IBPS RRB Office Asst. Preliminary Grand Test –IRP-180712
## HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

1.(1) I. F < C   (True)
       II. G < D   (False)
2.(2) I. Z < B   (False)
       II. Z < L   (True)
3.(4) I. L = N   (False)
       II. T > N   (False)
4.(4) I. T < B   (False)
       II. T ≤ B   (False)
5.(2) I. N < P   (False)
       II. Q ≤ N   (True)

6-10.

A   E   C   B   F   G   H   D

March   June   May   January July   April   Feb   August

6. (4)   7. (1)
8. (1)   9. (2)   10. (2)
11. (2) RED
12. (5) No letter between D and E
13. (5) RDE, PDU, EFP and SHO
14. (1) No meaningful word has been formed after the operation.
15. (1) No word will have two vowel.
16-20. V sits opposite to W. Q is an immediate neighbor of W. S sits third to the right of Q. P is an immediate neighbor of V. We get two possibilities

Case 1   Case 2

U sits opposite to T. This will eliminate Case 2. S is not an immediate neighbor of T. So the final arrangement will be:
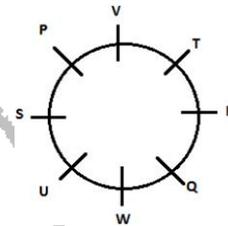
16. (2)   17. (3)
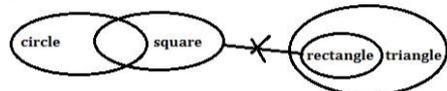18. (1)   19. (5)   20. (4)
21. (4) 5 4, 3 4, 5 9, 3 4
22. (4) 7
23. (3) 2
24. (3) Three - 5 4 6, 7 8 2, 3 4 6
25. (1) Four- 8 7, 1 3, 8 5, 8 7
26-30.

College	Student	Subject	Game
Galgotia	M	Mathematics	Cricket
G.L Bajaj	T	Chemistry	Lawn tennis
Galgotia	D	Physics	Hockey
NIIT	F	History	Chess/ Table tennis
NIIT	H	English	Chess/ Table tennis
G.L Bajaj	R	Geography	Basketball
NIIT	W	Biology	Football

26.(1)   27.(3)
28.(5)   29.(4)   30.(1)
31. (2) E
32. (4) Z
33. (3) Two – 9 % E, 7 @ E
34. (4) Four – SA$, WR9, QU@, MB&
35. (5) @3U
36. (4)

For I – Since, there is no direct relation between elements circle and rectangle. Hence, Conclusion I cannot be concluded.
For II – Since, there is no direct relation between elements square and triangle . Hence, Conclusion II cannot be concluded.
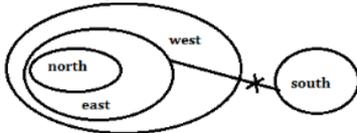
37. (2)
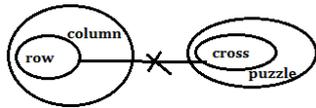
For I – Since, there is no direct relation between elements row and puzzle . Hence, Conclusion I cannot be concluded.

For II – Since, there is no direct relation between elements column and cross. So, possibility case will hold true. Hence, Conclusion II can be concluded.
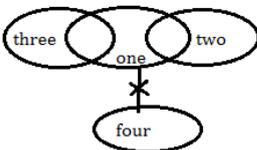
38. (5)

For I – Since All north are east and No east are South. Therefore, No north is South. Hence, Conclusion I is true.

For II – From venn diagram it is clear that some west are not south. Hence, Conclusion II will hold true.

39. (3)

For I – Since, there is no direct relation between elements Three and two. Hence, Conclusion I cannot be concluded.

For II – Since, there is no direct relation between elements three and two. Hence, Conclusion II cannot be concluded.

Since the elements are same and some and no case is mentioned. Therefore, either and or will be concluded.

40. (1)

For I – Since, there is no direct relation between elements crome and safari. So, possibility case will hold true. Hence, Conclusion I can be concluded.

For II – Since, there is no direct relation between elements opera and mozilla. Hence, Conclusion II cannot be concluded.

41. (3)
$? = 43 \times 5 + 25 \times 6 - 15 \times 8$
$= 365 - 120$
$= 245$

42. (2)
$? \times \dfrac{3}{5} \times \dfrac{4}{7} \times \dfrac{15}{16} \times 84 = \dfrac{90}{100} \times 360$
$\Rightarrow ? \times 27 = 36 \times 9$
$\Rightarrow ? = 12$

43. (4) $? = 1437.8 - 746.8 = 691$

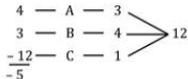**44. (2)**
$? + \dfrac{24}{100} \times 225 = \dfrac{8430}{3} \times 5 + \dfrac{16}{100} \times 450$
$? + 54 = 14050 + 72$
$\Rightarrow ? = 14,068$

45. (3) $? = 11 + 29 + 36 - 12 = 64$

46. (2)

Till 5 pm part of cistern tank filled = $4 \times 2 + 3 \times 1$
$= 8 + 3 = 11$
Cistern will be filled in $= \dfrac{11}{5}$
$= 2\dfrac{1}{5}$
$= 2$ hour 12 minute
$= 7 : 12$ PM

47. (4)
$\dfrac{d}{V+S} = 4$
$d = 4(V + 2)$
$d = 4V + 8$
$\dfrac{d}{V-S} = 5$
$d = 5(V - 2)$
$d = 5V - 10$
$5V - 10 = 4V + 8$
$V = 18$
$d = 4 \times 18 + 8$
$= 72 + 8 = 80$ km

48. (1)

$= \dfrac{1}{65}$ $= \dfrac{2}{39}$

Ratio $= \dfrac{\frac{1}{65}}{\frac{2}{39}} = \dfrac{1}{65} \times \dfrac{39}{2} = \dfrac{3}{10}$

49. (2)

Nilesh		Suresh
$40 \times 1 + 50 \times 1 + 60 \times 1 + 70$	:	85×2
220	:	170
22	:	17

Nilesh's share $= \dfrac{22}{39} \times 195000$
$= 110000$

50. (1) CP of tea sold Rs. 96 per kg
$= \dfrac{100}{80} \times 96 = 120$
CP of tea sold at Rs. 140 per kg $= \dfrac{100}{125} \times 140$
$= 28 \times 4$
$= 112$

$x - 112 = 120 - x$
$2x = 232$
$x = 116$

Profit $= \dfrac{174 - 116}{116} \times 100$

$= 50\%$

51. (3) x = 7, y = 8
Therefore, x < y.

52. (1) $x = \dfrac{-7}{2}, -5; \ y = -6, \dfrac{-13}{2};$
Therefore, x > y.

53. (2) x = 4, 1.8; y = −1.5, 1.8
Therefore x ≥ y.

54. (1) x = 3, 4.7; y = 1.5, 2.5
Therefore, x > y.

55. (5) x = 11, y = 11
Therefore, x = y.

56. (3) Total marks = 600
Marks obtained = 49.5+112.5+79+44+108+49.5=442.5
Required % $= \dfrac{442.5}{600} \times 100 = 73.75$

57. (2) Required difference = (102+46+133.5)-(112.5+34+103.5)
=(281.5)-250=31.5

58. (1) Average% $= \frac{500}{7}\%$

∴ Required average $= \frac{500}{7} \times \frac{1}{100} \times 150$

= 107.14

59. (2) Required average $= \frac{565}{7} = 80.71\%$

60. (4) Total % = 522%

∴ Required marks $= \frac{522}{100} \times 75 = 391.5$

61. (2) Let Megha's age = x years

Ritu's age = y years

∴ x + y = 36 ...(i)

And,

x + 6 = 2(y + 6)

⇒ x − 2y = 6 ...(ii)

Solving eq. (i) and (ii), we get

x = 26 years, y = 10 years

62. (1) Let sum is Rs. P

∴ C.I. – S.I. (for two years) $= \frac{PR^2}{100^2}$

$\Rightarrow \frac{P(20)^2}{100^2} = 1100 - 1000$

⇒ P = Rs. 2500

63. (3) Let odd numbers are x − 4, x − 2, x, x + 2, x + 4

∴ $\frac{x-4+x-2+x+x+2+x+4}{5} = 33$

⇒ x = 33

∴ least odd number = 33 − 4 = 29

64. (1) Let sum invested in scheme A = 2x Rs.

Sum invested in scheme B = 3x Rs.

ATQ,

$\frac{2x \times 10 \times 3}{100} + \frac{3x \times 8 \times 3}{100} = 3300$

⇒ 132x = 3300 × 100

⇒ x = 2500 Rs

∴ Required Sum = Rs. 5,000

65. (2) Total marks obtained by Rahul in all the four subjects

= 76 + 88 + 96 + 114 = 374

Total maximum marks = 100 + 100 + 120 + 120 = 440

∴ Required percentage $= \frac{374}{440} \times 100 = 85\%$

66. (2) Difference = [(8250 + 7275 + 12000 + 13500 + 14500)
− (7625 + 9700 + 11050 + 12000 + 14000)] ÷ 5

$= \frac{1150}{5} = 230 = \text{US}\$230 \text{ million.}$

67. (3) Difference $= \frac{54375}{5} - 7625 = 3250$ million

68. (4) Required percentage $= \frac{14500 - 8250}{8250} \times 100 = 76$

69. (2) In year 1998, difference was maximum.

70. (4) Year is 2000 : percent
$= \frac{12000}{13500} \times 100 = 88.88\%$

71. (2) Pattern of Series is

3 × 1 + 1 = 4

4 × 2 + 2 = 10

10 × 3 + 3 = 33

33 × 4 + 4 = 136

136 × 5 + 5 = 685

72. (4) Pattern of series –

8 × 0.5 = 4

4 × 1.5 = 6

6 × 2.5 = 15

15 × 3.5 = 52.5

73. (1) Pattern is

74. (4) Pattern Series is

$11^2 - 2 = 121 - 2 = 119$

$13^2 - 2 = 169 - 2 = 167$

$17^2 - 2 = 289 - 2 = 287$

$19^2 - 2 = 361 - 2 = 359$

$23^2 - 2 = 529 - 2 = 527$

$29^2 - 2 = 841 - 2 = 839$

75. (2) Series is

4 × 2 − 1 = 7

7 × 2 − 1 = 13

13 × 2 − 1 = 25

25 × 2 − 1 = 49

49 × 2 − 1 = 97

76. (2) ? = 3 × 106 + 5 × 90 − 6 × 49
= 474

77. (3) $? \times 5 = \frac{33}{100} \times 600 + \frac{44}{100} \times 225$
= 198 + 99
⇒ ? = 59.4

78. (4) ? = 115.1 + 11.11 + 11.1
= 137.31

79. (2) ? × 2 = 606 + 30
= 636
⇒ ? = 318

80. (3) ? = 169 + 289 + 529 − 576 − 216
= 195