

Ch 7 RANKING AND ORDERING

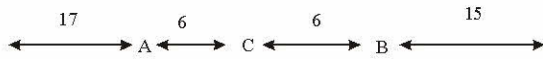
ANSWERS AND EXPLANATIONS

1. (d) 3 Girls are ahead of Jaya.
 \therefore 14 Boys are ahead of Jaya.
 \therefore Jaya's rank is 15th among the boys in the class.
2. (c) Total number of students in the class
 $= 16 + 12 - 1 = 27$
3. (a) $23 + \downarrow \cdot \cdot \cdot \cdot \cdot \downarrow + 10$
 Kailash Soman
 Kailash's position from the right end of the row
 $= 40 - 23 = 17\text{th}$
4. (a) Manav's rank from the top = $15 - 4 = 11\text{th}$.
 Manav's rank from the bottom
 $= 20 + 1 - 11 = 10\text{th}$
5. (d)
- or
- So, R's position can't be determined.
6. (a) Vijay's position from downwards
 $= [\text{Total students} - \text{Vijay's position from upwards}] + 1$
 $= [43 - 14] + 1 = 30\text{th}$
7. (c) Total students
 $= [\text{Rakesh's position from upwards} + \text{Rakesh's position from downwards}] - 1$
 $= [9 + 38] - 1 = 46$
8. (d) Total students
 $= [\text{First position of Ganesh} + \text{Second position of Rajan}] - 1$
 $= [12 + 20] - 1 = 31$
9. (a) Number of persons between Vijay and Jack = $48 - (14 + 17) = 17$
- Now, Mary lies in middle of these 17 persons
 So, number of persons between Vijay and Mary = 8.
10. (c) Total boys
 $= [\text{Malay's place from starting} + \text{Malay's place from end}] - 1$
 $= [13 + 17] - 1 = 29$
 Number of passed students
 $= [\text{Malay's place from starting} + \text{Malay's place from end}] - 1$
 $= [8 + 13] - 1 = 20$
 \therefore Number of failed students = $29 - 20 = 9$
11. (b) Failed Students
 $= [\text{Total students}] - [(\text{Anmol's position from upwards}) + (\text{Anmol's position from downwards}) - 1]$
 $= 45 - [(11 + 15) - 1] = 20$
12. (b) After interchanging their positions, position of A from left = 11
 then positions of A from right = 9.
 \therefore The total no. of people in the row
 $= (9 + 11) - 1 = 19$.
13. (c) Let the number of boys be x .
 Then, number of girls = $2x$.
 $\therefore x + 2x = 60$ or $3x = 60$ or $x = 20$.
 So, number of boys = 20 and number of girls = 40.
 Number of students behind Kamal in rank $(60 - 17) = 43$.
 Number of girls ahead of Kamal in rank = 9.
 Number of girls behind Kamal in rank = $(40 - 9) = 31$
 \therefore Number of boys behind Kamal in rank = $(43 - 31) = 12$.
14. (c) Sumit is 17th from the last and Ravi is 7 ranks ahead of sumit. So, Ravi is 24th from the last.
 Number of students ahead of Ravi in rank = $(39 - 24) = 15$.



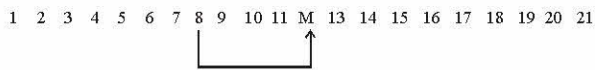
So, Ravi is 16th from the start.

15. (c) A is 18th from front and C is 24th
Number of persons between A and C = 6.
Since C is exactly in middle of A and B, so number of persons between C and B = 6.



\therefore Number of persons in the queue
 $= (17 + 6 + 6 + 16) = 45$.

16. (d) The change of place by Monika can be shown as under.

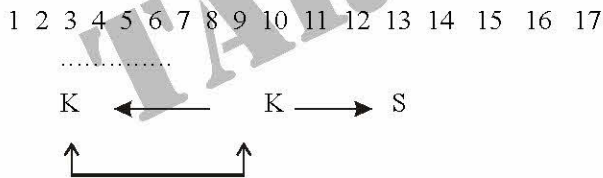


Clearly, Monika's earlier position was 8th from the left and 14th from the right end.

17. (b) Since Rita and Monika exchange places, so Rita's new position is the same as Monika's earlier positions. This position is 17th from the right and 10th from the left
 \therefore Number of girls in the row $= (16 + 1 + 9) = 26$.

18. (c) Rank of Ram from the last $= 23 - 13 + 1 = 11$
and Rank of Shyam from the last $= 23 - 14 + 1 = 10$

19. (d) On shifting 4 the left Komal is 10th from the left end of the row. Thus, komal's original position was 14th from the left end.



Swati is 3 places to the right of Komal's original positions

Clearly, swati is 17th from the left end.

Number of girls to the right of swati $= (40 - 17) = 23$.

Thus, Swati is 24th from the right end of the row.

20. (d) Number of boys who passed $= 16 + 29 - 1 = 44$
 \therefore Total number of boys in the class $= 44 + 6 + 5 = 55$

21. (d) The new sequence becomes 9 5 1 8 2 3 4 7 8

3 counting to the left, the seventh number is 8.

22. (c) Suman is 17th from the last and Raman is 7 ranks ahead of Suman. So Raman is 24th from the last.

\therefore Raman rank from the start is $39 + 1 - 24$ i.e., 16th

23. (c) Rank of Mohan from the bottom
 $= (41 + 1) - 7 = 35$ th.

Rank of Ramesh from the bottom
 $= (41 + 1) - 11 = 31$ st.

24. (c) $T_r = 11, B_r = 31$
 \Rightarrow no. of students $= T_r + B_r - 1$
 $= 11 + 31 - 1 = 41$

25. (d) By counting 21 letters from the end and 20 letters from the beginning we get the following sequence
F G H I J K L M N O P Q R S T
Obviously, the letter M appears exactly in the sequence formed.

26. (c) The heights of A, B, C, D and E in ascending order is $E < D < A < B < C$
Clearly, E is the shortest.

27. (a) The numbers from 1 to 100 which are exactly divisible by

4 are 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, 84, 88, 92, 96, 100.

But each number should have 4 as its digit.

The required numbers are 4, 24, 40, 44, 48, 64, 84.

Clearly, there are 7 such numbers.

28. (d) Clearly, number of boys towards the left of Manish
 $= (40 - 14) = 26$.

So, Manish is 27th from the left end.

29. (d) $T_r = 11, B_r = 27$.

\therefore Number of students in the class
 $= 11 + 27 - 1 = 37$.

30. (c) Suresh's new position is 22nd from left. But it is the same as Rohit's earlier position which is 12th from right.

\Rightarrow The number of persons in a row.

$= (22 + 12 - 1) = 33$



31. (a) Number of persons between vijay and jack
 $= 48 - (14 + 17) = 17$
 Now, mary lies in the middle of these 17 persons
 i.e, at the ninth positions.
 \therefore Number of persons between Vijay and Mary = 8
32. (c) Prabir > Mohan
 Suresh > Prabir
 Hence, Mohan < Prabir < Mihir Suresh
 Hence Mihir won the race.
33. (a) $R < M; Q < R, N; N < M$
 $M > N / R > Q$
34. (b) Total students = 40
 $11 + \dots + 20$
 Sameer Alok
 \therefore Alok's rank from bottom
 $= 40 - (11 + 1 + 8) + 1$
 $= 21\text{st}$
35. (d) Radha † Geeta > Sita
 Radha = Rani
 Geeta < Rani Paru is the tallest.
36. (c) Yash > Mahesh > Karan
 Abhishek > Hrithik > Yash
 Karan < Mahesh < Yash < Hrithik < Abhishek
37. (a) $M > P, T > R$
 $T > R > M > P$ (M is older than only P)
 Hence, T is the eldest
38. (a) $D > C > \boxed{A} > B > E$
 \therefore A will be in the middle if they stand in the order
 of the height.
39. (a) $T > S > R > Q > P$
 \therefore P among them is the youngest
40. (d) Geeta > Shilpa
 Deepa > Geeta
 Reepa > Gayatri
 Fatima is the seniormost
 But no other data is there to find who is the
 juniormost.

