



CHAPTER

3

RANKING ARRANGEMENT

Basically, ranking arrangement is defined as the rank or position of a given person in a given series or row. Suppose, ranking position from left is given and ranking position from right is given then the student will be required to find the total number of persons.

EXAMPLE:

1. A class of boys stands in a single line. One boy is nineteenth in order from both the ends. How many boys are there in the class?

- a) 27 b) 37 c) 38 d) 39.

Solution, (b); Clearly, number of boys in the row = $(18 + 18 + 1) = 37$

The question can be solved by formula also, total number of boys in the row = $19 + 19 - 1 = 37$

Formula:

Total number of persons in a row or class =
(Rank of a person from upper end or left end) + (Rank of that person from lower or right end) - 1

EXAMPLE:

2. Anu and Vinay are ranked seventh and eleventh respectively from the top in a class of 31 students. What will be their respective ranks from the bottom in the class?
- a) 20th and 24th b) 24th and 20th
c) 25th and 21st d) None of these

SOLUTION:

Number of students behind Anu in rank = $(31 - 7) = 24$ So, Anu is 25th from the bottom.

So, Number of students behind Vinay in rank = $(31 - 11) = 20$ So, Vinay is 21st from the bottom,

This question can be solved by formula also, Anu's rank from the bottom = $31 - 7 + 1 = 25$ th Vinay's rank from the bottom = $31 - 11 + 1 = 21$ st. Hence, the correct answer is c)

Formula:

Rank of a person from lower or right =
(Total number of persons in row) - (Rank of that person from upper or left end) + 1

EXAMPLE:

3. In a class of 42 students, Mahesh's rank is 16th from the bottom. What is his rank from the top?
- a) 25th b) 26th c) 24th d) 27th

SOLUTION

Number of students ahead of Mahesh in rank = $42 - 16 = 26$ So, Mahesh's rank is 27th from the top.

This question can be solved by formula also. Mahesh's rank from the top = $42 - 16 + 1 = 27$ th. Hence the correct answer is (d).

Formula:

Rank of a person from upper or left end =
(Total number of persons in row) - (Rank of that person from lower or right end) + 1