 = 225$
45. (5) $1^3 + 1, 4^3 - 4, 2^3 + 2, 5^3 - 5, 3^3 + 3, 6^3 - 6$
 $6^3 - 6 = 210$

46. (1) $? = 13 \times 4 + 17 \times 5 - 44 \times \frac{625}{100}$
 $= -138$
47. (5) $? = \frac{24}{100} \times 125 + \frac{48}{100} \times 150$
 $= \frac{10200}{100}$
 $= 102$

48. (3) $? = \frac{7}{3} \times \frac{30}{7} \times \frac{10}{3} \times 81$
 $= 2700$

49. (2) $? = 450 + 13 - 28 + 75$
 $= 510$

50. (1) $? = (3 + 4 - 4 + 5) + (\frac{1}{2} + \frac{3}{4} - \frac{3}{5} + \frac{1}{2})$
 $= 8 + (\frac{23}{20})$
 $= 9\frac{3}{20}$

51. (1) Let length of field = $3x$
breadth of field = $2x$
ATQ,
 $2(3x + 2x) = 250$
 $\Rightarrow x = 25$
 \therefore Required area = $75 \times 50 = 3750$ sq. unit

52. (2) Let speed of stream = s km/hr
 $\therefore (8 - s) \times 6 = (8 + s) \times 4$
 $\Rightarrow 48 - 6s = 32 + 4s$
 $\Rightarrow s = 1.6$ km/hr

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53. (3) Speed of train X (in m/sec) = $54 \times \frac{5}{18} = 15$ m/s
 Speed of train Y (in m/sec) = $72 \times \frac{5}{18} = 20$ m/s

ATQ,

Let length of train Y = y meters

$$\frac{(160 + y)}{(20 - 15)} = 48$$

$$\Rightarrow y = 80 \text{ m}$$

54. (4) Initial quantity of water in mixture = $\frac{3}{8} \times 64 = 24\ell$

Initial quantity of milk in mixture = $\frac{5}{8} \times 64 = 40\ell$

ATQ,

$$\frac{24 + x}{40} = \frac{5}{8}$$

$$\Rightarrow 24 + x = 25$$

$$\Rightarrow x = 1\ell$$

55. (4) A : B = 120 : 100
 = 6 : 5

Total work = $120 \times 5 = 100$

Remaining work = $100 - 6 \times 2$

$$= 88$$

$$\text{Required days} = \frac{88}{(6 + 5)}$$

$$= 8 \text{ days}$$

56. (1) Required percentage = $\frac{45}{75} \times 100$
 = 60%

57. (2) Required average = $\frac{1}{5} \times (64 + 60 + 72 + 40 + 84)$
 = $\frac{1}{5} \times 320$
 = 64

58. (3) Required ratio = $\frac{(80+60)}{(60+40)}$
 = $\frac{140}{100} = \frac{7}{5}$

59. (4) Required difference
 = $(60 + 80 + 45 + 75 + 90) - (64 + 60 + 72 + 40 + 84)$
 = $350 - 320$
 = 30

60. (2) Required percentage = $\frac{90-84}{90} \times 100$
 = $\frac{100}{15} = \frac{20}{3}\% = 6\frac{2}{3}\%$

61. (2) $? = \frac{11}{3} \times \frac{24}{11} \times 130 - \frac{40}{100} \times 350$
 = $1040 - 140$
 = 900

62. (3) $? = 23 \times 6 + 33 \times 8 - 53 \times 4$
 = $138 + 264 - 212$
 = 190

63. (4) $? = (2 + 4 - 3 + 3) + \left(\frac{1}{2} + \frac{3}{4} - \frac{2}{3} + \frac{5}{6}\right)$
 = $6 + \frac{17}{12}$
 = $7\frac{5}{12}$

64. (3) $? = 1.11 + 1.111 - 1.01$
 = 1.211

65. (1) $? = 13121 - 8431 = 4690$

66. (5) I. $x^2 + 9x - 22 = 0$
 $\Rightarrow x^2 + 11x - 2x - 22 = 0$
 $\Rightarrow (x + 11)(x - 2) = 0$
 $\Rightarrow x = -11, 2$
 II. $2y^2 - 7y + 6 = 0$
 $\Rightarrow 2y^2 - 4y - 3y + 6 = 0$
 $\Rightarrow 2y(y-2) - 3(y-2) = 0$
 $\Rightarrow (y-2)(2y-3) = 0$
 $\Rightarrow y = 2, \frac{3}{2}$
 No relation

67. (5) I. $2y^2 - 13y - 34 = 0$
 $\Rightarrow 2y^2 - 17y + 4y - 34 = 0$
 $\Rightarrow y(2y-17) + 2(2y-17) = 0$
 $\Rightarrow (2y-17)(y+2) = 0$
 $\Rightarrow y = \frac{17}{2}, -2$

II. $3x^2 - 11x - 20 = 0$
 $\Rightarrow 3x^2 - 15x + 4x - 20 = 0$
 $\Rightarrow 3x(x-5) + 4(x-5) = 0$
 $\Rightarrow (x-5)(3x+4) = 0$
 $\Rightarrow x = 5, -\frac{4}{3}$

No relation

68. (2) I. $x^4 = 256$
 $\Rightarrow x = \pm 4$
 II. $y^2 - 16y + 64 = 0$
 $\Rightarrow (y-8)^2 = 0$
 $\Rightarrow y = 8$
 $y > x$

69. (5) I. $x^2 - 46x + 528 = 0$
 $\Rightarrow x^2 - 24x - 22x + 528 = 0$
 $\Rightarrow (x-24)(x-22) = 0$
 $\Rightarrow x = 24, 22$

II. $y^2 - 48y + 572 = 0$
 $y^2 - 26y - 22y + 572 = 0$
 $(y-26)(y-22) = 0$
 $y = 26, 22$

No relation

70. (2) I. $2x + 3y = 4$
 II. $4x + 5y = 6$
 Solving eq. (I) and (II),
 $(2x + 3y = 4) \times 2$
 $4x + 5y = 6$
 $y = 2$
 Put $y = 2$ in eq. (I),
 $2x + 6 = 4$
 $\Rightarrow x = -1$
 $y > x$

71. (5) $\frac{12}{100} \times 885 = \frac{?}{6}$

$$? = 637.2$$

72. (2) $?^2 = 69696$

$$? = 264$$

73. (2) 589.57

74. (5) $? = 4207 - 3007$

$$? = 1200$$

75. (2) $44.4 - 16.4 = 28$

76. (2) Let sum = Rs. P $\therefore 16\frac{2}{3}\% = \frac{50}{3}\%$

$$\therefore 1250 = \frac{P \times 3 \times 50}{100 \times 3}$$

$$\therefore P = 2,500$$

77. (1) Let fraction = $\frac{p}{q}$

ATQ, $\frac{p + \frac{20}{100} \times p}{q - \frac{80}{100} \times q} = \frac{5}{3}$

$$\Rightarrow \frac{\frac{6p}{10}}{\frac{2q}{10}} = \frac{5}{3}$$

$$\Rightarrow \frac{12p}{7q} = \frac{5}{3}$$

$$\Rightarrow \frac{p}{q} = \frac{35}{36}$$

78. (3) Required C.I. paid by Rajjo to PNB
 = $6300 \left[\left(1 + \frac{100}{300}\right)^2 - 1 \right]$

$$= 6300 \times \frac{7}{3}$$

$$= 4900$$

79. (4) Savings of Raheem = $100 - (36 + 40)$
 = 24%

ATQ, 24% \rightarrow 14,400

$$\Rightarrow 100\% \rightarrow \frac{14400}{24} \times 100 = \text{Rs. } 60,000$$

80. (1) Let present population = P

$$\therefore 21,600 = P \left(1 + \frac{20}{100}\right)^3$$

$$\Rightarrow P = \frac{21,600 \times 125}{216}$$

$$\Rightarrow P = 12,500$$