

CHAPTER – 5

ORDERING AND SEQUENCING

The term “Order Sequence” is self-explanatory. In questions for this category, you will be asked to deal with relative positions of subjects. The absolute values of the subjects is not what you should be interested in. It is comparison between different subjects that you have to deal with. The data also specifies the relationships like “A is greater than B” or “C is not less than D” and so on. You have to decide the positions of the subjects in ascending or descending order on the parameters given. The subjects of comparison can be people or things.

In short, data will be given to compare the quality or quantity. The parameters on which the subjects are compared can be heights or weights of people, the money with them, complexion, sizes of things, etc.

In such questions, you will come across typical statements like “A is taller than B,” “B is not shorter than C”, and so on.

You may use the following symbols to symbolically represent the conditions given and then later, represent all the subjects pictorially.

Greater than >
Less than <
Greater than or equal ≥
Less than or equal ≤

“Not greater than” is the same as “less than or equal to.” Similarly, “not less than” is the same as “greater than or equal to”.

Words like “Who, And, Which, But” used in the data play a significant role in analysing the data. “AND” and “BUT” play the same role whereas “Who” and “Which” play the same role.

Let us illustrate with one statement.

“A is taller than B, who is shorter than C and taller than D but shorter than E, who is taller than F and G but shorter than H”.

By using appropriate symbols, the above statement can be represented as follows.

A > B; B < C; B > D; B < E; E > F; E > G; E < H

Questions on the above data can be as follows.

- (i) Who is the tallest?
- (ii) Who is the shortest?
- (iii) Who is the second tallest in the group? etc.

Let us take some examples.

Directions for questions 1 to 5: These questions are based on the following information.

A, B, C, D and E are five cars while P, Q and R are three motorcycles. A is the fastest of the cars and R is the slowest of the motorcycles. C is costlier than D and Q but cheaper than B. Among cars, A is not the costliest. D is cheaper than E and there is no car whose cost lies

between the cost of these two. E is faster than three of the cars and all the motorcycles. Q is costlier than R but cheaper than P, who is faster than Q.

1. Which of the following cars cannot stand exactly in the middle position among cars as far as their cost is concerned?
(A) A (B) C (C) E (D) D
2. Which of the following statements is true about the motorcycles?
(A) P is the costliest as well as the fastest motorcycle.
(B) The fastest motorcycle is not the costliest motorcycle.
(C) The slowest motorcycle is also the cheapest motorcycle.
(D) Both (A) and (C)
3. If P is costlier than E, how many cars are cheaper than P?
(A) 1 (B) 2
(C) 3 (D) Cannot be determined
4. If P is cheaper than A which is not costlier than E, which of these is the cheapest of all the cars and motorcycles put together?
(A) R (B) Q
(C) E (D) Cannot be determined
5. Which of these is the slowest of the cars, if B and C are faster than D?
(A) B (B) D (C) E (D) A

Solutions for questions 1 to 5:

Let us first write down all the comparisons given for costs and speeds. Then we will tabulate them.

Speed

A → fastest car

E → Faster than three of the cars → E is the second fastest car

R → slowest motorcycle

P > Q

Cost

C > D

C > Q

B > C

A → Not the costliest among cars

E > D → No other car lies between these two

Q > R

P > Q

Now let us tabulate this data.

Speed

Cars

Fastest	A	E				Slowest
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Motorcycles

Fastest	P	Q	R	Slowest
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Cost

Cars

Costliest	B	C	E	D	Cheapest
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Here, we know that A is not the costliest car but we do not know where it will fit in. It can come anywhere after B except between E and D.

Motorcycles

Costliest	P	Q	R	Cheapest
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In addition to the above, we have to also keep in mind that $C > Q$ in cost. (From this we can conclude that $B > Q$, $B > R$, $C > R$ in cost).

- In terms of cost of the cars, A can come between B and C or between C and E or to the right of E. In each of the above cases, the middle car will be C, A and E respectively. Hence, among the cars given, D cannot be in the middle. Choice (D)
- By looking at the tables above, we can make out that choices (A) and (C) are both correct and hence, the correct answer is (D). Choice (D)
- If P is costlier than E, we can also conclude that it is costlier than D but we cannot conclude anything about the relationship between the cost of P and that of B, C and A. Choice (D)
- Since A is not costlier than E, it means that A is at the same level of E or cheaper than E. We cannot conclude which of these two positions A is in. Hence, we cannot conclude which the cheapest of all the vehicles is. {Please note that if A is the cheapest car, then R will be the cheapest of all the vehicles. However, if A is at the same level as E in cost, then there is a possibility of R or D being the cheapest of all the vehicles.} Choice (D)
- If B and C are faster than D, then the order will be as follows:

1	2	3	4	5
A	E	B/C	C/B	D

Hence, D is the slowest of all the cars.

Choice (B)

Directions for questions 6 to 9: These questions are based on the following information.

J, K, L, M and N are five boys in a class. They are ranked in the order of heights – from the tallest to the shortest – and in order of cleverness – from the cleverest to the dullest. K is taller than N, but not as clever as J and L, whereas M is the cleverest of all but shorter than J. While L is shorter than M but taller than K, L is not as clever as J. No two persons got the same ranks in any of these parameters.

- Who is the third in the order of heights?
(A) J (B) N (C) K (D) L
- If N is not the last in at least one of the two comparisons, which of the following is the dullest of all the five?
(A) K (B) L (C) M (D) J
- If L is the third in order of cleverness, who is the dullest of all?
(A) M (B) N
(C) L (D) Cannot be determined

9. Who among the following is cleverer as well as taller than K?

- (A) L and J only (B) N
(C) L and N (D) J, L and M

Solutions for questions 6 to 9:

Let us first write down all the conditions given and then tabulate the data.

Cleverness

$J > K$
 $L > K$
M is the cleverest.
 $J > L$

Height

$K > N$
 $J > M$
 $M > L$
 $L > K$

Now let us put together all the information we have.

Cleverness

Cleverest	M	J	L	K	Dullest
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We do not know where N will come in the order of cleverness but he will definitely be after M.

Height

Tallest	J	M	L	K	N	Shortest
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- From the table above, we can clearly see that L is ranked third in order of heights. Choice (D)
- N is the last in terms of height. Since we are given that he is not the last in at least one of the lists, he CANNOT be the last in cleverness. So, K is the dullest of all. Choice (A)
- If L is the third in the order of cleverness, as can be seen from the table above, either N or K can be the dullest. Choice (D)
- By looking at the tables we made above and from the answer choices, we find that L, J and M are taller as well as cleverer than K. Choice (D)

Directions for question 10: Select the correct alternative from the given choices.

- P, Q, R, S, and T are five girls competing in a running race. R and P have at least two girls ahead of each of them. T and P do not have more than one girl behind each of them. Who arrives at the finishing line after two girls as well as before two other girls, if no two girls finish the race at the same time?
(A) Q (B) S (C) T (D) R

Solution for question 10:

- R and P have at least two girls before them → R and P have to be in two out of 3rd, 4th and 5th positions.
T and P have not more than one girl behind each of them → T and P have to be in the 4th or 5th positions.
The above two statements together mean that R will have to be in the third position. Choice (D)

Exercise – 5(a)

Directions for questions 1 to 4: Select the correct alternative from the given choices.

1. Five boys – Lalit, Mohan, Naveen, Omi and Pavan – are compared with each other in terms of their heights. Lalit is taller than Mohan but shorter than Pavan, who is shorter than Naveen, who is taller than Omi. Who among these five friends is the second tallest?
(A) Omi (B) Naveen
(C) Naveen or Pavan (D) Cannot be determined
2. A, B, C, D and E are five persons working in an office. C comes to the office before B, but after A. E comes after D, but not immediately after him. The number of persons who came between D and E is the same as those who come between C and B. Who was the first person to come to the office?
(A) A (B) D (C) A or D (D) C
3. Each of four students – Gopi, Hari, Murali and Anil – did exactly one project out of four different projects – P.T., T.D., D.M.E and H.T. No two students got the same marks. The project H.T. secured more marks than the project T.D. and the project P.T. did not get the first or the fourth rank. The projects are ranked from first to fourth from maximum to minimum marks in that order.
Anil secured more marks than Murali and Hari got less marks than Gopi, who did the project H.T.
If the project P.T. got more marks than H.T., then who did the project P.T.?
(A) Murali (B) Anil
(C) Hari (D) Hari or Anil
4. The following are the comparisons made between five business tycoons – Mukesh, Aditya, Prem, Murthy and Raju.
Mukesh is richer and younger than Murthy. Aditya is poorer than Prem but richer than Mukesh. The poorer of Mukesh and Prem is the younger of the two. Murthy is richer than Raju, who is older than Aditya but younger than Mukesh. How many people are richer but younger than Mukesh?
(A) 1 (B) 2 (C) 3 (D) 0

Directions for questions 5 to 7: These questions are based on the following information.

Each of the six children – Amit, Sumit, Kamat, Namit, Ranjit and Charit has a different number of chocolates among 3, 4, 5, 6, 7 and 8, not necessarily in the same order. We know the following information.

- I. The difference between the number of chocolates with Charit and Ranjit is the same as that between the number of chocolates with Kamat and Ranjit.
 - II. The number of chocolates with Charit is less than that with Sumit which in turn, is less than that with Ranjit.
 - III. The number of chocolates with Sumit is more than that with Namit.
5. Who has 6 chocolates?
(A) Sumit (B) Ranjit
(C) Amit (D) Charit

6. What is the number of chocolates with Sumit?
(A) 5 (B) 6 (C) 7 (D) 4

7. What is the difference between the number of chocolates with Namit and Kamat?
(A) 2 (B) 3 (C) 4 (D) 5

Directions for questions 8 to 10: These questions are based on the following information.

Six students – Anand, Brijesh, Charan, Deepti, Gopal and Hriday are the top six rankers of a class. No two persons got the same rank. We know the following information regarding their ranks.

- (i) Deepti got a better rank than atleast two students.
 - (ii) Gopal got a better rank than Brijesh.
 - (iii) The number of persons who got better rank than Anand is the same as the number of persons who got worst rank than Charan.
 - (iv) Anand got a better rank than Deepti.
 - (v) Only one person got a rank between the ranks of Hriday and Brijesh.
8. If Hriday got the third rank then the only person whose rank is between the ranks of Deepti and Charan is
(A) Anand (B) Gopal
(C) Hriday (D) Brijesh
9. Who got the sixth rank?
(A) Charan (B) Brijesh
(C) Hriday (D) Cannot be determined
10. If Deepti got the second rank, then who got the fifth rank?
(A) Brijesh (B) Charan
(C) Hriday (D) Cannot be determined

Directions for questions 11 to 13: These questions are based on the following information.

Eight persons – Anurag, Bhadri, Chakri, Dayanand, Eleena, Firoz, Goutam and Hemant who got different marks are comparing their marks. We know the following information regarding their marks.

- (i) Anurag got more marks than Bhadri and the number of persons who got less marks than Anurag is the same as the number of persons who got more marks than Bhadri.
 - (ii) Chakri got more marks than Dayanand, but less marks than Eleena.
 - (iii) Firoz got the fifth highest marks.
 - (iv) Goutam got more marks than Hemant, who did not get the lowest marks.
 - (v) Dayanand got more marks than Goutam.
11. Who got the fourth highest score?
(A) Anurag (B) Eleena
(C) Chakri (D) Dayanand
12. Who got the third lowest score?
(A) Firoz (B) Dayanand
(C) Goutam (D) Hemant
13. Who got the highest score?
(A) Eleena (B) Anurag
(C) Girish (D) Cannot be determined

Directions for questions 14 to 16: These questions are based on the following information.

Four students – Akil, Nikil, Bunny and Sunny are the top four rankers in Physics as well as in Chemistry. No two persons got the same rank in any subject. No person got the same rank in both the subjects. We know the following information regarding their ranks.

- (i) Bunny got the fourth rank in Chemistry, but the sum of the ranks of Bunny is not the highest.
- (ii) In Physics, Akil got a better rank than Bunny and Nikil got a better rank than Sunny.

14. Who got the first rank in Chemistry?
(A) Akil (B) Nikil
(C) Sunny (D) Cannot be determined
15. Who got the second rank in Chemistry?
(A) Akil (B) Nikil
(C) Sunny (D) Cannot be determined
16. Who got the third rank in Chemistry?
(A) Akil (B) Nikil
(C) Sunny (D) Cannot be determined

Directions for questions 17 to 19: These questions are based on the following information.

Two of the four boys A, B, C and D are playing T T. Older of A and C is the shorter of the two players. Heavier of C and D is the younger of the two players. Taller of B and D is the heavier of the two players. Older of A and D is the lighter of the two players.

17. Who is the heaviest, if it is not D?
(A) A (B) B
(C) C (D) Cannot be determined
18. Who is the youngest, if it is not C?
(A) A (B) B
(C) D (D) Cannot be determined
19. Who are playing T T?
(A) A and D (B) C and D
(C) A and D or C and D (D) Cannot be determined

Directions for questions 20 to 23: These questions are based on the following information.

Four boys – A, B, C, D – and four girls – W, X, Y, Z – compare their heights. It is found that there are two boys each of whom is taller than exactly two girls. Similarly, there are two girls each of whom is taller than exactly two boys.

Also, it is known that B is taller than W, who is taller than A, who is taller than X. Y is taller than X, but shorter than D, who is shorter than Z, who is not as tall as C, who is taller than B.

20. Which of the following statements can be false?
(A) The shortest among girls is X.
(B) The shortest among boys is A.
(C) The tallest among boys is C.
(D) The tallest among girls is W or Z.
21. If W is taller than Z, then which of the following statements is not definitely true?
(A) X is the shortest among all.
(B) B is the second tallest and Y is the second shortest.

- (C) W is the third tallest and D is the third shortest.
- (D) Z is taller than four persons.

22. If D is shorter than A, then which of the following statements can be false?
(A) W and Z are the two girls each of whom is taller than exactly two boys.
(B) A and D are the two boys each of whom is taller than exactly two girls.
(C) D and X are the shortest among the boys and the girls respectively.
(D) W is the tallest among the girls.
23. Which choice among the following has the names of the shortest boy and the tallest girl, respectively, given that D is taller than A?
(A) C and X (B) A and X
(C) C, and Z or W (D) A, and Z or W

Directions for questions 24 to 26: These questions are based on the following information.

A, B, C, D and E are five ornaments made of Gold, Silver, Bronze, Copper and Platinum, not necessarily in the same order. They are each of a different weight and cost. D, the Copper ornament, is the heaviest but costlier than only E. B is neither the Bronze nor the Silver ornament but is the lightest and the costliest. The Bronze ornament is the 2nd heaviest and the 3rd costliest. The Silver ornament is the 3rd heaviest but it is neither A nor E.

24. The ornament B is made of
(i) Gold (ii) Platinum (iii) Silver
(A) Only (iii) (B) Only (i)
(C) Either (i) or (ii) (D) Either (ii) or (iii)
25. Which ornament is the 2nd costliest?
(A) Bronze (B) Gold
(C) Silver (D) Copper
26. Which among the following is definitely true?
(A) The Gold ornament is the lightest and the costliest.
(B) The Silver ornament is 2nd in weight and 3rd in cost.
(C) No ornament has the same ranking in terms of weight and cost.
(D) E is made of Platinum.

Directions for questions 27 and 28: These questions are based on the following information.

Six lakes - P, Q, R, S, T, U have different depths. We have the following information about their depths.

- (i) Lake T is deeper than lake S. Lake Q is deeper than lakes T and U.
 - (ii) The depth of lake Q is 27 m. Only one lake is deeper than P. Lake U is deeper than lake S.
 - (iii) Lake T is deeper than lake U. The depth of lake T is 18m.
 - (iv) R is not the deepest lake but its depth is 20 m.
27. What can be the possible depth of lake P?
(A) 13 m (B) 15 m (C) 19 m (D) 21 m
 28. If the depth of lake S is 14 m, then what could be the depth of lake U?
(A) 22 m (B) 21 m (C) 19 m (D) 15 m

Directions for questions 29 and 30: These questions are based on the following information.

Seven girls Priya, Jaya, Laya, Ziya, Diya, Riya and Maya are comparing their ages and each of them is of a different age. The following information is known about them

- (i) The number of girls elder than Maya is same as the number of girls younger than Diya.
- (ii) Jaya is 21 years old and is younger than only Riya. Maya is elder than Diya.

- (iii) Priya is not the second youngest but younger than Laya.
- (iv) Ziya is not the fourth youngest but she is 15 years old.

29. If Laya is 17 years old, what could be the age of Maya (in years)?
(A) 13 (B) 16 (C) 15 (D) 19

30. Who among the following is second youngest girl?
(A) Riya (B) Diya (C) Maya (D) Ziya

Exercise – 5(b)

Directions for questions 1 to 3: These questions are based on the following information.

Six friends – Sibaprasad, Amit, Rahul, Tamyra, Ulhas and Madhu are comparing their marks in two subjects – Maths and Physics. No two among them, got the same marks in any subject and if they are given ranks according to their marks in each of the subjects, no one gets the same rank in both the subjects. It is also known that :

- (i) In each of the subjects, there are three persons who scored more marks than Amit but less marks than Madhu.
- (ii) Among them Sibaprasad got the highest marks in Maths but did not get the lowest marks in Physics.
- (iii) In Physics, Rahul's marks are more than Tamyra's marks and less than Ulha's marks.
- (iv) In Maths, only two persons scored less marks than Rahul.

1. Among them, who got the highest marks in physics?

- (A) Ulhas
- (B) Tamyra
- (C) Madhu
- (D) Data inadequate

2. Among them, who got the second lowest marks in Physics?

- (A) Amit (B) Tamyra
- (C) Sibaprasad (D) Data inadequate

3. Among them, who got the second highest marks in Maths?

- (A) Ulhas (B) Tanuja
- (C) Rahul (D) None of these

Directions for questions 4 to 7: These questions are based on the following information.

Bond went to a showroom to buy a super-bike. He asked the executive about the details of the six bikes – Kamikaze, Killer, Diablo, DMG, Perro and Stilletto. The executive gave the following information.

- (1) Diablo is stronger and faster than Stilletto but cheaper than DMG.
- (2) Killer is the costliest bike and less stronger than Perro, which is less stronger than DMG.
- (3) Kamikaze is the fastest bike and stronger than Diablo but less stronger than Killer and costlier than DMG.
- (4) Perro is less costlier than Diablo but costlier than Stilletto and faster than DMG, which is faster than Killer, which is the slowest bike.

4. Which of the following is the strongest bike?

- (A) Perro (B) Killer
- (C) DMG (D) Kamikaze

5. Which of the following can be the order of bikes from the fastest to the slowest?

- (A) Kamikaze, Diablo, Killer, Stilletto, Perro, DMG.
- (B) Kamikaze, Stilletto, Diablo, DMG, Perro, Killer.
- (C) Kamikaze, Diablo, Stilletto, Perro, DMG, Killer.
- (D) Kamikaze, Diablo, DMG, Stilletto, Killer, Perro.

6. Which of the following cannot be ranked second in any of the three comparisons? (E.g. the fastest bike is ranked first and the slowest is ranked the sixth, in that order)?

- (A) Stilletto (B) Diablo
- (C) Kamikaze (D) Perro

7. If Bond bought a bike which is costlier and stronger than the Kamikaze, then he must have bought the

- (A) Stilletto. (B) Perro.
- (C) DMG. (D) Killer.

Directions for questions 8 to 11: These questions are based on the following information.

Each of seven cousins Abhay, Bhargav, Chandini, Deekshit, Ekta, Falgun and Giri was born in a different year from 1981 to 1989. The following information is known about them.

- (i) Deekshit was not born before 1985.
- (ii) The oldest among them was born in 1981 and the youngest, in 1989.
- (iii) Abhay and Chandini were born two years apart and neither of them is the oldest.
- (iv) There are as many people older than Falgun as there are people younger than him. Falgun is also as many years younger than the oldest cousin as he is older than the youngest cousin.
- (v) Both Ekta and Deekshit were born in leap years.
- (vi) Giri was born five years before Chandini.

8. Who is the oldest among the seven?

- (A) Giri (B) Bhargav
- (C) Deekshit (D) Ekta

9. In which year was Chandini born?

- (A) 1983 (B) 1985
- (C) 1987 (D) 1989

10. Who is four years older than Abhay?

- (A) Bhargav (B) Giri
- (C) Falgun (D) Ekta

11. Who among them is the fifth youngest?

- (A) Deekshit (B) Chandini
- (C) Ekta (D) Abhay

Directions for questions 12 to 14: These questions are based on the following information.

Five persons – Abanti, Bhabani, Chandan, Deeptam and Fahrook were comparing their expenditure and savings. It is known that :

- (i) Expenditure of no two of them is the same but their income is the same.
- (ii) For every person, income is the sum of his/her expenditure and savings.
- (iii) Chandan's savings are more than Deeptam's savings.
- (iv) Abanti's expenditure is more than Fahrook's expenditure.
- (v) The savings of Bhabani are more than that of Fahrook and the expenditure of Bhabani is more than that of Deeptam.

12. Whose expenditure is the highest?

- (A) Abanti (B) Bhabani
- (C) Deeptam (D) Fahrook

13. Whose savings are the highest?

- (A) Fahrook (B) Bhabani
- (C) Deeptam (D) Chandan

14. Savings of how many persons are more than that of Fahrook?

- (A) 1 (B) 2 (C) 3 (D) 4

Directions for questions 15 to 18: These questions are based on the following information.

Each of the five women – Amala, Kamala, Nirmala, Parimala and Vimala are of different ages and each of them has exactly one child. The five children are of different ages from 1 year through 5 years. If all the women were given ranks according to the decreasing order of their ages (i.e., the eldest woman gets the first rank) and all the children were given ranks in the similar manner, no woman has the same rank as her child. The names of their children are Chinna, Kanna, Munna, Rinku and Tinku. We know the following information about them.

- (i) Chinna is the eldest but his mother is not the youngest and Nirmala is not the eldest.
- (ii) Nirmala, who is the mother of the three year old child is elder than Vimala and Amala is elder than Kamala.
- (iii) The number of years by which Tinku is elder than Munna is same as the number of years by which Chinna is elder than Rinku.
- (iv) Parimala's child is Tinku and the number of women elder than Parimala is same as the number of children younger than Tinku.

15. Who is the child of Nirmala?

- (A) Chinna (B) Kanna
- (C) Rinku (D) Cannot be determined

16. If Munna is the child of Vimala, then Parimala is elder than

- (A) Vimala
- (B) Kamala
- (C) Nirmala
- (D) Cannot be determined

17. If Nirmala is elder than only one woman, then who is the mother of Rinku?

- (A) Kamala (B) Vimala
- (C) Amala (D) Cannot be determined

18. Which of the following statements is true?

- (A) Rinku is three years old.
- (B) Amala's child is five years old.
- (C) Nirmala got the same rank as Tinku.
- (D) Kanna is the child of either Vimala or Kamala.

Directions for questions 19 to 21: These questions are based on the following information.

A, B, C, D and E are five friends. It is known that A is heavier and shorter than D, who is richer and younger than C, who is older and shorter than E. B is lighter, shorter and richer than E, but is neither the shortest nor the youngest. The person who is the richest is also the youngest and the person who is the heaviest is also the shortest. The person who is the second eldest is also second poorest. The person who is the second heaviest is also third shortest. The person who is the second shortest is also third poorest. The person who is second richest is third eldest. The ranks are from most to least e.g., heaviest is ranked first and lightest is ranked fifth or last, and so on for other parameters. In any of these four comparisons, D is never ranked least and E is never ranked first, also, no person gets the same rank in any of the two comparisons. Based on the above information, solve the following questions:

19. Which of the following statements would be required to complete the arrangement?

- (I) A is shorter than E.
- (II) E is lighter than A.
- (III) The youngest person is heavier than the poorest person.
- (A) Only I and II (B) Only I and III
- (C) Only II and III (D) Either I or II or III

20. What is the total sum of the ranks obtained by all the five persons?

- (A) 50 (B) 60 (C) 90 (D) 120

21. Which choice consists of the correct order of the names of the persons with the following characteristics – second richest, fourth richest, fourth heaviest, second shortest?

- (A) D, E, D, (A or E)
- (B) (A or E), C, B, D
- (C) D, C, D, B
- (D) B, D, (A or E), (A or E)

Directions for questions 22 to 25: These questions are based on the following information.

A, B, C, D and E are five students who are ranked 1 through 5 in each of the four parameters among height, weight, age and marks. The tallest, the heaviest and the oldest are ranked one in respective parameters. The student with highest marks is ranked one.

Following information about them is known:

C is the only one who is neither first or last in any parameter.

Except for C, all the other students scored different ranks in each parameter.

B is shorter than A who is not the second tallest student.

A is taller than E who is shorter than three other students. D is taller than A.

Both C and A are lighter than E but heavier than B and D.

B is older than A. C is older than atleast two people.

E is ranked fifth in marks.

C's rank in marks is the same as D's rank in age.

Directions for questions 22 to 25: Write your answer in the box provided below the question.

22. What is B's rank in the parameter "age"?

23. What is A's rank in the parameter "marks"?

24. If B is ranked second in "marks", what is D's rank in the parameter "marks"?

25. If C is ranked third in "age", what is E's rank in the parameter "age"?

Directions for questions 26 to 30: These questions are based on the following information.

Each of four students Akhil, Bhanu, Charan and Devika gave four exams CAT, MAT, XAT and NMAT. Each of the four students is ranked one to four in each of the exams, among themselves. The following information is also known Bhanu scored a better rank in CAT and XAT than atleast two people.

Each of Akhil and Bhanu scored either the first or last rank in MAT.

Devika did not secure a rank one in any of the exams.

Both Charan and Devika secured consecutive ranks in NMAT.

Charan did not score a better rank than Akhil in CAT. Bhanu and Charan did not secure the first rank in XAT. Devika was ranked fourth in CAT.

Akhil was ranked third in NMAT.

Further, it is also known that Akhil secured first rank in either three or one exam(s).

If Akhil secured first rank in three exams, then Charan secured third in one exam.

If Akhil secured first rank in one exam, then Charan secured third rank in three exams.

No two students secured the same rank in any exam.

Directions for questions 26 to 30: Write your answer in the box provided in the question.

26. If Akhil secured rank one in MAT, rank of Charan in

XAT is .

27. If Devika secured rank three in MAT, rank of Akhil in

CAT is .

28. If Devika secured two similar ranks-pairs in four

exams, rank of Charan in MAT is .

29. If Bhanu did not secure first rank in any of the exams,

rank of Devika in XAT is .

30. rank of Devika in NMAT is .

Key

Exercise – 5(a)

- | | | | | | |
|------|-------|-------|-------|-------|-------|
| 1. D | 6. A | 11. D | 16. C | 21. C | 26. C |
| 2. A | 7. D | 12. C | 17. B | 22. D | 27. D |
| 3. A | 8. D | 13. B | 18. D | 23. D | 28. D |
| 4. A | 9. D | 14. B | 19. A | 24. C | 29. D |
| 5. B | 10. A | 15. A | 20. B | 25. C | 30. D |

Exercise – 5(b)

- | | | | | | |
|------|-------|-------|-------|-------|-------|
| 1. C | 6. A | 11. C | 16. A | 21. C | 26. 4 |
| 2. A | 7. D | 12. A | 17. B | 22. 1 | 27. 1 |
| 3. D | 8. B | 13. D | 18. C | 23. 1 | 28. 3 |
| 4. C | 9. C | 14. C | 19. D | 24. 3 | 29. 3 |
| 5. C | 10. C | 15. D | 20. B | 25. 2 | 30. 2 |