# **CHAPTER - 7**

# ANALYTICAL PUZZLES

## Linear Sequencing:

Linear sequencing is essentially arranging the items in a sequence (in a single line). The questions of this type are also referred to as "Seating Arrangement". The word "seating arrangement" should not be misconstrued – it should not be treated as questions involving only persons sitting as per specified conditions. Essentially, these questions involve arranging subjects (people or things) according to the given conditions. The arrangement is done only on one "axis" and, hence, the position of the subjects assumes importance here in terms of order like first position, second position, etc.

Let us look at the examples:

**Directions for questions 1 to 5:** Read the data given below carefully and answer the questions that follow.

Seven persons Paul, Queen, Rax, Sam, Tom, Unif and Vali are sitting in a row. Rax and Sam sit next to each other. There are exactly four persons between Queen and Vali. Sam sits to the immediate left of Queen.

- If Paul and Tom are separated by exactly two persons, then who sits to the immediate right of Vali?
   (A) Paul (B) Tom (C) Unif (D) Rax
- 2. If Queen is not sitting at either ends of the row, then who among the following has as many persons on the left as on the right?
  - (A) Sam
- (B) Unif
- (C) Rax
- (D) Vali
- 3. If Queen sits at one end of the row, then who is at the other end?
  - (A) Paul
- (B) Tom
- (C) Vali
- (D) Cannot be determined
- 4. If Tom sits to the right of Queen, and Paul is separated from Tom by exactly three persons. Then, who is sitting to the immediate right of Vali?
  - (A) Sam
- (B) Paul
- (C) Tom
- (D) Unif
- 5. In how many different ways can the seven persons sit in a row?
  - (A) 3
- (B) 2
- (C) 10
- (D) 12

### Solutions for questions 1 to 5:

Let us write down the conditions given in short form and then represent them pictorially. Also, let us treat the left of the persons sitting as "left" and their right as "right" for interpreting the conditions.

Rax and Sam sit next to each other → RS or SR.

There are exactly 4 persons between Queen and Vali  $\Rightarrow$  Q — — — — V or V — — — — Q. Sam sits to the immediate left of Queen  $\Rightarrow$  SQ.

Now let us analyse the data/conditions that we are given and then put the three conditions together. Let us number the seats from *our* left to right as Seat 1 to Seat 7.

Since S is to the left of Q and since R and S have to be next to each other, R can only be to the immediate left of

S. Thus, R, S and Q, will be in the order RSQ. Since there are four persons between Q and V, Q can be placed in seats 1, 2, 6 or 7. But if Q is in seat 1 or 2, then there are no seats for R and S. Hence, there are only two seats available for Q. Let us fix the positions of R, S and V in each of these two positions of Q and write them down. The directions Left and Right are as shown below.

**∢**L **▶** R

Arrangement I:

1 2 3 4 5 6 7 V R S C

Arrangement II:

**1 2 3 4 5 6** 7 V R S Q

These are the only two arrangements possible for the four persons V, R, S and Q. The other three persons Paul, Tom and Unif can sit in the three vacant seats in any order, as no information is given about them. Now let us look at each of the questions.

Paul and Tom are separated by exactly two persons.
 Arrangement I is the only one possible as in Arrangement II, Paul and Tom cannot have exactly two persons between them. So, we have the arrangement as follows: T/P, V, U, P/T, R, S, Q

So, Unif must be sitting to the immediate right of Vali. Choice (C)

- 2. If Queen is not at the end, then only arrangement II mentioned above is possible. The person who has as many persons on the left as on the right can only be the person who is sitting in the middle seat, i.e. seat 4. In this arrangement, Rax is sitting in seat 4.

  Choice (C)
- 3. "Queen sits at one end" means that we should look at arrangement I. In this arrangement, any one out of the three persons Paul, Tom and Unif can be in seat 1.

Choice (D)

4. If Tom and Paul are separated by exactly three persons, then only arrangement II is possible. So, Tom and Paul have to be in seats 3 and 7. Since, it is also given that Tom is to the right of Queen. Tom has to be in seat 7 and Paul, in seat 3. So, the arrangement must be as follows: V, U, P, R, S, Q, T.

The person sitting to the immediate right of Vali is Unif. Choice (D)

**5.** We have two possible arrangements — "Arrangement I and Arrangement II" that we have already looked at. In each arrangement, the remaining three people can sit in the remaining three seats in 6 ways. Thus, a total of 12 ways of seating the seven persons is possible.

Choice (D)

Directions for questions 6 to 10: These questions are based on the following information.

Eight persons - G, H, I, J, K, L, M, and N - are sitting in a row but not necessarily in the same order. Some of them are facing south and the remaining are facing north. No two persons sitting adjacent to each other face south.

- J sits two places away from H and they both face different directions.
- M sits second to the right of G.
- The number of persons to the right of M is one less than the number of persons to the right of K.
- K sits to the immediate right of H, who faces the same direction as I faces.
- I sits to the immediate left of N and one of them sits at an end.
- G sits to the left of N, who sits to the left of L.
- K and L face the same direction which is different from the direction which M faces.
- **6.** Who sits second to the right of J? (A) K (B) M (D) N
- 7. Three of the following are alike in a certain way and hence form a group. Which is the one that does not belong to that group?
  - (A) JH (B) IH
- (C) MG
- (D) MK
- 8. Which of the following is/are definitely true?
  - (A) M and G face different directions.
  - (B) K sits three places away from J.
  - (C) Two persons sit between L and H.
  - (D) Both (A) and (B)
- 9. Who sits to the immediate right of G?

(A) K

(B) L

(C) H

(D) J

- **10.** How many persons are facing north?
  - (A) Five
- (B) Three
- (C) Two
- (D) Cannot be determined

#### Solutions for questions 6 to 10:

It is given that M sits second to the right of G, who sits to the left of N. Thus, if N sits at the right end, N must face north, since I sits to the immediate left of N. As J sits two places away from H and they both face different directions and K sits to the immediate right of H, J must be sitting at the third place from the left end and H sits two places away from I. It is given that H and I face the same direction. For the above conditions to satisfy, I must face north. Thus, H also faces north and K sits adjacent to I. Since H and J face different directions, J faces south. Thus, the neighbors of J must face north as no two persons sitting adjacent to each other face south. It is also given that M sits second to the right of G and the number of persons to the right of M is one less than the number of persons to the right of K. Hence, M must be sitting to the immediate left of J and G to the immediate right of J. As K and L face the same direction which is different from the direction in which M faces, K and L must face south as M faces north and L sits at the left end. Hence, the final seating arrangement is as below.

L↓ <u>G</u>↑ <u>J</u>↓ <u>M</u>↑ <u>H</u>↑ K↓ <u>I↑ N↑</u>

- 6. L sits second to the right of J.
- Choice (C)
- Except MK, in all other options the second person sits second to the left of the first person.

Choice (D)

- K sits three places away from J. Choice (B)
- J sits to the immediate right of G. Choice (D)
- 10. Five persons are facing North. Choice (A)

#### Exercise - 7(a)

Directions for questions 1 and 2: Select the correct alternative from the given choices.

- 1. Five students A, B, C, D and E participated in a 100 m race and finished the race in five different timings (not necessarily in the same order). Three students finished the race behind D and three students finished the race ahead of E. C is neither the first nor the last student to finish the race. If A finishes the race after B, then who is the last student to finish the race?
  - (A) D
- (B) E
- (C) A
- 2. Each of six boys P through U is of different height. T is shorter than P. U is shorter than Q who is taller than S. S is taller than P but shorter than R. Who is the shortest?
  - (A) U
- (B) S
- (C) T
- (D) cannot be determined

Directions for questions 3 and 4: These questions are based on the following information.

Five buses  $B_1$ ,  $B_2$ ,  $B_3$ ,  $B_4$  and  $B_5$  operate between two stations S<sub>1</sub> and S<sub>2</sub>. The 1<sup>st</sup> bus, which leaves from S<sub>1</sub>, is the  $3^{rd}$  bus to reach  $S_2$ .  $B_1$ , the  $2^{nd}$  bus to reach  $S_2$ , reaches after B<sub>5</sub>. B<sub>4</sub>, the 2<sup>nd</sup> bus to leave the station S<sub>1</sub> is the last to reach S2, immediately after B2, which leaves S<sub>1</sub> after B<sub>5</sub> and B<sub>1</sub> respectively.

- Which bus is the first bus to leave from the  $S_1$ ? (C) B<sub>2</sub> (A) B<sub>4</sub> (B) B<sub>3</sub>
- What is the position of  $B_1$  in leaving  $S_1$  and in reaching S<sub>2</sub>?

(A) 4<sup>th</sup>, 3<sup>rd</sup> (B) 3<sup>rd</sup>, 5<sup>th</sup> (C) 3<sup>rd</sup>, 2<sup>nd</sup> (D) 4<sup>th</sup>, 2<sup>nd</sup>

Directions for questions 5 to 9: These questions are based on the information given below.

In a zoo there are 7 cages in which 7 different animals -Tiger, Lion, Elephant, Chimpanzee, Gorilla, Deer and Bear are present. The cages are in a row one beside the other, not necessarily in the same order. Further it is known that

- (A) the cage in which the Tiger is present is at the extreme right end.
- the Deer's cage is to the right of the Gorilla's cage.
- the Chimpanzee's cage is three places to the right of the Elephant's cage.
- (D) the Lion's cage is to the immediate right of the Bear's cage which is to the immediate right of the Elephant's cage.
- (E) the Gorilla's cage is not at the extreme end.

5.	Which of the following extreme left end? (A) Lion (C) Deer	(B) Elephant	the <b>16</b>	i. Who is two places to the (A) C (C) E	right of B? (B) G (D) Cannot be determined				
	, ,	(D) Gorilla		. If F and G interchange places then who is opposite					
6.		ed from 1 to 7 starting from ong the following animals is		to H? (A) C (B) D	(C) G (D) F				
	(A) Gorilla (C) Lion	(B) Deer (D) Bear	18	immediate left of G?	right of F, then who is to the				
7.	Which among the follow		es	(A) B (C) E	(B) C (D) Cannot be determined				
	away to the right of the Li (A) Gorilla (C) Elephant	on? (B) Deer (D) Chimpanzee		ections for questions 19 to 22: These questions are ed on the following information given below.					
8.	Which among the following (A) Gorilla (C) Elephant	(B) Deer (D) Chimpanzee	Na wh ea	ght friends Jumuna, Navin, Naresh, Jagdeesh, Jai, man, Niki and Sri are sitting around a rectangular table ich has 3 seats each on the longer sides and one seat ch on the shorter side. Further it is known that					
9.	Which among the follow true?  (A) Chimpanzee's cage adjacent to each other (B) Deer's cage is adjacent (C) Bear's cage is two placent (D) There are two cage and Chimpanzee's c	e and Gorilla's cage er. ent to Chimpanzee's cag ces to the left of Deer's cag is in between Bear's ca	(i) are (ii) (iii e. e, (iv	<ul> <li>(i) Jamuna is to the immediate left of Naman.</li> <li>(ii) Naresh and Jagdeesh are sitting opposite each other.</li> <li>(iii) Jai is to the immediate right of Navin, who is sitting on the shorter side.</li> <li>(iv) Jagdeesh is to the right of Jai.</li> <li>(v) Sri is sitting opposite Navin.</li> </ul>					
	ections for questions 10 sed on the information give	to 14: These questions		. Who is opposite Jamuna (A) Naresh (C) Jai	? (B) Niki (D) None of these				
Eight persons A, B, C, D, E, F, G, and H, not necessarily in the same order, are waiting in a queue at PVR Cinema Hall to buy tickets. F was before C and was immediately after A. E was the first person in the queue. B and C bought tickets one after the other. H bought his tickets exactly before two persons. G bought his tickets at least after four persons. D bought the ticket before A.				20. Who is opposite Jai?  (A) Naman (B) Naresh (C) Jamuna (D) None of these  21. Who among the following is adjacent to Jamuna?  (A) Niki (B) Navin (C) Naresh (D) Jagdeesh					
10.	Who among the follow immediately after E? (A) D (B) A	ving bought his/her tid	ket <b>22</b>	. Who is to immediate left (A) Navin (C) Naman	of Jagdeesh? (B) Naresh (D) Niki				
11.	Who is the last person to (A) G	(B) B	ba	<b>Directions for questions 23 to 26:</b> These questions are based on the information given below.					
12.	(C) C Who bought the ticket im (A) D (B) G	(D) Cannot be determing mediately before H? (C) B (D) C	P, ha mo	P, Q, R, S and T are five friends. P is taller than Q, and lass less money than S. R is taller than Q and also has more money than Q. T is the shortest of all but has more money than R.					
13.	How many persons have D and G? (A) Zero (B) One	e bought tickets in between (C) Two (D) Three	23	23. If S is the tallest of all then which of the following can be the order of the five friends in the descending order of their heights?					
14.	If B is the last person to bought the ticket immedia	ately after H?	rho	(A) S, R, P, Q, T (C) S, R, Q, P, T	(B) S, P, Q, R, T (D) S, Q, P, R, T				
	(A) D (B) G	(C) B (D) C		. If Q is taller than S, then (A) P (B) R	who can be the tallest? (C) T (D) P or R				
<b>Directions for questions 15 to 18:</b> These questions are based on the following information.					an exactly three friends then				
Eight boys A, B, C, D, E, F, G and H are seated around a circular table. A and B are opposite to each other. F is neither next to H nor next to G. H is to the immediate left				who has 3 <sup>rd</sup> highest mon (A) Q (C) S	ey? (B) P (D) Cannot be determined				
	3 and opposite G. D is to the			. Who among the following has more money than Q	ng is always taller and also				
15.	Who is to the right of A? (A) G (B) F	(C) C (D) E		(A) P (C) S	(B) R (D) Cannot be determined				
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Directions for question 27: These questions are based on the following information.

T<sub>1</sub>, T<sub>2</sub> and T<sub>3</sub> are three trains that leave station S<sub>1</sub> and reach station S2. The train number and the order in which they depart or arrive is not the same. The first train to leave  $S_1$  is the third train to reach  $S_2$ .

**27.** Which train is the first to leave from  $S_1$ ?

(A)  $T_1$ 

(B) T<sub>2</sub>

(C)  $T_3$ 

(D) Either T<sub>2</sub> or T<sub>3</sub>

Directions for questions 28 to 32: These questions are based on the following information given below.

Five students P, Q, R, S, and T got some marks in the exam. Further it is known that.

- exactly 2 students got same marks.
- Q got more marks than R.
- T got more than S but less than R.
- P got more marks than exactly one person.

28. Who among the following got same marks?

(A) P, S

(B) R, T

(C) T, Q

(D) T, P

29. Who got the highest marks?

(A) Q

(B) R

(C) T

(D) S

30. Who got the least marks?

(A) Q

(B) S

(C) T

(D) R

31. How many students got less marks than R?

(A) One

(B) Two

(C) Three (D) Four

32. Which of the following is true?

- I. P got same marks as Q got.
- II. R got the 2<sup>nd</sup> highest marks.
- III. T got the same marks as P got.
- (A) Only I

(B) Only II

(C) Only II and III

(D) Only I and III

Directions for questions 33 to 36: These questions are based on the following information.

Six monkeys A, B, C, D, E and F are seated around a circular table. Each one has a different coloured tail among Blue, Black, Green, Orange, Red and Yellow. It is further known that.

- A is sitting opposite to E.
- II. F is to the immediate left of the monkey with yellow
- III. The monkeys that have black and blue coloured tails are seated adjacent to each other. However, neither of them is E.
- IV. C, the monkey with orange tail, is seated to the immediate right of E.
- V. A has Yellow coloured tail.
- 33. What is the colour of the tail of Monkey F?
  - (A) Blue
  - (B) Black
  - (C) Green
  - (D) No suitable answer choice is given.
- 34. If the colour of the tail of monkey E is red, which of the following is definitely the colour of the tail of monkey adjacent to A?
  - (A) Green (B) Black

- (C) Blue
- (D) Orange

- 35. If B is adjacent to E, then what is the colour of the tail of B?
  - (A) Blue

(B) Black

(C) Orange

- (D) Black or Blue
- 36. If the monkey B is adjacent to A, then which monkey is opposite F?

(A) C

(B) E

(C) B

(D) D

Directions for questions 37 to 40: These questions are based on the following information.

After six months of coaching, there was a discussion among some students regarding who attended more classes. When they asked the faculty, he gave the following information.

- Chinmay attended more classes than Tiscon and Tony but fewer classes than Hillary and Baskar.
- Balu attended fewer classes than Baskar, Tywin and Tiscon.
- 3. Harish attended more classes than Hillary and Baskar.
- Tony attended Fewer classes than Balu, Tywin, Hillary and Tiscon.
- Chinmay attended more classes than Tywin.
- Tiscon attended fewer classes than Tywin.
- 37. Who among the following four has attended the highest number of classes compared to the remaining three?
  - (A) Chinmay

(B) Tywin

(C) Tiscon

(D) Balu

38. Who attended the least number of classes?

(A) Tywin (B) Tiscon (C) Tony

(D) Balu

- 39. If Baskar is not the one who attend the second greatest number of classes, who attended the second greatest number of classes?
  - (A) Hillary (C) Chinmay

(B) Harish

(D) Cannot be determined

(A) Tony

(B) Balu

40. Who attended the second least number of classes? (C) Tiscon (D) Tywin

Directions for questions 41 to 44: These questions are based on the following information.

Each of the six friends Jon, Ron, Bronn, Ma, Ben and Finn went to a different movie among Ironman, Spiderman, Avengers, Captain Marvel, Thor and Hulk. It is further known that.

- Neither Jon nor Bronn went to watch either Thor or Hulk.
- Ma and Ben did not go to any movie other than Avengers and Spiderman.
- Bronn did not go to Ironman.
- Finn did not go to Hulk.
- Ben did not go to Spiderman.
- 41. Who went to watch the movie Captain Marvel? (C) Bronn (D) Jon

(A) Ben

(B) Ma

42. Which movie did Jon go to?

(A) Avengers (C) Captain Marvel (B) Spiderman (D) Ironman

43. Which movie did Finn go to?

(A) Thor (C) Hulk

(B) Spiderman (D) Ironman

44. Who went to watch the movie Hulk?

Directions for questions 45 to 48: These questions are based on the following information.

Each of the seven friends A, B, C, D, E, F and G attended a party in a different hotel among Taj, Leela, Oberoi, Hyatt, Lodhi, ITC and Westin. It is further known that.

- Neither A nor B visited Taj, Leela or Oberoi hotels.
- G and C visited hotel Lodhi and hotel Hyatt respectively.
- III. D did not visit either Leela or Oberoi hotel.
- IV. F did not visit Oberoi hotel.
- V. A did not visit hotel Westin.
- 45. Who visited hotel Taj?
  - (A) C
- (B) D
- (C) E
- (D) F
- **46.** Which hotel did E visit?
  - (A) Taj
- (B) Leela
- (C) Oberoi (D) Lodhi
- 47. Which hotel did F visit?
  - (A) Taj
- (B) Leela
- (C) Oberoi (D) Lodhi
- 48. Who visited hotel ITC?
  - (A) A
- (B) B
- (C) E
- (D) F

Directions for questions 49 to 52: These questions are based on the following information.

Seven students Arya, Bran, Cat, Dany, Eddard, Frey and Gendry read the history of some of the seven kingdoms -Winterfell, Vale, Iron islands, Casterly rock, Highgarden, Stormlands and Dorne. The following information is known.

- Arya read the history of Casterly rock, Winterfell and Stormlands.
- Bran read the history of Winterfell, Highgarden and Dorne.
- III. Cat read the history of Dorne, Stormlands and Casterly Rock.
- IV. Dany read the history of Vale, Iron Islands and Dorne.
- Eddard read the history of Vale, Casterly rock, Winterfell and Stormlands.
- VI. Frey read the history of Iron Islands and Stormlands.
- VII. Gendry read the history of Winterfell, Iron islands, Stormlands and Dorne.
- 49. The history of which kingdom is read by the most number of people?
  - (A) Winterfell
- (B) Stormlands
- (C) Casterly Rock
- (D) Iron Islands
- 50. The history of which among the following kingdoms is read by exactly three people?
  - (A) Winterfell
- (B) Stormlands
- (C) Casterly Rock
- (D) Dorne
- 51. The history of which among the following kingdoms is read by exactly four people?
  - (A) Stormlands
- (B) Casterly Rock
- (C) Dorne
- (D) Iron Islands
- 52. The history of which kingdom is read by the least number of people?
  - (A) Vale
- (B) Highgarden
- (C) Dorne
- (D) Iron Islands

Directions for questions 53 to 56: These questions are based on the following information.

There are five students P, Q, R, S and T who like some of the sports among Polo, Skating, Rugby, Baseball and Hockey and some of the movie genres among Thriller, Horror, Comedy, Action and Romance. We also know that.

- P likes Polo, Skating sports and Action and Comedy movies.
- Q likes Rugby, Hockey, Baseball, Thriller, Horror and Romance movies.
- III. R likes Polo, Rugby and Baseball sports and Comedy, action and Romance movies.
- IV. S likes Skating, Baseball and Hockey sports and Action, Thriller, comedy and Romance Movies.
- T likes Polo, Skating and Baseball sports and Thriller, Horror and comedy movies.
- 53. Which of the following sports is liked by highest number of students?
  - (A) Polo
- (B) Skating
- (C) Rugby
- (D) Baseball
- 54. Which of the following genre movies is liked by least number of students?
  - (A) Thriller
- (B) Horror
- (C) Action
- (D) Romance
- 55. Which of the following persons like neither any movie nor any sport liked by Q?
  - (A) P
- (B) R
- (C) S
- (D) T
- 56. How many students like both thriller movies and polo sport?
  - (A) 1
- (B) 2
- (C) 3
- (D) 4

Directions for questions 57 to 60: These questions are based on the following information.

Each of the six persons A, B, C, D, E and F is wearing a different sari among cotton, nylon, silk, woolen, linen and jute. Out of the six persons, four of them must be selected for the role of board member. It is further known that.

- If A is selected then the person wearing jute sari must not be selected.
- F is selected only if the persons wearing the nylon and cotton saris are selected.
- III. C, the person who is wearing the cotton sari, and D, the person who is not wearing nylon sari, are to be selected together.
- IV. E is selected only if A is not selected and the person wearing nylon sari is selected.
- Neither D nor E is wearing jute sari, while neither A nor E is wearing silk sari.
- VI. Neither E nor B is wearing woolen saree.
- 57. Who among the following must be selected?
  - (A) A
- (B) E
- (C) C
- (D) F
- 58. If F is selected, among the following, what is the sari worn by the person who is definitely not selected? (B) Cotton (C) Silk (D) Linen (A) Nylon
- 59. What saree did A wear?
  - (A) Nylon (B) Woolen (C) Silk
- (D) Linen
- 60. If the person with Linen saree is selected, then who among the following is definitely not selected? (C) E (A) C (B) D (D) F

## Exercise - 7(b)

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

Each one of the five persons - D and E is lives in a different house which are along one side of a street. Each of these houses is painted with a different colour among Red, Pink, Blue, Green and White.

- (1) The house which painted in Red colour is on the right hand side of the house in which A lives, which is painted with Blue.
- (2) Neither D nor E is living in extreme houses.
- C is living in the house which is immediately left to the house in which E is living.
- (4) Neither B nor D is in Red colour house.
- (5) Either E or D is in Green colour building which is to the immediate left of the Red colour building.
- (6) Neither of the extreme houses are painted with White.
- 1. What is the colour of the building in which B lives?
  - (A) Pink

(B) White

(C) Red

- (D) None of these
- 2. What is the colour of the building which is to the immediate left of the Pink coloured building?
  - (A) White

(B) Red

(C) Blue

- (D) Cannot be determine
- 3. Who stays in the extreme left end house?

(A) A

(C) E (B) D (D) B

- 4. What is the colour of the building which is at the middle of the row?
  - (A) White

(B) Red

(C) Green

- (D) Either (A) or (B)
- 5. How many houses are to the right of D's house? (B) 2 (C) 3 (D) 4

Directions for questions 6 to 10: These questions are based on the following information.

Eight persons – A to H – sit around a square table facing different directions such that four persons sit at the four corners of the table and the remaining sit at centre of each side of the table. They play different games among cricket, football, volleyball, squash, badminton, tennis, kabaddi, and hockey but not necessarily in the same order. No two adjacent persons face the same direction. A plays neither cricket nor volleyball and sits second to the left of the football player. E plays either tennis or kabaddi and sits at one of the corners. Tennis player and cricket player sit opposite each other. D sits second to the right of A. Either D or G plays kabaddi. Kabaddi and cricket players sit adjacent to each other. Football player sits adjacent neither to F nor to the squash player. C sits adjacent to squash player. Volleyball player and H sit adjacent to each other. H plays neither squash nor badminton. B sits second to the right of the hockey player.

Who among the following plays cricket?

(A) A

(B) C

(C) B

(D) D

7. F plays which game?

(A) Cricket

(B) Vollevball

(C) Kabaddi

- (D) Squash
- 8. What is the position of C with respect to the cricket player?
  - (A) Immediate right
- (B) Immediate left
- (C) Second to the right (D) Second to the left

**9.** Which of the following 'player–game' combination is true?

(A) H - Hockey

(B) B - Squash

(C) C – Football

- (D) G Badminton
- 10. Which of the following statements is/are definitely true?
  - (A) B and E sit opposite each other.
  - (B) A plays hockey.
  - (C) C plays badminton.
  - (D) Both (A) and (C)

Directions for questions 11 to 15: These questions are based on the following information given below.

There are six families living in different floors of an apartment starting from 1st floor. Each family has a different car among Palio, Swift, Ritz, Spark, Figo and Punto, not necessarily in the same order.

- The Khanna family stays on the 4th floor and does not own a Spark.
- The family which has Ritz stays on the 5<sup>th</sup> floor.
- The Khurana family has Punto and stays in the final floor.
- The Rajput family stays immediately above the Khan family.
- The family which has Figo stays on the 1st floor.
- The Kapoor family stays below the Dixit family.
- The Khan family owns a Swift.
- 11. Which family owns a Spark?
  - (A) Rajput (B) Khanna (C) Khan
- (D) Dixit
- 12. On which floor does the Rajput family stay?

(A) 5st

(B) 2<sup>nd</sup>

(C) 3<sup>rd</sup>

13. Which car is owned by the Dixit family?

(A) Spare (B) Figo

(C) Bright

(D) Ritz

14. Which car is owned by the family staying on the 4th floor?

(A) Figo

(B) Palio

(C) Ritz

(D) Swift

- 15. Which of the following statements is true?
  - The Kapoor family stays on the 2<sup>nd</sup> floor and owns a Swift.
  - The Kapoor family stays on the 1st floor and owns a Figo.
  - III. The Khan family stays on the 2<sup>nd</sup> floor and owns a Swift.

(A) Only I

(B) Only II

(C) Only I and III

(D) Only II and III

Directions for questions 16 to 20: These questions are based on the following information.

Eight persons of different heights are stood in a queue. Only one person is ahead of the eighth tallest person. Number of persons ahead of the second tallest is same as the number of persons behind the second shortest person. The fifth tallest person stood immediately ahead of the second tallest. The eighth tallest person is immediately behind the tallest person. The third tallest person is exactly in between the fourth and the sixth tallest persons.

16. How many persons are ahead of the fifth tallest person?

(A) 3

(B) 2

(C) 4

- 17. What is the position of the 'fourth tallest person? south, not necessarily in that order. Each person faces (A) Four positions behind the second tallest person. exactly one person who sits on the opposite side. The (B) Two positions behind the sixth tallest person. following information is known about them. (C) Five positions behind the sixth tallest person. (D) Cannot be determined 18. Who is immediately ahead of the fourth tallest person? (A) The second tallest person. The third tallest person. (C) The eighth tallest person. father, who is not R. (D) Cannot be determined **26.** Who is to the immediate right of P? 19. How many people stood behind the second tallest (A) R's father (B) P's sister person? (C) D's father-in-law (D) R (A) 2 (C) 5 (D) None of these 27. Which of the following persons sits at an end? (B) R 20. How many persons stood in between the third tallest (C) Q's daughter (D) B's father and second shortest persons? (A) 1 28. Who sits opposite C's uncle? (C) 3 (D) None of these (A) C's mother (B) C's cousin (C) C's grandfather (D) C's aunt Directions for questions 21 to 25: These questions are based on the information given below. 29. Four of the following are alike in a certain way and so form a group. Find the one which does not Five players L, M, N, Q and P are of different ages, belong to that group. scored different number of centuries and also have (A) D (C) Q (D) R (B) A different averages. In each parameter they are ranked from 1 to 5 i.e., the oldest gets rank 1 and the youngest 30. Which of the following statements is true? gets rank 5. Similarly the player who scored the highest (A) Q is at the left end (B) B is at the right end number of centuries is ranked 1 and the one who scored (D) R is the brother of A (C) A is the sister of C least number of centuries is ranked 5. The player with the highest average is given rank 1 and the least Directions for questions 31 to 35: These questions are average is given rank 5. Further based on the information given below. no two players got the same rank in any parameter. Four friends Anil, Bharat, Chetan and Divya have no player got the same rank in any two parameters. travelled different distances among 120 m, 180 m, 240 P, who is the oldest of all does not have the least m, and 300m not necessarily in same order and in number of centuries. different amounts of time among 15s, 20s, 30 and 40s N, who is not the youngest has the highest average. not necessarily in same order. the rank obtained by "Q" in number of centuries is The speed of Bharat is more than that of Divya but same as the rank obtained by M in age. less than that of Chetan, whose speed inturn is less the rank given to P in average is the same as the than that of Anil. rank given to L in number of centuries. The person with the highest speed did not travel the Q has the 2<sup>nd</sup> least average and L is the 3<sup>rd</sup> oldest. P does not have the least average. amount of time. 21. Which rank did L get in the number of centuries?
  - (B) 2<sup>nd</sup> (C) 3<sup>rd</sup> (D) 4th (A) 1st highest speed.
- 22. Who got the highest number of centuries?
- (D) P (B) Q (A) L (C) M
- 23. Who is the youngest player? (A) L (B) Q (C) N (D) M
- **24.** Who has the 2<sup>nd</sup> highest average? (B) Q (D) M (A) P (C) L
- 25. Which of the following is true?
  - (A) N got better rank than M in all three parameters.
  - (B) L got better rank than N in all three parameters.
  - (C) M got better rank than N in all three parameters.
  - (D) None of these

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

Eight persons of the same family sit around a rectangular table in such a way that four persons - A, B, C and D - sit along one of the longer sides of the table, facing north and the other four persons - P, Q, R and S - sit along the other longer side of the table facing

P is the brother of Q, who is not adjacent to either P or S. A is the daughter of P and sits to the immediate right of B's husband. D is opposite to neither P nor S. C is the niece of P but is not opposite to either P or S. B is not opposite S, but is opposite her brother. D has only one child who is a male. Q is the daughter of C's grand

- longest distance and did not travel for the least
- The person with 8 m/s is not the person with the
- No two persons have the same speed.
- No person has less than 5 m/s speed.
- 31. Who among the following has travelled the least distance?
  - (A) Anil (B) Chetan (C) Bharath (D) Divya
- 32. What is the speed of the person who travelled 120 m? (A) 6 m/s (B) 7.5 m/s (C) 8 m/s (D) 12 m/s
- 33 What is the highest speed? (A) 6 m/s (B) 7.5 m/s (C) 8 m/s (D) 12 m/s
- 34. What is the lowest speed?

(B) 7.5 m/s (A) 6 m/s (D) 12 m/s (C) 8 m/s

- **35.** Which of the following statements is / are true?
  - I. Chetan travelled 120 m at a speed of 8 m/s.
  - Bharat travelled 300 m at 10 m/s.
  - III. Divya travelled for 30 sec at 6 m/s.
  - (A) Only I (C) Only II and III

(B) Only III (D) Only I and III

Triumphant Institute of Management Education Pvt. Ltd. (T.I.M.E.) HO: 95B, 2nd Floor, Siddamsetty Complex, Secunderabad – 500 003. Tel: 040-40088400 Fax: 040-27847334 email: info@time4education.com website: www.time4education.com SM1002107/47

Directions for questions 36 to 40: These questions are based on the following information given below.

Four articles A, B, C, and D have different market prices among ₹150, ₹225, ₹300, and ₹375, not necessarily in the same order. Discount is given on these articles. The discount percentage offered is among 30%, 40%, 50% and 60%, not necessarily in the same order. Further it is known that

- the article B is sold at less discount than D but more than A, which in turn is sold at more discount than C.
- the article which gets maximum discount neither has the highest market price nor has the highest discount percentage.
- ₹112.5 is not the highest discount obtained
- no two articles have same discount offered.
- 36. What is highest discount offered?

(A) ₹150 (B) ₹120

(C) ₹112.50 (D) ₹100

37. What is the lowest discount offered?

(A) ₹150 (B) ₹120

(C) ₹112.50 (D) ₹60

38. What is the discount offered on article B? (C) ₹120

(A) ₹150

(B) ₹135

(D) ₹110

(D) ₹212.50

39. Which article has the highest selling price?

(A) A

(B) B

(C) D (D) Cannot be determined

40. What is the highest selling price? (B) ₹262.50 (C) ₹240

Directions for questions 41 to 45: These questions are based on the following information given below.

A team is to be selected from the six people P, Q, R, S,

T and U depending on the following criteria.

- If P is selected, Q is also selected.
- Only if U is not selected, T is also not selected.
- Unless S is selected, R is not selected.
- Exactly one between R and P must be selected.
- 41. If R is selected, then who is selected in a team of three people?

(A) Q

(B) T

(C) U

(D) Either (A) or (B)

- 42. If T is not selected, then what is the least possible size of the team?
  - (A) One
- (B) Two
- (C) Three (D) Four
- 43. If Q is selected then what is the maximum possible size of the team?

15. D

20. D

- (A) One
- (B) Two
- (C) Five
- (D) Four

- 44. Who is not selected in a team of five?
  - (A) P (C) U

(D) Either (A) or (B)

- 45. Which of the following is true?
  - I. P and S cannot be selected together.
  - When Q is selected P may or may not be selected.
  - III. S and U are not in the team together.
  - (A) Only I

(B) Only II

(C) Only I and III

(D) Only II and III

Directions for questions 46 to 50: These questions are based on the information given below.

Seven places Hyderabad, Bangalore, Delhi, Kerala, Chennai, West Bengal and Gujarat as well as the seven prominent players from these places. Each player is from a different place.

- Sachin is not from Delhi and Sehwag is not from Kerala.
- Raina is neither from Hyderabad nor from Bangalore
- Munaf is either from Chennai or Gujrat.
- Dhoni and Yuvraj are neither from Banglore nor from
- Kohli is either from Chennai or West Bengal.
- 46. If Raina is from Delhi then Sachin is from which of the following states?
  - (A) Hyderabad
- (B) Kerala
- (C) Banglore
- (D) Chennai
- 47. If Sachin is from Hyderabad then from which place does Raina come?
  - (A) Delhi
- (B) Kerala
- (C) West Bengal
- (D) Gujrat
- 48. If Raina is from West Bengal then who is from Banglore?
  - (A) Muraf
- (B) Sachin
- (C) Sehwag
- (D) Kohli
- 49. If Kohli is not from West Bengal then Munaf is from which place?
  - (A) Bangalore
- (B) West Bengal
- (C) Delhi
- (D) Gujarat
- 50. If Sachin is from West Bengal then how many combinations are possible?
  - (A) One
- (B) Two
- (C) Three (D) Four

50. B

# Key

# Exercise - 7(a)

1. C 2. D 3. B	7. A 8. D 9. A	13. C 14. D 15. B	19. B 20. A 21. C	25. D 26. B 27. B	31. C 32. C 33. D	37. A 38. C 39. A	43. A 44. B 45. B	49. B 50. C 51. C	55. A 56. A 57. C
3. В 4. D 5. В	10. A 11. D	16. D 17. D	22. D 23. A	28. D 29. A	34. A 35. D	40. B 41. C	46. C 47. B	52. B 53. D	58. D 59. B
6. C	12. B	18. C	24. D	30. B	36. D	42. D	48. A	54. B	60. D
				Exerc	ise — 7(b)				
1. A 2. A 3. A	6. C 7. B 8. C	11. A 12. C 13. D	16. B 17. D 18. C	21. B 22. C 23. D	26. C 27. C 28. D	31. B 32. C 33. D	36. A 37. D 38. B	41. D 42. B 43. C	46. B 47. B 48. C

Triumphant Institute of Management Education Pvt. Ltd. (T.I.M.E.) HO: 95B, 2<sup>nd</sup> Floor, Siddamsetty Complex, Secunderabad – 500 003. Tel: 040-40088400 Fax: 040-27847334 email: info@time4education.com website: www.time4education.com SM1002107/48

30. B

35. D

40. B

45. B

25. D