

# Seating Arrangement

### **Introduction to Seating Arrangement**

The questions on seating arrangement are regular features of almost every competitive examination. In these questions, you have to arrange a group of persons fulfilling certain conditions. This is also written as sitting arrangement or sitting arrangement reasoning at some places.

### **Types of Seating Arrangement**

- 1. **Linear Arrangement:** Here the arrangement of the persons is linear i.e. you have to arrange them in a line. Here generally a single row of arrangement is formed.
- 2. **Double row arrangement:** In these questions, there will be two groups of persons. You have to arrange one group in one row and the other group in other rows. The persons in these rows normally face each other.
- 3. **Circular arrangement:** In the circular seating arrangement questions, you have to arrange the persons around a circular table, etc. fulfilling certain conditions.
- 4. **Rectangular arrangement:** These arrangements are almost similar to the circular arrangements; the only difference is that the persons are sitting around a rectangular table.

### **How to solve Seating Arrangement Problems**

Questions on seating arrangement are generally asked in blocks of 4 – 5 questions. You are given some information and then there will 4 -5 questions based on the information. These questions have two types of information:

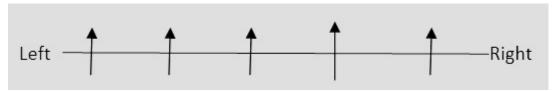
1. **Direct information:** This is the information that is clearly mentioned in the statement of the question. This is the information that you will use when you start solving the questions.



2. **Indirect information:** After filling in the direct information you will look for the connection between different parts of the information. These connections form indirect information.

While arranging the persons, the direction to which the persons are facing is very important.

Let us take the case of linear arrangements. Here if it is stated that there are five persons sitting facing North then the arrangement will be like



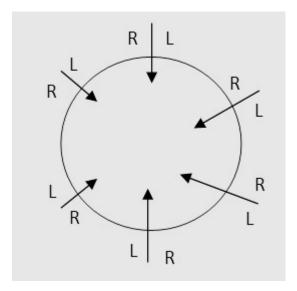
On the other hand, if these persons are sitting facing South then the arrangement will be like



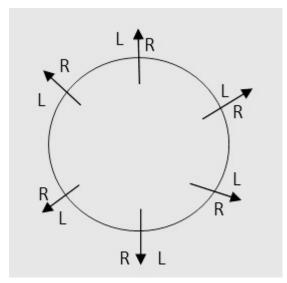
Similarly, if the arrangement is a double row arrangement, then one group of people will be facing north and the second will face south and the directions will be taken as similar to the above figures.

In the case of circular arrangements questions, or rectangular arrangements, the persons may be facing the center of the circle or they may be looking away from the center. If they are looking towards the center, then the right-hand side will be in the anticlockwise direction and the left-hand side will be in the clockwise direction as shown below:





If the persons are looking away from the center then the right-hand side will be in the clockwise direction and the left-hand side will be in the anti-clockwise direction as shown below:



The same concept of directions follows if the persons are sitting around a rectangular table.

Next, while solving the questions related to linear arrangements or double row arrangements, the information regarding the position of the persons is very important. If it is written that A is sitting next to B, then it means that A and B are sitting together. B may be to the right or left of A. Further, if it is given that B is sitting to the right/left of A, then it does not mean that B is sitting immediately right/left of A. There may be some other persons sitting between A and B. If B is sitting immediate right/left of A then it will be mentioned in the statement of the question.



## **Example**

#### **Linear Arrangement:**

**Example** 1:1. There are five students P, Q, R, S, and T who are sitting on a bench. T & Q are sitting together, T & R are sitting together, P is on the extreme left, Q is second from the extreme right. Who is sitting between P &Q? (SBI

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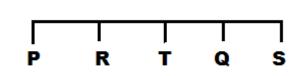
A)Q & R

B)R & T

C)R & P

D)R & S

Answer:B)R & T



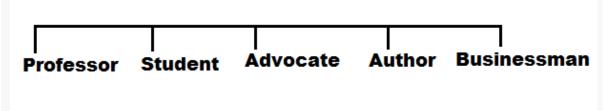
#### Solution:

**Example** 2: Five persons are standing in one line. One of the two persons at extreme end is a professor and the other is a businessman. An advocate is to right of a student. An author is to the left of the businessman. What is the position of advocate from the left?

- A) 2nd
- B) 3rd
- C) 4th
- D) 1st

**Answer**: B)3rd

Solution:





#### **Double row arrangement:**

A) SB) PC) QD) RE) T

Answer: C) Q

**Example:** Twelve persons were seated in two parallel rows containing six persons each, in such a way that there is an equal distance between adjacent persons. In row 1 – A, B, C, D, E, and F were seated and all of them are facing south and in row 2 – P, Q, R, S, T, and U were seated and all of them were facing north.(**IBPS 2018**)

P was seated second from the end. One person was seated between P and the one who faces A. B was seated to the immediate right of A. C was seated third to the right of D. Q faces the one who sits second to the left of B. One of the immediate neighbors of D faces S. T was seated second to the right of S. One person was seated between E and the one who faces U.

1. Who was seated second to the left of U?

<b>Solution</b> : P was seated second from the end. One person was seated between P												
and the one who faces A. B was seated to the immediate right of A.												
(Started with the person/variable whose position is fixed. Here P's position is second												
from the end. So, we need to find more information about P)												
	Row 1 (s)	—		B	_A_							
Case 1:												
	Row 2 (n)		P				—					
	Row 1 (s)		B	_A								
Case 2:												
	Row 2 (n)					P	—					



2. How many persons were seated between Q and the one who faces C?											
-	A) 3										
B) N	B) More than 3										
C) 1	C) 1										
D) n	D) none										
E) 2											
Answer: E) 2											
<b>Solution</b> : C was seated third to the right of D. Q faces the one who sits second to the											
left of B.											
icic or B.			C	R	A	D					
	Row I (s)						_				
C 1.											
Case 1:											
	D 2 ()		P			Q					
	Row 2 (n)										
	D 1 (a)	C	В	A	D						
	Row I (s)						_				
C											
Case 2:											
	D 2 (n)				Q	P					
	Row 2 (n)										

### **Circular arrangement:**

**Example1:** Six friends were sitting around a circular table facing at the center Amar, Kiran, Jeetu, Hemanth, Dhawan, and Manjeet. Jeetu is sitting 2 places to the left of Amar and opposite to Kiran. If Dhawan and Manjeet are opposite to each other. Who is sitting left of Jeetu?

A)Dhawan

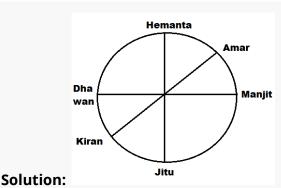
B)Manjeet

C)Kiran

D)Hemant

**Answer**: C)Kiran





**Example 2:** A, B, C, D, E, and F are sitting in a circular manner facing at the center. D is between F and B, A is second to the left of D, and second to the right of E. Who is facing A? ( Wipro hiring 2017)

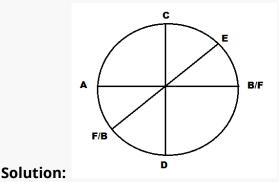
A)B

B)F

C)D

D)B or F

**Answer**: D)B or F



Rectangular arrangement:

**Example** 1: Study the following information and answer the questions given below. There are eight people viz. D, E, R, N, P, T, V, and A sitting around a square table. They have a different profession viz. Engineer, Soldier, Teacher, Pilot, Artist, Doctor, Politician, and Player but not necessarily in the same order. Four of them sit on the middle of the four sides while four of them sit on the four corners of the square table. All persons who sit at the four corners are facing the center except one, while those who sit in the middle of the sides are facing outward the center except one. T is neither Politician nor a Pilot. E is immediately left to the Player. N is not facing towards the center. Soldiers and Engineers are the neighbors of the Doctor. D is a Teacher but not facing towards the center. The Politician is the neighbor of both E and Soldier. The doctor is not facing towards the center. R and A are facing each other but none of them is in the middle of the sides. The Player is facing towards the center but



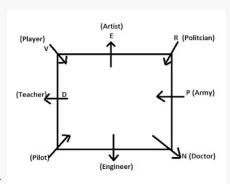
not sitting in the middle of any side of the table. E sits second to the right of P, who is a Soldier. Z is not the neighbor of either E or P and sits second to the right of N.V is between Artist and teacher. ( **SBI 2016** )

- 1. Who among the following is a Pilot?
  - A) T
  - B) N
  - C) R
  - D) Z

Answer: D) Z

- 2. The profession of N is
  - A) Artist
  - B) Pilot
  - C) Doctor
  - D) Teacher

**Answer**: A) Artist



**Solution** 1 & 2: