LOGICAL THINKING - SOLUTION



HSEM1BTECHFASTRACK0719

25. Ans: [a]

From figures (i) and (ii), we conclude that the numbers 1, 4, 3 and 5 lie adjacent to the number 6. Clearly, the number 2 lies opposite 6 and conversely 6 lies opposite 2.

26. Ans: [c]

The number 2 is common to both the figures. We assume the parallelepiped in fig. (ii) to be rotated so that 2 appears at the same position as in fig. (i) i.e. on the RHS face and the numbers 6 and 3 move to the faces hidden behind the numbers 1 and 5 respectively [in fig. (i)]. Then, the combined figure will have 1 opposite 6 and 5 opposite 3. Thus, when 3 will be on the top, then 5 will appear at the bottom.

27. Ans: [a]

If 1 is adjacent to 2, 3 and 5, then either 4 or 6 lies opposite to 1. So, the numbers 4 and 6 cannot lie opposite to each other. Hence, 4 necessarily lies adjacent to 6.

28. Ans: [b]

Since the total number of dots on opposite faces is always 7, therefore, 1 dot appears opposite 6 dots, 2 dots appear opposite 5 dots and 3 dots appear opposite 4 dots.

29. Ans: [b]

If 1 is opposite to 5 and 2 is opposite to 3, then 4 definitely lies opposite to 6. Therefore, 2 cannot lie opposite to any of the two numbers - 4 or 6. Hence, 2 necessarily lies adjacent to both 4 and 6.

30. Ans: [d]

From positions X and Y we conclude that 1, 5, 6 and 3 lie adjacent to 4. Therefore, 2 must lie opposite 4. From positions Y and Z we conclude that 4, 3, 2 and 5 lie adjacent to 6. Therefore, 1 must lie opposite 6. Thus, 2 lies opposite 4, 1 lies opposite 6 and consequently 5 lies opposite 3.

Since 3 lies opposite 5 (as analysed above), it follows that 1, 4, 6 and 2 lie adjacent to 5. Out of these four numbers, the hidden numbers adjacent to 5 in position X are 6 and 2 and the hidden numbers adjacent to 5 in position Z are 1 and 4. Clearly, there is no number common.

REASONING ABILITY

SESSION - 12

& SUDOKU - I

1.

3	6	1	2	4	5
2	4	5	3	6	1
4	2	3	1	5	6
5	1	6	4	3	2
6	3	2	5	1	4
1	5	4	6	2	3

2.

3	4	2	6	1	5
5	6	1	2	3	4
2	5	4	3	2	1
4	1	3	5	4	6
6	3	5	1	6	2
1	2	6	4	5	3

3.

5	1	6	2	4	3
4	3	2	1	6	5
1	2	3	4	5	6
6	4	5	3	1	2
2	6	1	5	3	4
3	5	4	6	2	1

4.

7	4	1	5	9	6	2	3	8
8	9	3	2	1	7	4	6	5
2	5	6	4	8	3	1	9	7
6	7	4	9	5	8	3	2	1
1	3	5	7	4	2	6	8	9
9	8	2	6	3	1	5	7	4
3	2	9	1	7	5	8	4	6
4	1	8	3	6	9	7	5	2
5	6	7	8	2	4	9	1	3

5.

	_								
	2	1	3	5	4	9	7	8	6
ı	9	7	8	3	2	6	1	5	4
	5	4	6	8	7	1	9	2	3
	1	2	4	6	5	3	8	9	7
	6	8	7	9	1	4	5	3	2
	3	9	5	7	8	2	4	6	1
ı	4	6	1	2	29	5	3	7	8
	8	3/	9	1	6	7	/2/(4	5
	7	5	2	4	3	8	6	1	9

6.

8	7	5	9	3	1	4	2	6
9	6	2	8	7	4	3	5	1
1	3	4	6	5	2	8	7	9
2	4	6	1	8	5	9	3	7
3	5	9	2	6	7	1	8	4
7	1	8	3	4	9	2	6	5
6	2	7	4	9	3	5	1	8
4	8	3	5	1	6	7	9	2
5	9	1	7	2	8	6	4	3

LOGICAL THINKING - SOLUTION



HSEM1BTECHFASTRACK0719

7.

1	2	5	4	7	9	6	3	8
3	8	9	5	6	1	2	4	7
4	7	6	2	8	3	1	5	9
7	9	4	1	3	2	5	8	6
8	3	1	6	5	7	4	9	2
6	5	2	9	4	8	3	7	1
2	4	7	3	9	6	8	1	5
5	1	8	7	2	4	9	6	3
9	6	3	8	1	5	7	2	4

REASONING ABILITY SESSION - 13

& SUDOKU − II

1.

				_				
7	2	1	3	5	4	6	9	8
8	4	3	7	6	9	2	1	5
5	9	6	2	1	8	3	4	7
4	6	2	8	7	5	9	3	1
1	3	7	4	9	2	5	8	6
9	8	5	1	3	6	7	2	4
3	1	9	5	8	7	4	6	2
6	7	4	9	2	1	8	5	3
2	5	8	6	4	3	1	7	9

2.

9	2	8	3	1	4	7	5	6
3	6	1	7	8	5	2	9	4
4	5	7	6	9	2	1	3	8
6	8	9	1	7	3	4	2	5
2	7	5	4	6	8	3	1	9
1	4	3	5	2	9	6	8	7
8	1	6	9	3	7	5	4	2
5	3	2	8	4	6	9	7	1
7	9	4	2	5	1	8	6	3

3.

3	2	6	8	5	4	7	9	1
8	7	5	3	9	1	6	4	2
1	4	9	7	6	2	3	5	8
7	9	1	2	8	6	5	3	4
2	6	4	1	3	5	8	7	9
5	3	8	4	7	9	2	1	6
4	1	7	6	2	3	9	8	5
6	5	3	9	1	8	4	2	7
9	8	2	5	4	7	1	6	3

7	9	1	2	6	3	4	5	8
6	5	3	1	8	4	2	7	9
4	8	2	9	5	7	3	6	1
5	1	7	6	2	8	9	3	4
3	2	4	7	1	9	6	8	5
8	6	9	4	3	5	7	1	2
9	4	5	3	7	1	8	2	6
1	7	6	8	9	2	5	4	3
2	3	8	5	4	6	1	9	7

7	2	6	3	7	9	1	5	8	4
	1	5	8	6	3	4	7	9	2
	7	4	9	8	2	5	3	1	6
	9	3	1	4	6	7	8	2	5
	4	7	2	9	5	8	1	6	3
	5	8	6	2	1	3	9	4	7
	3	1	4	5	8	6	2	7	9
	8	2	7	3	4	9	6	5	1
	6	9	5	1	7	2	4	3	8

2	5	8	4	7	3	6	9	1
3	4	1	8	6	9	2	7	5
7	6	9	1	2	5	8	3	4
6	9	7	5	8	1	3	4	2
5	2	3	7	9	4	1	8	6
1	8	4	6	3	2	9	5	7
9	7	5	3	1	6	4	2	8
8	1	2	9	4	7	5	6	3
4	3	6	2	5	8	7	1	9

7.		4	3	6	2	5	8	7	1	9
8 2 4 7 6 3 9 1 5 9 1 5 2 8 4 7 3 6 2 4 8 6 5 1 3 7 9 7 6 9 3 2 8 1 5 4 1 5 3 9 4 7 8 6 2	urces		n	di	a	F	V		L	tc
9 1 5 2 8 4 7 3 6 2 4 8 6 5 1 3 7 9 7 6 9 3 2 8 1 5 4 1 5 3 9 4 7 8 6 2		6	3	7	5	1	9	2	4	8
2 4 8 6 5 1 3 7 9 7 6 9 3 2 8 1 5 4 1 5 3 9 4 7 8 6 2	nou Down	8	2	4	7	6	3	9	1	5
7 6 9 3 2 8 1 5 4 1 5 3 9 4 7 8 6 2	er Devi	9	1	5	2	8	4	7	3/	6
1 5 3 9 4 7 8 6 2		2	4	8	6	5	1	3	7	9
		7	6	9	3	2	8	1	5	4
5 7 2 1 9 6 4 8 3		1	5	3	9	4	7	8	6	2
		5	7	2	1	9	6	4	8	3
3 8 6 4 7 2 5 9 1		3	8	6	4	7	2	5	9	1
4 9 1 8 3 5 6 2 7		4	9	1	8	3	5	6	2	7