

## **REASONING HIGH LEVEL**

1. Seating Arrangement
2. Coding – Decoding
3. Mathematical Inequalities
4. Blood Relations
5. Syllogism
6. Ranking and Arrangement
7. Scheduling
8. Direction and Distance
9. Data Sufficiency
10. Input & Output
11. Ordering and Ranking
12. Analytical Ability
13. Series
14. Alphabetical Operations
15. Numerical Operations
16. Decision Making & Statement and Conclusion

## High Level Reasoning Syllabus

Major Topics in Reasoning section and weightages are given below.

Reasoning paper contains 35-40 questions. Each question carries one mark. This paper is designed to test your accuracy, calculation and speed through logical analysis. The questions in this section may consume most of your time. So be aware of it.

Reasoning Topics	Weightage of Qns.
Seating arrangement	3 – 10
Coding-Decoding	3 – 5
Mathematical Inequalities	2 – 5
Blood relations	2 – 5
Syllogism	2 – 5
Ranking and arrangement	0 – 5
Scheduling	0 – 5
Direction and Distance	1 – 2
Classification/Analogy	0 – 2
Series	0 – 5
Ordering and ranking	1 – 2
Decision Making & Statement and Conclusion	1 – 5

### TIPS FOR REASONING

Your primary focus should be on accuracy. So try to solve easy sections first such as Classification / Odd pair, Series completion / Analogy, Direction based test / Direction sense test, Ranking and Time sequence test, Number and Alphabet test, etc.

- ★ Don't waste lot of time on a single topic.
- ★ Your Score depends on your accuracy with speed. So try some Prelims / Mains mock tests for reasoning.
- ★ Learn Formulae and Shortcut tricks.
- ★ Also, Check Prelims / Mains Previous Year Papers.
- ★ Practise more and more with Mock tests.



# 1. SEATING ARRANGEMENT

Here, we deal with the questions having information regarding arrangement. We are given with some objects and then we have to arrange them according to the information provided. Objects are arranged either in a row or in a circle on the basis of such given constraints. In some questions we will also deal with other arrangements like Square / Pentagon / Hexagonal.

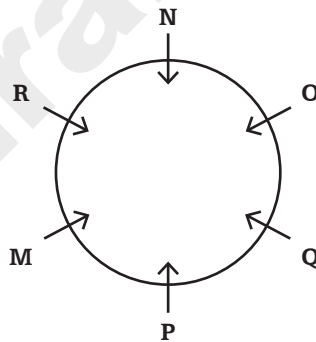
## Type 1

### ARRANGEMENT AROUND A CLOSED PATH

In such questions some clues are given regarding arrangement. You have to apply these clues on a circle by using the information. You have to find the solutions to questions associated with them.

#### Example:

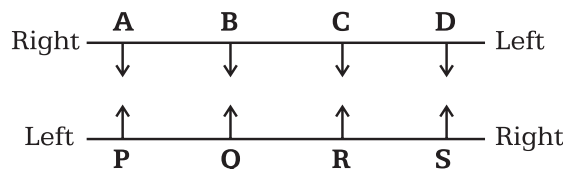
Six persons M, N, O, P, Q and R are playing cards sitting in a circle facing the centre. R is sitting between M and N; and Q is sitting between O and P. P is sitting immediate right of M.



## Type 2

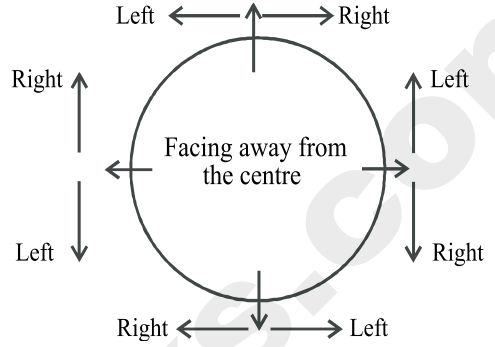
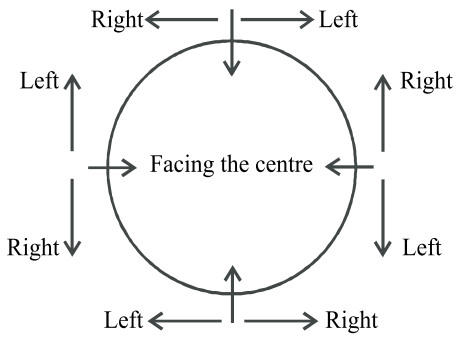
### ARRANGEMENT IN A LINE OR OTHERS.

When A, B, C, D are facing south direction and P, Q, R, S are facing North direction in a line, then their positions of right and left will be

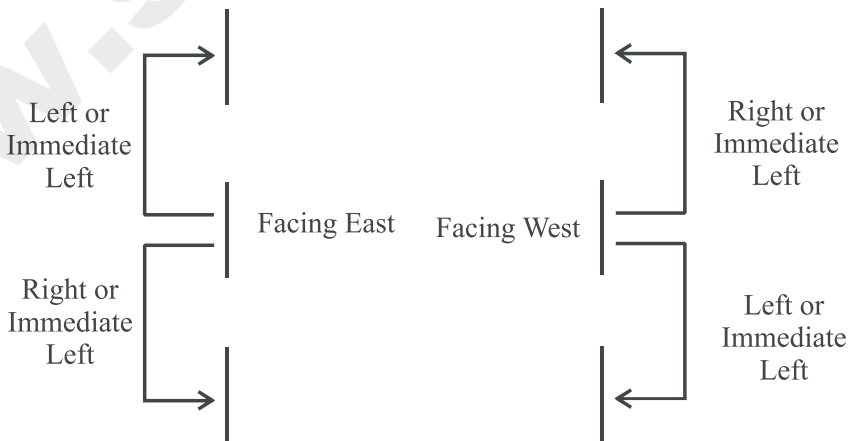
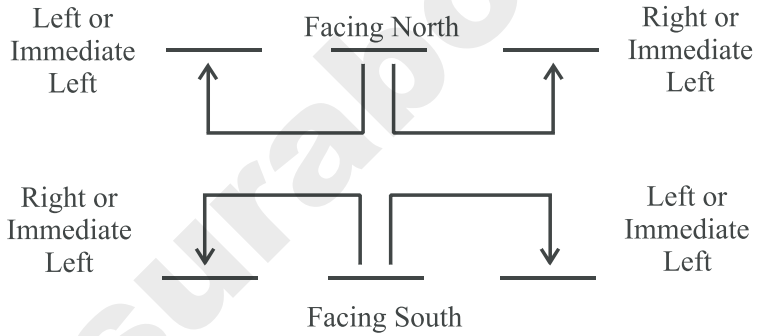


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**DIRECTIONS FOR SEATING ARRANGEMENTS (CIRCULAR)**



**LINEAR ARRANGEMENTS**



**SURA'S** ♦ Reasoning - High Level

**Directions (Qns. 1 - 5):** Read the following information carefully and answer the questions given below the paragraph.

Eight people - K, L, M, N, O, P, Q and R are seated in a straight line facing north but not necessarily in the same order.

L sits third from the left end of the line. Only three people sit between L and R. O sits on the immediate left of Q. Only one person sits between L and P. P sits on the immediate left of K. Only one person sits between M and Q. P sits third to the left of N. L is not an immediate neighbour of K.

- 1. What is the position of Q with respect to P ?**  
A) Second to the left  
B) Third to the left  
C) Second to the right  
D) Third to the right  
E) Fifth to the left
- 2. Which of the following pairs represents the persons seated at the two extreme ends of the line ?**  
A) L & K                      B) Q & R  
C) Q & N                      D) O & N  
E) O & R
- 3. How many persons are seated between M and R ?**  
A) Two                      B) Four  
C) One                      D) Three  
E) More than four
- 4. Who among the following sits exactly between L and O ?**  
A) M                      B) R  
C) P                      D) N  
E) Q
- 5. If each of the persons is made to sit in alphabetical order from left to right the position of how many will remain unchanged as compared to the original seating arrangement ?**

- A) Two                      B) Four  
C) Three                      D) One  
E) None

**Directions (Qns. 6 - 10):** Read the following information carefully to answer the questions given below the paragraph.

M, N, O, P, Q, R, S and T are sitting around a circular table facing the centre with equal distance between each other (but not necessarily in the same order). Each of them also belongs to a different field of work - Author, Designer, Doctor, Engineer, Journalist, Policeman, Singer and Teacher (but not necessarily in the same order).

Q sits second to the left of Singer. Only two people sit between S and the Singer. Only one person sits between Q and the Designer. N sits second to the left of the Designer. P is neither an immediate neighbour of N nor of Q. P is not a singer. T is an immediate neighbour of P. The Doctor sits second to the right of T. Only three people sit between the Doctor and Engineer. R sits second to the left of the Engineer. T is not a Journalist. The Journalist is neither an immediate neighbour of S nor of T. O sits on the immediate left of the Journalist. The Teacher sits on the immediate right of Author.

- 6. Who sits exactly between N and the one who sitting on the immediate right of M ?**  
A) S                      B) T  
C) O                      D) R  
E) Other than those given options
- 7. Which of the following statements is TRUE as per the given arrangement ?**  
A) Only one person sits between S and O.  
B) The Engineer sits second to the left of O.  
C) S is a Teacher  
D) The Author sits on the immediate left of Q.  
E) All the given options are true.
- 8. Who among the following is a Designer ?**  
A) M                      B) R  
C) S                      D) T  
E) P

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9. Four of the following five are alike in a certain way, and so form a group. Which of the following does not belong to that group ?  
 A) N, Teacher      B) T, Engineer  
 C) P, Policeman    D) S, Journalist  
 E) M, Author

10. R works as a .....  
 A) Doctor              B) Engineer  
 C) Singer              D) Journalist  
 E) Designer

*Directions (Qns. 11-15) : Read the following information carefully to answer the below questions.*

Eight friends J, K, L, M, N, O, P and Q are sitting around a circular table but not necessarily in the same order. Some of them are facing the centre and some of them are facing outside (ie., in a direction opposite to the centre)

- ♦ Only one person sits between K and O. Q sits third to the right of O.
- ♦ M sits on the immediate right of Q. Q faces outward.
- ♦ L sits second to the left of P. P is not an immediate neighbour of O.
- ♦ L faces a direction opposite that of O. The immediate neighbours of L face opposite directions.
- ♦ J sits third to the left of N. J is an immediate neighbour of neither P nor K.
- ♦ M and J face the direction same as that of N.

11. Four of the following five are alike in a certain way based on the directions they are facing and so form a group. Which is the one that does not belong to that group ?  
 A) KL                      B) QM  
 C) PQ                      D) NJ  
 E) QL

12. Who among the following sit exactly between Q and O when counted from the right of Q ?  
 A) P & J                      B) M & P

- C) L & K                      D) N & L  
 E) J & M

13. Which of the following is NOT TRUE regarding K as per the given arrangement ?  
 A) N is an immediate neighbour of K.  
 B) Only three people sit between K and M.  
 C) L sits on the immediate left of K.  
 D) K faces outside  
 E) None of the given options is true.

14. What is L's position with respect to N ?  
 A) Immediate right  
 B) Third to the right  
 C) Second to the right  
 D) Third to the left  
 E) Immediate left

15. Who amongst the following are immediate neighbours of P ?  
 A) M & N                      B) K & M  
 C) J & O                      D) N & K  
 E) Q & N

*Directions (Qns. 16 - 20) : Read the following information carefully to answer the below questions.*

Eight persons A, B, C, D, E, F, G and H are sitting around a circular table. Each of them has a laptop of a different company, viz., Dell, Lenovo, HP, Sony, Acer, Apple, Asus and Toshiba but not necessarily in the same order. Four of them are not facing the centre.

The one who has Acer is on the immediate left of D, who does not have Asus. D is third to the right of H. G is fourth to the left of F. Neither G nor F is an immediate neighbour of D. C has HP and sits exactly between A and F. C is facing the centre and is to the right of both A and F. E is third to the left of A who has Toshiba.

A sits third to the right of the one who has Acer. The one who has Lenovo sits second to the left of the one who has Toshiba. The one who has Dell sits second to the left of D. The one who has Apple sits second to the left of person who has HP. B does not like Acer. A face the centre.

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16. Who among the following has the laptop of Sony ?  
A) D                                  B) F  
C) H                                  D) C  
E) None of these
17. Who among the following sits third to the right of the one who has the laptop of Asus ?  
A) E                                  B) D  
C) F                                  D) C  
E) B
18. Who among the following sits third to the left of H ?  
A) C                                  B) B  
C) F                                  D) D  
E) None of these
19. Who among the following sits opposite E ?  
A) The one who has Toshiba.  
B) The one who has Apple.  
C) The one who has HP.  
D) The one who has Sony.  
E) None of these.
20. Which of the following statements is/are true ?  
A) The one who has Asus is not facing the centre.  
B) F has Dell and he is facing the centre.  
C) The one who has Apple is on the immediate left of D.  
D) Only (A) and (C) are true.  
E) None of these.

*Directions (Qns. 21 - 25) : Read the following information carefully and answer the questions given below.*

Eight family members A, B, C, D, E, F, G and H are sitting in a row facing north, but not necessarily in the same order. Four of them are males. There are three couples in the family.

E is a male and sits second to the right of G, who is wife of C. D sits second to the left of B, who is a female. D is wife of H and sits adjacent

to her husband. F is daughter of H and is not between G and E. B is on the immediate left of G and second to the left of her father-in-law. A is brother of H, who is on the immediate right of A. E and F are siblings.

21. How many female members are there between C and H ?  
A) One                                  B) Two  
C) Three                                  D) Four  
E) None of these
22. Who among the following sits second to the left of G ?  
A) Son                                  B) Grand-daughter  
C) Daughter                                  D) Daughter-in-law  
E) None of these
23. Who among the following sits at the extreme ends of the row ?  
A) A and his wife  
B) E and his uncle  
C) C and his daughter  
D) H and his wife  
E) None of these
24. What is the position of H with respect to C ?  
A) Third to the left  
B) Fourth to the right  
C) Fifth to the left  
D) Sixth to the right  
E) None of these
25. How is E related to C ?  
A) Grand son                                  B) Son  
C) Son-in-law                                  D) Grand-daughter  
E) None of these

*Directions (Qns. 26 - 30): Read the following information carefully and answer the questions given below.*

Eight persons N, P, Q, R, S, T, U and W are sitting around a circular table facing the centre. Each of them belongs to a different States Tamilnadu, Kerala, Karnataka, Andhra Pradesh, Madhya Pradesh, Gujarat, Odisha and Maharashtra but not necessarily in the same order.

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P sits second to the left of T. The person who belongs to Madhya Pradesh is an immediate neighbour of T. There are only three persons between the one who belongs to Madhya Pradesh and N. Only one person sits between the one who belongs to Karnataka and N. The one who belongs to Kerala is on the immediate right of the one who belongs to Karnataka. W sits second to the right of T. R belongs to Madhya Pradesh. Q and S sit adjacent to each other. Neither S nor Q belongs to Karnataka. The one who belongs to Odisha sits on the immediate left of P. The one who belongs to Maharashtra sits second to the right of the one who belongs to Kerala. The one who belongs to Andhra Pradesh is an immediate neighbour of the one who belongs to Karnataka. Q sits second to the right of the one who belongs to Tamilnadu.

26. Who among the following is second to the right of N ?
- A) Q                      B) P  
C) N                      D) U  
E) None of these
27. What is the position of U with respect to the one who belongs to Madhya Pradesh ?
- A) Second to the left  
B) Second to the right  
C) Fourth to the left  
D) Cannot be determined  
E) None of these
28. Who among the following belongs to Tamilnadu ?
- A) Q                      B) U  
C) P                      D) N  
E) None of these
29. Who among the following sits third to the right of the one who belongs to Tamilnadu ?
- A) The one who belongs to Kerala  
B) The one who belongs to Karnataka  
C) The one who belongs to Maharashtra  
D) The one who belongs to Gujarat  
E) None of these
30. Which of the following statements is / are true ?

- A) The one who belongs to Andhra Pradesh sits second to the left of the one who belongs to Gujarat
- B) U is an immediate neighbour of the one who belongs to Tamilnadu
- C) T sits opposite to the one who belongs to Maharashtra
- D) The one who belongs to Gujarat sits third to the left of N.
- E) None of these

*Directions (Qns. 31 - 35): Read the following information carefully and answer the questions given below.*

Ten persons J, K, L, M, N, P, Q, R, S and T are sitting in two rows with five persons in each row. The persons in row 1 are facing south and the persons in row 2 are facing north. Each person in row 1 faces a person from the other row.

All of them like a different soft drink, viz Sprite, Slice, Pepsi, Maaza, Fanta, Mirinda, Limca, 7up, Nimbooz and Cola but not necessarily in the same order.

The persons who like Fanta and Miranda sit opposite to each other. P sits opposite to J, who likes sprite. The one who likes slice sits opposite the one who likes 7up. T is not facing north but sits third to the left of Q, who likes Slice. There is only one person between K and L. N sits at one of the ends of row and likes Mirinda. The one who likes 7up is on the immediate right of M, who does not like Cola. The persons who like Pepsi and Maaza respectively are not facing north. L likes Limca. The one who likes Maaza sits opposite to the one who is second to the right of K. S does not like Cola. N sits opposite to the one who sits second to the left of the one who likes Pepsi.

31. Who among the following likes Cola ?
- A) R                      B) T  
C) P                      D) S  
E) None of these
32. Who among the following sit at the extreme ends of the row and are facing south ?
- A) M & N                      B) S & L  
C) T & N                      D) R & T  
E) None of these