CHAPTER 11

Ranking Test

The process of determining the position of a person/thing on the basis of comparison or relative position of other person/thing is called ranking.

There are two types of questions which are asked

1. Based on Comparison

2. Based on Position (Top/Left or Right/Bottom)

1. Based on Comparison- In this type of questions, comparison of different objects based on some factors like ages, marks, size, height etc is given.

The candidate is required to arrange the data in ascending or descending order and then answer the related question.

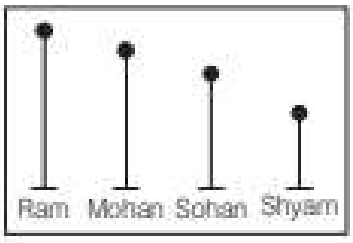
Example 1: Ram is taller than Mohan and Sohan, while Sohan is taller than Shyam. Also, Mohan is taller than Sohan. Who amongst the following is the shortest?

(a) Shyam (b) Mohan (c) Ram (d) Sohan

Sol. (a) According to the question, Ram > Mohan and Ram > Sohan

Sohan > Shyam

Mohan > Sohan



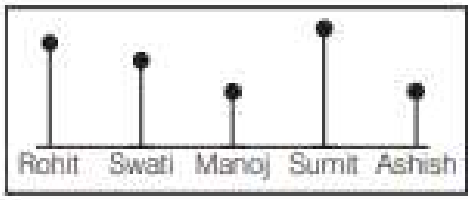
Arranging the above data, we get Ram > Mohan > Sohan > Shyam

Clearly, Shyam is the shortest.

Example 2: In a group of five friends, Rohit is taller than Swati. Also, Manoj is shorter than Swati. Sumit is taller than Rohit while Ashish is shortest. Who amongst them is the tallest?

(a) Swati (b) Rohit (c) Sumit (d) Manoj

Sol. (c) According to the question,



Rohit > Swati; Manoj < Swati or Swati > Manoj; Sumit > Rohit and Ashish is shortest.

Arranging the above data, we get Sumit > Rohit > Swati > Manoj> Ashish

Clearly, Sumit is the tallest.

2. Based on Position- (Top/Left or Right/Bottom) In this type of questions, the position of person (s) from either of the two ends of a row is given. The candidate is required to find the total number of persons in the row or number of persons to the top/left or right/bottom of a particular person etc.

While solving this type of questions, keep the following points in mind.

1. Total number of persons in a row

= (Rank of a person from left end/top + Rank of that person from right end/ bottom) – 1

2. Rank of a person from right end/bottom

= (Total number of persons in row) − (Rank of that person from left end/top) + 1

3. Rank of a person from top/left end

= (Total number of persons in row) – (Rank of that person from right end/bottom) + 1

4. In case of interchanging of positions

(a) Total number of persons

= [Initial position of 1st person + Interchanged position of 2nd person] − 1

(b) New position of 2nd person

= [Difference in the two positions of 1st person] + [Initial position of 2nd person]

Example 3: In a class of 45 students rank of Ayush from the top is 15, then rank of Ayush from bottom is

(a) 30 (b) 32 (c) 31 (d) 35

Sol. (c) Here, total number of students = 45

Rank from top = 15

∴ Rank of Ayush from bottom

= (Total number of persons in the class) – (Rank of Ayush from top) + 1

= 45 − 15 + 1 = 31

Alternate Method

Total number of students = 45

Given, the rank of Ayush from top is 15, it means there are 45 – 15 = 30 students below Ayush in the class.

∴ The rank of Ayush from bottom = 30 + 1 = 31

Example 4: In a row, position of Sandeep is 10th from left and 16th from right. How many people are there in the row?

(a) 30 (b) 26 (c) 25 (d) 16

Sol. (c) Position of Sandeep from left (L) = 10

Position of Sandeep from right (R) = 16

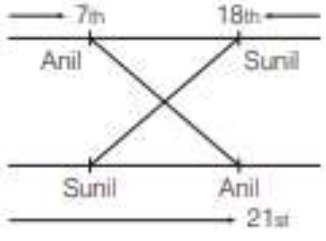
∴ Total number of people in the row = (L + R) − 1

= 10 + 16 − 1 = 25

Example 5: In a row of students, Anil is 7th from left, while Sunil is 18th from right. Both of them interchanged their positions such that Anil becomes 21st from left. What will be the total number of students in the class?

(a) 38 (b) 33 (c) 31 (d) 30

Sol. (a)



∴ Anil moves (21–7)

= 14 places ahead and changed his place with Sunil.

∴ Sunil will also move 14 places ahead.

∴ Sunil's new position from right end = 18 + 14 = 32

We can also calculate the total number of students

= (Anil's initial position) + (Sunil's new position) −1

= 7 + 32 − 1 = 38

Practice Questions

1. A pole is taller than a giraffe which is taller than a tree. A signal is shorter than a pole but taller than a building which is taller than a giraffe. Who is the shortest?

(a) Signal (b) Giraffe (c) Tree (d) Building

2. Mohan is taller than Rohan but shorter than Farhan. Kannan is shorter than Mohan but taller than Rohan, Shankar is taller than Rohan and Farhan. Who is the tallest?

(a) Mohan (b) Farhan (c) Shankar (d) Kannan

3. Sameer is older than Milon but not as old as Arjun, Priya is older than Sam but not as old as Milon. Who amongst them is the oldest?

(a) Milon (b) Sameer (c) Priya (d) Arjun

4. Five girls took part in a race. Sonam finished before Neha but after Pooja. Shivani finished before Anju but after Neha. Who won the race?

(a) Sonam (b) Pooja (c) Neha (d) Shivani

5. If Anita is taller than Surjit but shorter than Kusum and Surjit is just as tall as Kalpana but taller than Vanita, then Kalpana is

(a) just as tall as Anita (b) taller than Kusum

(c) shorter than Anita (d) shorter than Surjit

6. In a group of five districts Akbarpur is smaller than Fatehpur, Dhanbad is bigger than Palamu, and Barabanki is bigger than Fatehpur but not as big as Palamu. Which district is the biggest?

(a) Akabarpur (b) Fatehpur (c) Palamu (d) Dhanbad

7. Five friends A, B, C, D and E are sitting in a row in decreasing order of their weight from left to right. A is heavier than only C, while B is heavier than both E and A. D is heavier than B. Who amongst the following is sitting exactly in center between them?

(a) C (b) A (c) E (d) B

Directions (Q. Nos. 8-10) Consider the following information and answer questions based on it. Suresh is taller than Ramesh who is shorter than Rakesh. Jinesh is taller than the shortest person but shorter than Rakesh. Pritesh is taller than Suresh but shorter than Jinesh.

8. Who is the shortest?

(a) Rakesh (b) Ramesh (c) Pritesh (d) Suresh

9. If Jayesh who is taller than Suresh joins the group, who will be fourth, if they are arranged in a descending order?

(a) Jayesh (b) Jinesh (c) Pritesh (d) Cannot be determined

10. Which statement, among the following is correct?

(a) Suresh is taller than Jinesh (b) Pritesh is shorter than Rakesh

(c) Jinesh is taller than Rakesh (d) Ramesh is taller than Pritesh

11. In a queue of girls, Shama is 11^{th} from the starting and 27^{th} from the last. How many girls are there in the queue?

(a) 37 (b) 43 (c) 35 (d) 36

12. In a row of 50 people, Sachin is 24^{th} from right end. What is Sachin's position from left end?

(a) 30^{th} (b) 28^{th} (c) 27^{th} (d) 24^{th}

13. In the name list of 48 students, Rohit's rank is 41^{st} from bottom. Find his rank from top.

(a) 12^{th} (b) 8^{th} (c) 7^{th} (d) 9^{th}

14. In a row of trees, one tree is 7^{th} from either end of the row. How many trees are there in the row?

(a) 11 (b) 15 (c) 14 (d) 13

15. If you are 9^{th} person in a queue starting from one end and 11^{th} from another end, what is the number of persons in the queue?

(a) 20 (b) 19 (c) 21 (d) 18

16. Rajesh's rank is 12^{th} from top and 30^{th} from bottom among the children who passed the annual examination. If 16 children failed, then find the total number of children who appeared for the examination.

(a) 57 (b) 33 (c) 68 (d) 45

17. In an examination, Rahul got 11^{th} rank from top and he was 47^{th} from the bottom among those who passed. 3 students could not appear for the exam. 1 student failed. What is the total number of students?

(a) 60 (b) 62 (c) 59 (d) 61

18. In a queue of 17 people, when Seema shifts 3 positions left, then she becomes 6^{th} from left. Find her previous position in the queue from right.

(a) 5 (b) 2 (c) 9 (d) 3

19. In a queue, Mohan is 10^{th} from right side and Sohan is 25^{th} from left side. When they interchange their place, then Mohan is at 22^{nd} place from right. Find Sohan's new position from left.

(a) 37^{th} (b) 38^{th} (c) 35^{th} (d) 36^{th}

20. In a students queue, Kamal is 12^{th} from left and Deepak is 18^{th} from right. When Kamal and Deepak interchange their position, then Kamal is 25^{th} from left.

Find the total number of students in the queue.

(a) 40 (b) 41 (c) 42 (d) 43

ANSWERS

1.	(c)	**2.**	(c)	**3.**	(d)	**4.**	(b)	**5.**	(c)	**6.**	(d)	**7.**	(c)	**8.**	(b)	**9.**	(d)	**10.**	(b)
11.	(a)	**12.**	(c)	**13.**	(b)	**14.**	(d)	**15.**	(b)	**16.**	(a)	**17.**	(d)	**18.**	(c)	**19.**	(a)	**20.**	(c)

Hints & Solutions:

1. (c) According to the question,

Pole > Giraffe > Tree K (i)

Pole > Signal > Building > Giraffe K (ii)

From (i) and (ii), we get… Pole > Signal > Building > Giraffe > Tree

Clearly, tree is the shortest.

2. (c) According to the question,

Ferhan > Mohan > Rohan K (i)

Mohan > Kannan > Rohan K (ii)

Shankhar > Rohan , Ferhan K (iii)

From (i), (ii) and (iii), we get…Shankhar>Ferhan>Mohan> Kannan>Rohan

Clearly, Shankhar is the tallest.

3. (d) According to the question,

Arjun > Sameer> Milon

and Milon > Priya > Sam

Arranging in meaningful order, we get…Arjun > Sameer > Milon > Priya > Sam

Clearly, Arjun is the oldest.

4. (b) According to the question,

Pooja > Sonam > Neha

and Neha > Shivani > Anju

Arranging the data in meaningful order, we get…Pooja > Sonam> Neha > Shivani > Anju

Clearly, Pooja won the race.

5. (c) According to the question,

Kusum>Anita>Surjit

and Surjit = Kalpana > Vanita

Arranging in meaningful order, we get…Kusum> Anita > Surjit = Kalpana > Vanita

Clearly, Kalpana is shorter than Anita.

6. (d) According to the question,

Barabanki >Fatehpur > Akbarpur

and Dhanbad > Palamu

and Palamu > Barabanki

Arranging the data in meaningful order, we get…Dhanbad > Palamu > Barabanki > Fatehpur> Akbarpur

Clearly, Dhanbad district is biggest amongst them.

7. (c) According to the question,

A is heavier than only C, that means A is at 4^{th} place and C is at 5^{th} place from left.

A > C; B > E, A or B > E > A > C

Also, D>B ⇒ D > B > E > A > C

1 2 3 4 5

Clearly, E is sitting exactly in center between them.

Sol. (Q. Nos. 8-10) According to the question,

Suresh > Ramesh K (i)

Rakesh > Ramesh K (ii)

Rakesh > Jinesh K (iii)

Jinesh> Pritesh > Suresh K (iv)

From (i), (ii), (iii) and (iv), we get…Rakesh > Jinesh > Pritesh > Suresh > Ramesh

8. (b) Clearly, Ramesh is the shortest.

9. (d)

Rakesh > Jinesh > Pritesh > Suresh > Ramesh

Jayesh

Hence, it cannot be determined that who is the fourth.

10. (b) Clearly, Pritesh is shorter than Rakesh.

11. (a) We know that,

Total number of girls in queue = (Rank of girl from starting + Rank of girl from last) −1

= 11 + 27 − 1= 37

12. (c) Total number of people = (Position from left + Position from right) −1

⇒ 50 = (24 + L) – 1 ⇒ L = 51 – 24 = 27

∴ Sachin is 27^{th} from left end.

13. (b) Total number of students = (Rank from top + Rank from bottom) −1

48 = (T + 41) − 1 ⇒ T = 8

∴Rohit is 8^{th} from top.

14. (d) Here, position of tree from both the end is 7.

0∴ Total number of trees = 7 + 7 − 1 = 13

15. (b) Total number of persons = (Position from left end + Position from right end) −1

= (9 + 11) − 1= 19

16. (a) Total number of students who passed = (12 + 30) − 1 = 41

Number of students who failed = 16

∴Total number of students who appeared for the exam = 41 + 16 = 57

17. (d) Total number of students who passed = (11 + 47) − 1 = 57

Now, total number of students = 57 + 3 + 1 = 61

18. (c) Seema shifts 3 positions towards left. So, in order to find her original position we have to shift her 3 places towards right.

∴Seema's original position from left = 6 + 3 = 9

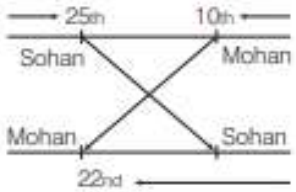
Also, total number of people = 17

∴Total number of people = (Position from left + Position from right) −1

∴ 17 = (9 + R) − 1 ⇒ R = 9

∴Seema is 9th from the right.

19. (a)

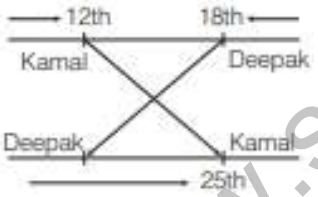


∴ Mohan moves (22 −10) = 12 places ahead and changed his place with Sohan.

∴ Sohan will also move 12 places ahead.

∴ Sohan's new position from left end = 25 + 12 = 37^{th}

20. (c)



∴ Total number of students = (Deepak's initial position + Kamal's new position) −1

= 18 + 25 − 1 = 42