

## Answers to Practice Exercises:

### Linear Arrangement Exercise:

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1. B  | 2. D  | 3. A  | 4. C  | 5. B  |
| 1. C  | 7. D  | 8. B  | 9. C  | 10. B |
| 11. C | 12. D | 13. D | 14. A | 15. C |

### Vertical, Circular, Others Exercise :

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1. B  | 2. D  | 3. B  | 4. A  | 5. B  |
| 6. C  | 7. A  | 8. C  | 9. D  | 10. A |
| 11. C | 12. A | 13. B | 14. C | 15. C |

### Tabular or Grid Based Exercise :

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1. A  | 2. B  | 3. D  | 4. C  | 5. C  |
| 6. D  | 7. A  | 8. C  | 9. B  | 10. B |
| 11. B | 12. A | 13. B | 14. D | 15. C |

### Grouping or Condition Based Exercise :

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1. C  | 2. C  | 3. D  | 4. D  | 5. D  |
| 6. A  | 7. B  | 8. D  | 9. D  | 10. A |
| 11. B | 12. C | 13. B | 14. D | 15. A |

### Blood Relations Exercise Set Based :

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1. C  | 2. D  | 3. C  | 4. D  | 5. A  |
| 6. B  | 7. B  | 8. D  | 9. A  | 10. C |
| 11. B | 12. C | 13. B | 14. A | 15. C |

**Blood Relations Exercise Others :**

- |      |      |      |      |       |
|------|------|------|------|-------|
| 1. B | 2. A | 3. C | 4. D | 5. D  |
| 6. B | 7. A | 8. D | 9. B | 10. A |

**Coding Decoding Exercise :**

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1. A  | 2. C  | 3. B  | 4. B  | 5. C  |
| 6. C  | 7. A  | 8. D  | 9. C  | 10. C |
| 11. D | 12. B | 13. C | 14. A | 15. C |

**Direction Sense Exercise :**

- |      |      |      |      |       |
|------|------|------|------|-------|
| 1. D | 2. B | 3. A | 4. B | 5. C  |
| 6. A | 7. D | 8. C | 9. D | 10. A |

**Series Completion Exercise :**

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1. C  | 2. D  | 3. B  | 4. C  | 5. A  |
| 6. C  | 7. C  | 8. D  | 9. D  | 10. D |
| 11. A | 12. C | 13. A | 14. C | 15. A |

**Miscellaneous Exercise :**

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1. A  | 2. C  | 3. B  | 4. A  | 5. A  |
| 6. D  | 7. C  | 8. A  | 9. C  | 10. A |
| 11. A | 12. C | 13. C | 14. B | 15. D |

# Practice Exercises

## Level 2

### Answers and Explanations :

#### Exercise 1 : Arrangement Based 1

##### Set 1 :

1. It is given that the English Book is at the 3<sup>rd</sup> position and 2<sup>nd</sup> to the left of the Science Book. It means that the Science Book is at position 1 ie the leftmost position in the arrangement.
2. Since there are exactly 2 books between the Science and Sanskrit book, the Sanskrit book is at position 4.
3. Also, the History book is to the immediate right of the Maths book. Therefore, the Maths book must be at position number 6 and History book at position number 5.
4. The Hindi book must be at position number 2.

The Final Arrangement is as follows :

Science x Hindi x English x Sanskrit x History x Maths.

Ans 1 : Option d

Ans 2 : Option a

Ans 3 : Option b

Ans 4 : Option d

##### Set 2 : General Explanations

1. It is given that Finance, HR and Marketing are located on odd numbered Floors ie Floor numbers 1,3 and 5 in no particular order.
2. The Marketing Department is immediately above the Library while the Finance Department is located somewhere above the HR department. ie both these departments cannot be located on the first floor of the building. Therefore the HR department is on the first floor.
3. Either Marketing or Finance can be on the 3<sup>rd</sup> Floor and accordingly, 2 possible arrangements exist.

Option 1 :      Lab  
                  Finance  
                  Acads  
                  Marketing  
                  Library  
                  HR

Option 2 :      Acads  
                  Marketing  
                  Library  
                  Finance  
                  Lab  
                  HR

Ans 5 : Option d

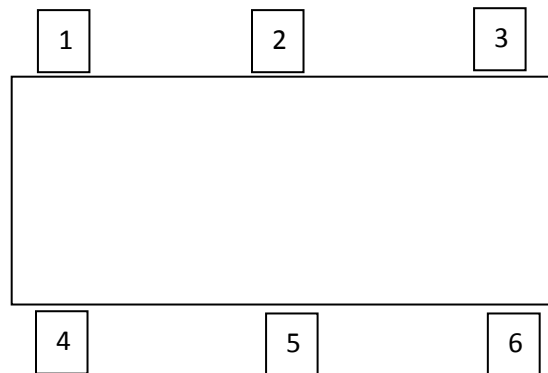
Ans 6 : Option b

Ans 7 : Option d

Ans 8 : Option a

**Set 3 : General Explanations**

Let us first indicate the seating arrangement using positions :



There can be 2 cases :

**Case 1 :** 1. Let the Geography expert be at position 4. Since the Philosophy expert is sitting next to experts who have reviewed Politics and Sociology and the Geography expert has not reviewed Sociology, let the Philosophy expert be at Position 2.

2. Now position 1 and 3 will be occupied by the Science and Sociology expert since neither Pub.Ad. expert nor Politics expert can be seated adjacent to the Philosophy expert. (Condition number 1 in the problem).

3. This further means that Pub. Ad. and Politics expert will have to occupy positions 5 and 6 which in turn will violate condition 1.

Therefore Case 1 cannot be possible.

**Case 2 :** The Geography expert is at position 4 and the Philosophy expert at Position 5.

1. The Geography expert must have reviewed Politics and the expert at position 6 must have reviewed Sociology.
2. This would further indicate that the Politics and Pub.Ad. experts are seated at positions 1 and 3 in no particular order.
3. It is given that one of the experts sitting in the middle has reviewed philosophy. Since no expert has reviewed his or her own work, therefore the person sitting at Position 2 must have reviewed Philosophy.
4. The person who has reviewed Geography is sitting on the same side as the Geography expert. This must be the Philosophy expert sitting at Position 5.
5. The expert at position 6 has reviewed Sociology. Therefore it cannot be the Sociology expert. Also, this position cannot be occupied by either of the Pub.Ad. or Politics experts. This means the person at position 6 must be the Science expert.
6. Therefore the person at position 2 is the Sociology expert.

The final arrangement would be as follows :

Position 1	Position 2	Position 3
Pub. Ad or Politics (Science or Pub.Ad.)	Sociology (Philosophy)	Pub.Ad. or Politics (Science or Pub.Ad.)
(Politics)	(Geography)	(Sociology)
Geography	Philosophy	Science
Position 4	Position 5	Position 6

We cannot be sure about the exact positions of the Politics and the Pub. Ad. experts. Also, Information in Brackets is the subjects reviewed by each expert.

Ans 9 : Option a

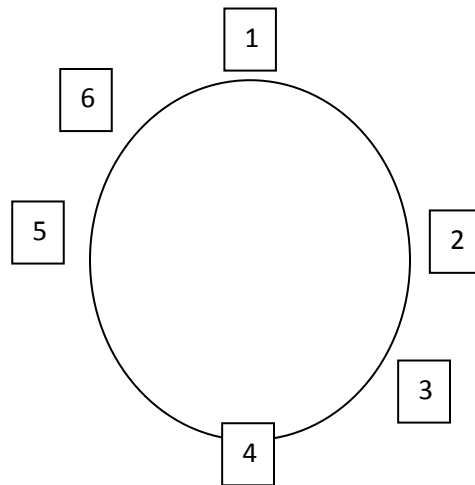
Ans 10 : Option d

Ans 11 : Option d

Ans 12 : Option c

**Set 4 : General Explanations :**

Let us first Look at how the arrangement has been done.



1. Let the IB expert be at position 4. Therefore, the Marketing expert will be at position 1.
2. Since Q, the IB expert is to the immediate left of the HR expert, therefore the HR expert will be at position 3.
3. It is given that O is the Marketing Expert.
4. Now P cannot be a Marketing or IB expert. Also given that P is not an IT or Finance expert and is sitting opposite to the Operations expert. Therefore P is the HR expert. This would mean that R, the operations expert is at Position 6.
5. The Finance and IT experts are therefore at positions 2 and 5 not in any order. But M is not adjacent to the HR expert. So M is at position 5 and the IT expert N is at position 2.

Ans 13 : Option d

Ans 14 : Option a

Ans 15 : Option b

Ans 16 : Option c

**Set 5 : General Explanations :**

1. It is given that Q got Rank 1 in Computer Funda while O got Rank 3 in Prog. Basics.
2. Also P got a higher rank than O in Prog. Basics. Since P did not get Rank 1 in any of the 2 subjects, therefore, P must have got Rank 2 in Prog. Basics.
3. M is the only person to get the same Rank in both the Tests. It could be either Rank 4 or 5. But P got a lower Rank than M in Computer Funda.

Therefore, M must have got Rank 4 in Computer Funda and so Rank 4 in Prog. Basics as well.

The Partial arrangement of Ranks is as follows:

Prog. Basics	1	2	3	4	5
		P	O	M	
Comp. Funda	1	2	3	4	5
	Q			M	P

4. Since M is the only person to get the same Rank in both the Tests, therefore, O cannot get Rank 3 in Comp. Funda. O must have got Rank 2 in Comp. Funda and N must have got Rank 3.

5. Similarly, Q cannot get Rank 1 in Prog. Basics. Q must have got Rank 5 in Prog. Basics and N must have got Rank 1.

Ans 17 : Option b

Ans 18 : Option d

Ans 19 : Option d

Ans 20 : Option c

## Arrangement Based 2

### Set 1:

1. It is given that A is 4 ranks above E but E is not the lowest scorer in the Test which means that E must not have got Rank 6. The only possibility is E getting Rank 5 and A getting Rank 1.
2. C has got Rank 2. Also B and F have got 2 consecutive ranks and therefore they must have got ranks 3 and 4 in no particular order which further means that D must have got the last rank ie Rank 6 among the mentioned students.
3. The Final arrangement of students and their ranks is as follows :  
Rank 1 : A  
Rank 2 : E  
Rank 3 : B or F  
Rank 4 : B or F

Rank 5 : E

Rank 6 : D

Ans 1 : Option d

Ans 2 : Option b

Ans 3 : Option c

**Set 2 : General Explanations**

It is given that the Tests have to be scheduled from Monday to Sunday. Also, there has to be a gap of at least 1 day between any 2 slots which means that the Tests have to be scheduled on Monday, Wednesday, Friday and Sunday.

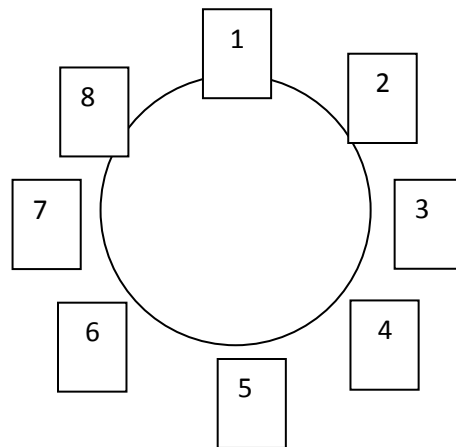
- a. Maths is the last Test to be conducted and therefore will be scheduled on Sunday.
- b. Since the English Test cannot be conducted after Thursday, it has to be conducted on either Monday or Wednesday. But if the English Test is scheduled on Wednesday, then Reasoning cannot be scheduled on Monday or Friday. Therefore, the English Test has to be scheduled on Monday.
- c. If English Test is scheduled on Monday, Reasoning has to be scheduled on Friday and General Knowledge on Wednesday.

Ans 4 : Option a. The Tests can be scheduled in only 1 way.

Ans 5 : Option c

Ans 6 : Option b

**Set 3 :**



From the given conditions, the following can be deduced :



1. Rakesh and Ritesh are sitting directly opposite each other say at positions 1 and 5 respectively.
2. Rashmi is sitting 3<sup>rd</sup> to the left of Rakesh ie at position 4. This could be either Rakesh's wife or Ritesh's daughter.

Case 1 : Rashmi at Position 4 is Rakesh's wife. Now since it is given that each person sits between 2 people of the opposite gender, therefore, there has to be a male at Position no 6 and it cannot be Ritesh's son Rahul (as per condition 3 in the given question) . Therefore, it has to be Rakesh's son Rohan. But this would violate the condition that each child has at least 1 parent as his or her immediate neighbor. Therefore, Case 1 is not correct.

Case 2 : Rashmi at Position 4 must be Ritesh's daughter. Also, using the logic given above, Rohan must be at Position 6. Now Rohan has at least 1 parent as his immediate neighbor and so Rakesh's wife Rashmi must be at Position 7.

3. Rashmi needs to have a lady on her immediate left. It has to be her daughter Raddhika at position no 8.
4. Position 2 will be Ritesh's son Rahul and position 3 will be Ritesh's wife Roshni.

Ans 7 : Option a

Ans 8 : Option d

Ans 9 : Option c

**Set 4 :** From the conditions given, the following can be deduced

1. The Dentist lives on the topmost floor i.e floor no 7. Also from condition no 2 of the question, the Businessman must be either on Floor no 3 or Floor no 5. Using the same logic the Engineer and the Teacher must be on any 2 floors out of Floor nos. 2, 4 or 6.
2. Since, the Teacher had only 1 family as his immediate neighbor, the Teacher must be on Floor no. 2 (The first floor is the recreation club). This would mean that the Doctor is on Floor no 3.
3. Also, from point no 1 and 2 above, the Businessman must be on Floor no 5.
4. The Lawyer and the Engineer's family must be on Floor no 4 and 6 not in any particular order. But the Lawyer has more number of families living above him in the building as compared to the Engineer. Therefore, the Lawyer must be on Floor 4 and the Engineer must be on Floor no. 6.
5. The Final arrangement is as under :

Floor 7 : Dentist

Floor 6 : Engineer

Floor 5 : Businessman

Floor 4 : Lawyer

Floor 3 : Doctor

Floor 2 : Teacher

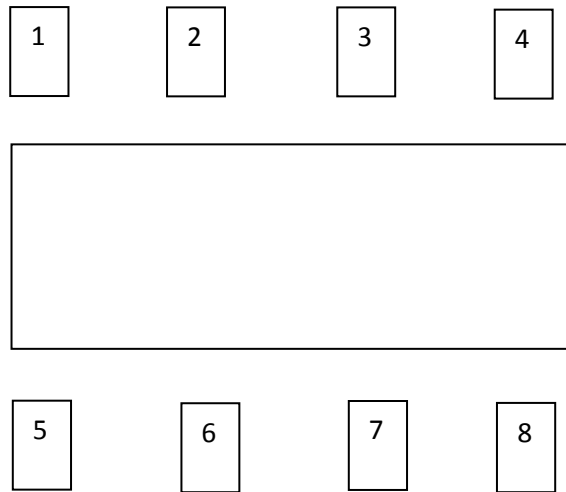
Floor 1 : Recreation club.

Ans 10 : Option b

Ans 11 : Option b

Ans 12 : Option c

**Set 5 :**



Let the 8 positions be as shown in the figure above. Let Astha be at position 1. Since there are 2 people sitting between Astha and Ashish, therefore, Ashish would be at position no. 4.

Alok is sitting opposite Ashish and will be at position no. 8. Alok is 2<sup>nd</sup> to the right of Ankita. Therefore, Ankita will be at Position no 6. Also, since Atul and Anita occupy adjacent positions they will be at position nos. 2 and 3 in no particular order.

Amit and Anu must be occupying the positions 5 and 7 in no particular order. Further, Astha does not have a girl sitting opposite to her. Therefore, Amit must be at position no 5, while Anu must be at position no 7.

Ans 13 : Option d because it could be either Atul or Anita.

Ans 14 : Option b

Position no 6 Ankita and Position no 7 Anu.

Ans 15 : Option a

Ans 16 : Option c

Ankita, Anu, Atul and Anita.

**Set 6 : General Explanations**

1. Ekalavya is at the extreme right of the arrangement ie at position 5.
2. The person with CE specialization is 2<sup>nd</sup> to the right of Dheeraj ie Dheeraj can be seated either at Position 3 or Position 4.
3. Let Dheeraj be at Position 4. Therefore, the person with CE specialization is at Position 2.
4. Now Bipin cannot be at position 1 or 2 (the person on the immediate left should be EE specialization) or 3 (Bipin cannot have ME as his specialization). Positions 4 and 5 are already occupied.
5. Therefore our assumption of Dheeraj being at Position 4 is incorrect.
6. Let Dheeraj be at Position 3. The person with CE specialization is at position 1. Now there are 2 positions that Bipin can occupy 1 and 4.
7. If Bipin is at Position 4, Ekalavya will have EE specialization. Charu will be at position 2 and Anubhav at Position 1. Now Bipin's specialization cannot be EE,CE,ME or EC. Also Bipin's specialization is not CS. This is not possible and so Bipin cannot be at Position 4.
8. Bipin has to be at Position 1 and so the person with EE specialization is at position 2. This person cannot be Charu and so the person at position 2 must be Anubhav. This would mean that Charu is at position 4.

The final positions alongwith specializations is as follows:

Position 1	2	3	4	5
Bipin	Anubhav	Dheeraj	Charu	Ekalavya
CE	EE	ME	EC	CS

Ans 17 : Option c

Ans 18 : Option b

Ans 19 : Option c

Ans 20 : Option a

**Arrangements : Non Deterministic 1**

**Set 1 :** The only condition that is certain is that Lakme Fashion Show is scheduled on Thursday. Also, since the Laughter Mania had more events that followed it as compared to those that preceded it, Laughter Mania must be either on Monday or Thursday.

1. Metallica concert cannot be the last event scheduled. Therefore, the event on Friday has to be either Dance Night or Quiz Show.

Ans 1 : Option b

If the Metallica concert is scheduled after the Quiz show, the Quiz show cannot be scheduled on Friday and therefore the event scheduled on Friday will be Dance Night.

Ans 2 : Option d

The Quiz Show can be scheduled on any day out of Monday, Wednesday or Friday.

Ans 3 : Option c

All the mentioned events except for Lakme Fashion Show can be scheduled on the first day.

Ans 4 : Option b

### **Set 2 : General Explanation**

1. There are 6 possible combinations that can be formed but out of these, Kebab only forms a combination with sweets. Therefore the 4 available combinations are  
(Kebab, Sweets), (Sweets, South Indian Platter), (Sweets, Chicken Biryani),  
(Chicken Biryani, South Indian Platter)
2. Minaz is not famous for sweets and therefore all the other 3 joints must have sweets in their combination. Also, the item combination in Minaz must be (Chicken Biryani and South Indian Platter).
3. The outlet in Najafgarh specializes in Kebabs and Sweets. It cannot be Rakims or Kawala Inn. The Outlet in Najafgarh must be Chaldiram.
4. Rakims is located at Pantheon Road.

The partial table looks as follows :

1. Minaz :Chicken Biryani, South Indian Platter : Bada Baazar or Rasoipur
2. Chaldiram :Kebabs and Sweets : Najafgarh
3. Rakims :Chicken Biryani, Sweets or South Indian Platter, Sweets : Pantheon
4. Kawala Inn : Chicken Biryani, Sweets or South Indian Platter, Sweets : Bada Baazar or Rasoipur.

Ans 5 : Option b

Ans 6 : Option a

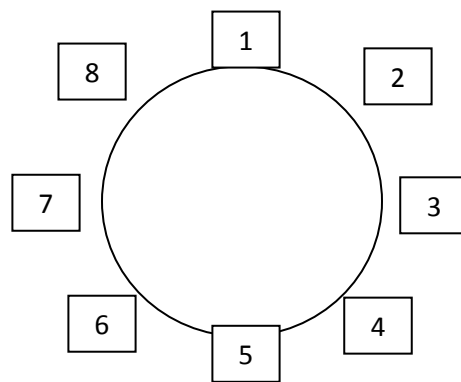
If Kawala Inn is located at Rasoipur, it has to specialise in South Indian Platter and Sweets since one of the 2 locations where South Indian Platter is famous is Rasoipur(Given). This would mean that Rakims will be known for Chicken Biryani and Sweets.

Ans 7 : Option d

Bada Baazar or Rasoipur.

Ans 8 : Option a

**Set 3** : Let us first decide the way these people are seated to play the game.



1. It is given that C started the Game and is at Position 3. Therefore, as per the given priority, C must have passed the parcel to the person at Position number 7.
2. Now person at Position 7 cannot use priority 1 and give it back to C otherwise the game will end. This person must therefore use priority 2 ie pass it to the person sitting 2 places to the right ie to the person at Position 5.
3. Since H is the 3<sup>rd</sup> one to receive the parcel, H will be at position number 5. Now H will have to use the 1<sup>st</sup> priority and pass it to the person sitting at Position number 1 ie B
4. The person at Position Number 1 will have to use the 3<sup>rd</sup> Priority and pass it to the person to the immediate right ie Position Number 8 ie E.
5. Person at Position Number 8 will have to pass it to the person at position number 4 which is G.
6. Person at position number 4 will pass it to person at position number 2.
7. Person at Position Number 2 will finally pass it to the person at position number 6.

Ans 9 : Option d

Ans 10 : Option b

A and F can be persons at position numbers 7 , 6 or 2. Since there are exactly 3 people sitting between A and F, therefore A and F will be at positions 2 and 6 in no particular order. ie the person at Position number 7 (opposite to C) will be D.

Ans 11 : Option b

If A gets the parcel sometime before H, A will be the 2<sup>nd</sup> one to get the parcel. Also, if D gets it immediately after G, D is the 7<sup>th</sup> person to get the parcel which in turn means that F is the last one to get the parcel.

Ans 12 : Option b

**Set 4 : General Explanations**

1. Mohit must have got position number 3. Also, Pramod must have got either position number 1 or 2.
2. Okif finished exactly 2 positions ahead of Nitin but Nitin was not ranked 5<sup>th</sup>. Also, Nitin cannot be at Rank 3 since Mohit has got Rank 3. Therefore, Nitin must be at Rank 4 which means that Okif must be at rank 2 and Pramod at Rank 1.
3. Lucky must have therefore got Rank 5.
4. First Rank is Pramod Bansal.
5. Verma got a better rank than Gupta but lower than Okif. This would mean that Okif is either Aggarwal or Sharma.

Ans 13 : Option b

Okif's Surname must be Sharma.

Ans 14 : Option d

If there is a gap of 2 positions between Sharma and Verma, it is only possible if Okif is Sharma. Therefore, Verma must be at position 5 but as per the given conditions, Verma cannot be the last one to finish as Verma got a better Rank than Gupta. Therefore statement 2 is definitely False. Statement 1 may be true.

Ans 15 : Option d

It could be either Sharma, Aggarwal or Gupta.

Ans 16 : Option a

Since the gap between Bansal and Mohit is exactly 1 Rank, the gap between Aggarwal and Gupta is also 1 Rank. Therefore, Okif must be Aggarwal and the person at the 4<sup>th</sup> position ie Nitin must be Gupta.

**Set 5 : General Explanations :**

In this problem, there can be 2 basic conditions based on whether Infogain or Infy is the first company to visit Campus.

Let Infy be the first Company to visit.

1. If Infy visits on Monday, the Company testing in .Net will not visit before Wednesday ie it will visit either on Wednesday, Thursday or Friday.
2. Cogni visits on Thursday and will test the skills in either Database or C. Also, The company testing in Datastructure will visit on Friday. Therefore, the company testing in .Net will visit on Wednesday.
3. Accen tests the skills in C++ and so it will visit on Tuesday.

The partial data for this case can be compiled as follows :

Mon	Tue	Wed	Thu	Fri
Infy	Accen	Wipro/Infogain	Cogni	Wipro/Infogain
Database/C	C++	.Net	Database/C	Datastructure

Now let us look at the second case. Let Infogain be the first company to visit

1. If Infogain visits on Monday, Accen will visit immediately before Infy. Since Cogni is on Thursday, it would mean that Accen will visit on Tuesday and Infy on Wednesday. This would further lead to Wipro visiting on Friday.

The partial data for this case can be compiled as follows:

Mon	Tue	Wed	Thu	Fri
Infogain	Accen	Infy	Cogni	Wipro
	C++			Datastructure

Based on this data, let us try to answer the questions

Ans 17 : Option d

Ans 18 : Option b

In both the cases, it can be seen that Accen will visit on Tuesday.

Ans 19 : Option d

If Wipro is certain to visit on the last day, we are definitely talking about the 2<sup>nd</sup> case ie Infy will visit on Wednesday but we cannot be sure about the additional skills tested.

Ans 20 : Option b

From the first case, we can see that if Infy visits on Monday, the company testing in .Net will visit on Wednesday.

## **Arrangements : Non Deterministic 2**

### **Set 1 : General Explanations**

1. Since C scored 18 Marks in the Test, C must have got 4 Questions correct and 1 wrong.
2. The number of Correct answers of B is more than that of D. Also, the number of correct answers of E is equal to that of A and B together. Therefore, E must have got more questions correct than both A and B. This would mean E must have got all 5 questions correct.
3. From point 2 above, we can also say that A and B must have got 2 and 3 questions correct, not in any particular order. This would mean D must have got only 1 Question correct.

Ans 1 : Option b

Ans 2 : Option d

It could be either 2 or 3.

Ans 3 : Option c

D has got 1 Question correct and 4 incorrect. Therefore, D must have got 5-8 ie -3 marks. Also, B must have either got  $15-4=11$  Marks or  $10-6=4$  Marks.

The average Marks of B and D together can be either  $(11-3)/2 = 4$  or  $(4-3)/2 = 0.5$  Marks.

Ans 4 : Option a

If A scored more than B, then A must have got 3 Questions correct and B must have got 2 Questions correct.

### **Set 2 : General Explanation:**

1. The Yellow line is going to the Airport and is the last Train to arrive. Also, Trains going to Airport and ISBT will arrive immediately one after the other



not in any particular order. Therefore, the Train going to ISBT will arrive 4<sup>th</sup> while the one going to Airport will be the last to arrive.

2. The Destination of the first Train is Dwarka and it will be either on the Silver line or the Black Line.
3. The Red Train's destination is not ISBT. It also is not Airport, Rohini or Dwarka. Therefore the destination of the Red Train will be Badarpur.
4. Since the Train going to Rohini is on the Blue Line, the Trains going to ISBT will be either on the Black or the Silver line.

The partial information can now be compiled as follows:

1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Dwarka	Badarpur	Rohini	ISBT	Airport
Black/Silver	Red	Blue	Black/Silver	Yellow

or

1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Dwarka	Rohini	Badarpur	ISBT	Airport
Black/Silver	Blue	Red	Black/Silver	Yellow

Ans 5 : Option c

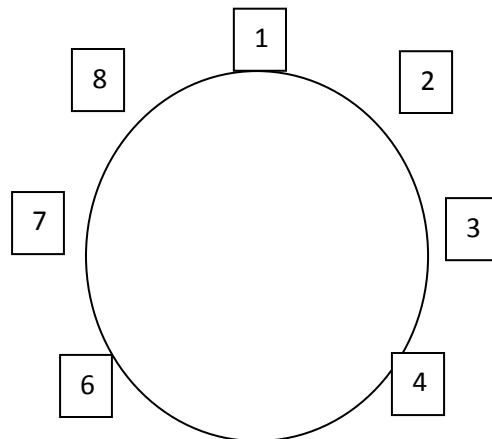
Ans 6 : Option a

Ans 7 : Option c

Ans 8 : Option d

**Set 3 : General Explanation:**

Let us first look at the way they have been seated



1. Let S be at Position 1. Therefore, Q is at position 5 and towards the table.
2. T is 3 places to the left of Q. T will be at position 8 and seated away from the Table.
3. R is 2<sup>nd</sup> to the right of T and so R must be at Position 2 seated away from the Table. Also, R is to the immediate right of V. Therefore, V must be at position 3, seated looking towards the Table.
4. P and W are not at adjacent positions.

Ans 9 : Option b

If P is directly opposite to R, then W must be at position 4.

Ans 10 : Option b

U can occupy either position 6 or position 7.

Ans 11 : Option d

P can be either at Position 6 or Position 7 and so we cannot be sure about the person seated to the immediate left of P.

Ans 12 : Option c

Since the 3<sup>rd</sup> position to the right of R is already occupied by S.

**Set 4** : General Explanation:

1. The Test can be scheduled only on any day from Wednesday to Saturday.
2. The 4 topics will have to be scheduled in the order Numerical Analysis, Integration, Finite Automata, Discrete Maths.
3. Numerical Analysis is the first class to be scheduled. This is not taken by Anand. Vishal is not the first one to take a class. Also Lalit's class is scheduled after Ms. Gaur takes a class. ie Numerical Analysis will be taken by Ms. Gaur.
4. Since Anand takes Discrete Maths, it would mean that Vishal and Lalit will take Integration and Finite Automata in no particular order.
5. Numerical Analysis will be scheduled on either Monday or Tuesday (If Monday is a Holiday).

Ans 13 : Option a

Ans 14 : Option d

The class on Thursday will be Finite Automata and can be taken by either Lalit or Vishal.

Ans 15 : Option a

If Vishal takes a class exactly 2 days before the Holiday, Vishal will have to take the class on Wednesday and Holiday will be on Friday. It would mean that Vishal is taking the 3<sup>rd</sup> topic in the Sequence ie Finite Automata and therefore Lalit will take the topic Integration.

Ans 16 : Option b

Set 5 : General Explanation :

Let us first indicate the positions in terms of numbers.

Second Row      5                                  6                                  7                                  8

First Row      1                                  2                                  3                                  4

1. India is the only Asian Country not represented in the 2<sup>nd</sup> row. It means that the captains of both Sri Lanka and Pakistan will be in the 2<sup>nd</sup> row.
2. Alistar, the South African captain was 3<sup>rd</sup> in the 2<sup>nd</sup> row. Also, Alistar was seated between Mhoni and Blarke. It means that one of Mhoni and Blarke will be at position 6 and the other one at position 8 in no particular order.
3. The Indian captain is at the rightmost end of the arrangement ie either at position 4 or position 8. But the Indian captain cannot be at position 8. Therefore, the Indian captain will be at Position 8.
4. Bismah the England captain is directly behind Smith the captain of West Indies. The only position available in the 2<sup>nd</sup> Row is position 5 which means Smith will be at position 1.
5. The number of persons between Pettori and Smith is same as that between Wammy and Hilshan. Therefore, Pettori can be either at position 2 or 3.

Ans 17 : Option b

If Blarke is seated behind Pettori, Blarke must be at position 6 and therefore Mhoni must be at position 8.

Ans 18 : Option c

Ans 19 : Option a

If Wammy is next to the Indian captain, Wammy must be at position 3, Pettori will be at position 2 and Hilshan at position 4.

Ans 20 : Option b

Pettori can occupy either position 2 or 3.

### **Tabular/Grid Based 1**

#### **Set 1 : General Explanation**

Based on the given information the following can be deduced

1. Utkarsh choose Poke which does not go well with a Non-chilly Snack. Therefore, Utkarsh must have chosen a Chilly Snack. This means Itisha must have chosen a Non-Chilly Snack. Since Aditya chooses Sandwich, Itisha must have chosen the other Non-Chilly snack ie Patties.
2. Also Reyu and Utkarsh must have chosen one snack each out of Burger and Pizza in no particular order.

Child	Snack	Cold Drink
Reyu	B/P	Mimca
Aditya	Sandwich	Cepsi
Farhan	Hot Dog	Up-7
Utkarsh	B/P	Poke
Itisha	Patties	Liranda

Ans 1 : Option d

Ans 2 : Option a

Ans 3 : Option d

Ans 4 : Option a

#### **Set 2 : General Explanation**

1. A and H have been booked in adjacent rooms which could be (17,18), (18,19), (19,20), (21,22), (22,23), (23,24). None of their room number is prime. Therefore, the only possible pair that does not have a prime number is (21 and 22).
2. D is not on the same wing as A. So, D must be on the East wing. Since D's room is a prime number, It must be either 17 or 19.

3. There are exactly 2 rooms between F and D. This would mean D's room number must be 17 and therefore F's room number must be 20.
4. F is the neighbour of B and so B must be in room number 19.
5. If C and E exchange their rooms, C will have H as his neighbour. ie E and H are in the same wing and C in the other wing. Since H is in the West wing, E must also be in the West wing and the neighbour of H. This would mean Room number 18 in the East wing must be allotted to C.
6. If H is in room number 21 then A is in room number 22 and therefore if C and E exchange their rooms, C cannot have H as his neighbour. Therefore, A is in room number 21 and H in room number 22, E in room number 23 and G in room number 24.

East Wing	17	18	19	20
	D	C	B	F
	A	H	E	G
West Wing	21	22	23	24

Ans 5 : Option a

Ans 6 : Option c

Ans 7 : Option a

Ans 8 : Option b

**Set 3 : General Explanation**

1. Ekta, the child to choose last has taken Oreos but not the maximum number. The number of Oreos could be 2/3/5/7.
2. Dimple chooses the Jar with 5 cookies. The cookie type must be Britannia.
3. Cadbury Bite was 3 in number and the minimum number of Cookies were Parle-G and so Oreos would be 7 in number.
4. The number of cookies chosen by Cia is either 2 or 3.
5. Similarly, the number of cookies chosen by Bony is either 2/3/9. Also, the number of cookies chosen by Bony is more than Cia but less than Albert. Therefore, Bony must have chosen 3 Cookies ie Cadbury Bite (Given), Cia 2 Cookies ie (Parle-G) and Albert 9 cookies ie Krackjack.

The final table is as follows :

Albert : Krackjack : 9 cookies

Bony : Cadbury Bite : 3 cookies

Cia : Parle-G : 2 cookies

Dimple : Britannia : 5 cookies.

Ekta : Oreo : 7 cookies.

Ans 9 : Option b

Ans 10 : Option c

Ans 11 : Option a

Ans 12 : Option a

**Set 4 : General Explanation**

1. Narain from McLaren finished at the 3<sup>rd</sup> position. Also, Ferrari had 2 podium positions ie Ferrari drivers must have finished at positions 1 and 2.
2. Bernie wearing number 7 was 5<sup>th</sup> in the race. Also, Fernando had only one person sitting next to him ie Fernando must be either at position number 1 or 5 but since Bernie is at position 5, Fernando must be at position 1.
3. The positions left are 2 and 4. But the person at position 2 is from Ferrari and Vijay is not from Ferrari. Therefore, Vijay wearing number 18 must be at position 4 and Schumi from Ferrari must be at position 2.
4. The Shirt number of one of the Ferrari drivers must be 21. The other Ferrari driver and Narain are wearing shirts numbered 10 and 15 in no particular order.

The partial information can be compiled as follows:

1	2	3	4	5
Ferrari	Ferrari	McLaren	Force India/Honda	Force India/Honda
Fernando	Schumi	Narain	Vijay	Bernie
21/10/15	21/10/15	10/15	18	7

Ans 13 : Option a

Ans 14 : Option c

Ans 15 : Option d

Ans 16 : Option a

**Set 5 :** From the conditions given, the following can be inferred :

- The rating obtained by A in Cricket is same as the rating given to C in Basketball. Therefore, A must have got the rating VG in Cricket. Also, since A has got all the 3 ratings therefore A must have got the rating G in Football.
  - Further, E has got a better rating than A in both Cricket and Football. So, E must have got the rating E in Cricket. Using the same condition, E must have got either rating VG or E in Football. But D and E have got the same rating in Football and D cannot get the rating VG in Football because D has already got the rating VG in Cricket. (D has got all the 3 different ratings). Therefore, D must have got the rating E in Football and E must also have got the rating E in Football.
  - Continuing the same logic, D must have got the rating G in Basketball.
- The partial table will look as follows :

STUDENT NAME	RATINGS IN SPORTS		
	CRICKET	FOOTBALL	BASKETBALL
A	VG	G	E
B	G		
C			VG
D	VG	E	D
E	E	E	
F			

- F has got the same rating in all the 3 sports and equal number of students have got each of the 3 ratings in all the 3 sports. Therefore F must have got the rating G in all the 3 sports.
- C must have got the rating E in Cricket and both B and C must have got the rating VG in Football

STUDENT NAME	RATINGS IN SPORTS		
	CRICKET	FOOTBALL	BASKETBALL
A	VG	G	E
B	G	VG	
C	E	VG	VG

D	VG	E	G
E	E	E	
F	G	G	G

- Since A and D were the only 2 students to get all the 3 ratings, therefore, B cannot get the rating E in Basketball and so B must have got the rating VG in Basketball and E must have got the rating E in Basketball.
- The final table will look as follows

STUDENT NAME	RATINGS IN SPORTS		
	CRICKET	FOOTBALL	BASKETBALL
A	VG	G	E
B	G	VG	VG
C	E	VG	VG
D	VG	E	G
E	E	E	E
F	G	G	G

Ans 17 : Option a

Ans 18 : Option b

Ans 19 : Option a

Ans 20 : Option c

## Tabular/Grid Based 2

### Set 1:

- The average number of Cookies received by the 5 children is 20. Therefore, the total number of cookies with the 5 children should be 100.
- Since the number of cookies received by the children is consecutive integers, therefore the values would be 18,19,20,21 and 22 resulting in an average value of 20 cookies.
- Further based on conditions 2,6 and 7, we can have the initial arrangement as follows :

18

19

20

21

22



Danu                      Mehu                      Aryan                      Reyu                      Medhu

Alpen

Also from point no 5, since the number of lemons are more than exactly 2 cookies and also exactly less than 2 cookies, therefore the number of lemons must be 20. Further, since the number of Alpenliebe is 21, the number of Cadbury must be 22.

On the same basis, the number of Mangobite and Paspas must be either 18 or 19. Since it is mentioned that Danu did not get Paspas, therefore, Danu must have got 18 Mangobites while Mehu must have got 19 Paspas.

The final distribution looks as follows:

18	19	20	21	22
Danu	Mehu	Aryan	Reyu	Medhu
Mangobite	Paspas	Lemon	Alpen	Cadbury

Ans 1 : Option a

Ans 2 : Option c

Ans 3 : Option b

Average Number of cookies received by Aryan and Medhu =  $(20+22)/2 = 21$

Ans 4 : Option a

**Set 2 :** We need to find out the Groups and the position of the teams in the groups after the league matches. From the Information provided, we can conclude the following:

1. New Zealand will be designated as B1 while Sri Lanka will have the position B2.
2. New Zealand will play arch rivals Australia in the Quarter Finals and therefore Australia should be A2.
3. Pakistan is the 4<sup>th</sup> team in the A group to qualify and therefore it will be designated as A4.
4. The 3<sup>rd</sup> QF match is between 2 teams neither of whom has won the world cup earlier. This means B3 cannot be West Indies as they are the defending champions. Therefore, B3 should be South Africa and B4 must be West Indies.

5. Since India is in Group A and plays QF2, India will be designated as A1 and therefore, England will be A3.

Ans 5 : Option d

The 2 teams which played the 3<sup>rd</sup> QF have not won the world cup earlier ie South Africa and Pakistan.

Ans 6 : Option a

Ans 7 : Option b

**Set 3 :** It is given that the price of the Trousers and the T-Shirt purchased by Alpha is the same which leads to 3 different possibilities.

1. The price of the Trousers and the T-Shirt purchased by Alpha is Rs 500/- each leading to a total amount of Rs.1000/-. But Alpha cannot purchase both the items of the same brand since only 2 people (one from Gamma or Theta and the 2<sup>nd</sup> Beta) purchased both the items of the same brand. This case is therefore ruled out.
2. The price of the Trousers and the T-shirt purchased by Alpha is Rs.300/- each leading to a total amount of Rs.600/-. This would mean that the total amount spent by Delta should be Rs.1200/- which would only come from a combination of Rs.500/- for the Trousers and Rs.700/- for the T-Shirt. The partial table of purchases would be as under :

<b>Brand</b>	<b>Trousers</b>	<b>T-Shirt</b>
Levis	300 (Alpha)	250
Numero Uno	450	300 (Alpha)
Addidas	250	250
Reabok	500 (Delta)	500
Pepe	400	700 (Delta)

This means that there can be maximum 1 person who purchased both items of the same brand which in turn violates point no. 3 of the conditions given. This case is also not true.

3. The price of the Trousers and the T-Shirt purchased by Alpha is Rs.250/- each leading to a total amount of Rs.500/-. Therefore the total amount spent by Delta has to be Rs.1000/- which could be either 500 each or (300 + 700) but since Delta did not purchase both items of the same value therefore, it has to be the combination of Rs. (300+700).

Also, as indicated earlier, the 2 people who purchased items of the same brand are Beta and one from Gamma or Theta which means that Alpha purchased 2 items of the same value worth 250/- each but of different brands.

The partial table of purchases is as under

<b>Brand</b>	<b>Trousers</b>	<b>T-Shirt</b>
Levis	300 (Delta)	250 (Alpha)
Numero Uno	450	300
Addidas	250 (Alpha)	250
Reabok	500	500
Pepe	400	700 (Delta)

Now, Beta would have purchased either both Numero Uno brands or both Reabok brands but since it is given that Beta spent a lower amount in purchasing T-shirt therefore it has to be the brand Numero Uno.

The total amount spent by Beta is  $\text{Rs.}450+300 = \text{Rs.}750/-$

Therefore, one of Gamma or Theta would have spent a total amount of Rs 1000/- (500+500) while the other would have spent Rs.650 (400+250). Since Beta spent a higher amount as compared to Theta, therefore the total amount spent by Theta would be Rs.650/- while Gamma would have spent Rs.1000/- in total.

The final table of purchases would be as under :

<b>Brand</b>	<b>Trousers</b>	<b>T-Shirt</b>
Levis	300(Delta)	250(Alpha)
Numero Uno	450(Beta)	300 (Beta)
Addidas	250(Alpha)	250 (Theta)
Reabok	500(Gamma)	500(Gamma)
Pepe	400(Theta)	700(Delta)

Ans 8 : Option b

Ans 9 : Option b

Ans 10 : Option c

Ans 11 : Option c

**Set 4 :**

1. Each person has got at least 1 call and no 2 people got the same number of calls therefore, the number of calls received must be 1,2,3,4,5 & 6.
2. Since the number of calls got by A is a prime number, A must have got either 2,3 or 5 calls. It is also given that the number of calls received by both E and F is more than C but less than A, therefore A has definitely got more number of calls than at least 3 people which means that A must not have got either 2 or 3 calls. The number of calls received by A is 5.
3. D has got 2 calls and therefore C must have got 1 call since both E and F have got more calls than C.
4. The person who has got 6 calls must be B.

Person	Number of Calls	Percentile
C	1	
D	2	90
E or F	3	
E or F	4	
A	5	97
B	6	93 or 99

From point 4, since the person with the highest percentile did not get the maximum calls, therefore B must have got a percentile of 93.

Also, neither C nor F got the highest percentile, therefore E must have got a percentile of 99. We are not sure about the percentile of C or F

Ans 12 : Option b

Ans 13 : Option d

The number of calls received by F is either 3 or 4.

Ans 14 : Option d

When arranged in descending order of percentiles, the person in the 5<sup>th</sup> position will be the one with 92 percentile which could be either C or F.

**Set 5 :** From point 1, the items will be picked up at 9am, 11am, 1pm, 3 pm and 5pm respectively.

1. The item worth 25,000/- is picked up at 3pm.
2. The value of the item picked up at 9am from Mrt. is more than the one picked up last. This value can be 20,000 or 30000 or 35000/-.
3. From point no. 4, this value is lower than the value of the items picked up at Hpr. And Bsr. And therefore the value of the item picked up first from Mrt. cannot be 30,000 or 35,000/-. The value of the item picked up from Mrt. is Rs.20000/-. Therefore, the value of the item picked up last will be Rs.15,000/-. This location cannot be Hpr. Or Ddn. and therefore this location will be Alg.

The partial table of information looks as follows :

9am	11am	1pm	3pm	5pm
Mrt.		Bsr.		Alg.
20000			25000	15000

Ans 15 : Option a

If the value of the item at Ddun. is lower in value than the one picked up at Hpr. which in turn is lower than the one at Bsr. Therefore, the value of the item picked up at Ddun. is 25,000/- which means that the item from Hpr. is picked up at 11 am.

Ans 16 : Option c

Ans 17 : Option d

**Set 6 :** From the general information given, the following can be deduced :

1. Since no one placed a bet on India winning all it's matches, therefore the number of bets placed must be 0,1,2,3,4 and 5. Also, E is the one who did not place any bets.
2. F must have placed 4 bets since he spent a total of Rs.600 on betting. Also, since F did not bet on the first and last match he would have placed bets on Matches no. 2,3,4 and 5.
3. B must have placed a bet on India winning 5 out of the 6 matches.
4. C had a net profit of Rs.900/-. Since each correct bet placed would give a profit of Rs.300, therefore, C must have placed bet on 3 matches which India must have won.
5. India therefore must have won at least 3 matches in the league. It is given that India won more matches in the 2<sup>nd</sup> part of the league as compared to the first. Since the 4<sup>th</sup> match was a tie, therefore, India must have won 2 matches in the 2<sup>nd</sup> part of the league and 1 match in the 1<sup>st</sup> part of the league winning a total of exactly 3 matches.

From the available information, we can deduce the following :

Match 1	Match 2	Match 3	Match 4	Match 5	Match 6
Win	Loss	Loss	Tie	Win	Win
F	F	F	F		
B	B	B	B	Either 1/6	
C				C	C

D and A must have placed bets on India winning 1 and 2 matches not in any particular order.

Ans 18 : Option b

The match won by India in which everyone except E placed a bet is Match 5

Ans 19 : Option d

Ans 20 : Option b

The matches not won by India is Match no 2, 3 and 4.

### **Grouping/Condition Based 1**

#### **Set 1 :**

Ans 1 : Option b

If 3 subjects are chosen from Group 1 including Physics and Maths, then the 3<sup>rd</sup> Subject must be Social. Also, it is given that at least 1 subject from English and Psychology must be chosen. Since English is not chosen, Psychology must be chosen.

Ans 2 : Option b

At least 1 subject from Psychology and English must be chosen.

Ans 3 : Option d

If Physics is chosen from Group 1, Chemistry cannot be chosen. Also English is not chosen and since Sociology is not chosen, therefore Maths cannot be chosen. Therefore Social has to be chosen from Group 1.

Now from Group 2 , 3 subjects need to be chosen out of which Psychology is definitely chosen. Further Public Administration cannot be chosen. Therefore, Political Science and Accounts is definitely chosen.

Ans 4 : Option d

Any 3 subjects can be chosen from Sociology, Psychology, Political Science and Accounts.

**Set 2 :**

Ans 5 : Option d

If Rocket is in Cage 1, Tuffy will also be in cage 1 and therefore Steffi will be in Cage 2. Now if Daffy is in Cage 1, both Gypsy and Chilli will have to be in Cage 2 which violates Condition 1. Therefore Daffy will be in Cage 2.

Ans 6 : Option b

If Daffy is in Cage 1, Gypsy and Chilli cannot be together ie one of them will be in Cage 1. Therefore, Rocket cannot be in Cage 1. If Rocket is in Cage 2, then Chilli will be in Cage 1 and Gypsy in Cage 2. Now Steffi and Tuffy will be in Cage 1 and 2 but in no particular order ie 2 possible arrangements exist.

Ans 7 : Option d

If Chilli is in Cage 2, Rocket has to be in Cage 1. Tuffy will also be in Cage 1 and so Steffi will be in Cage 2. Now if Daffy is in Cage 1, then Gypsy will have to be in Cage 2 but in this condition, Gypsy and Chilli cannot be together and so Daffy cannot be in Cage 1. Therefore Daffy will be in Cage 2 and Gypsy in Cage 1.

Ans 8 : Option c

Possible Arrangements are

Cage 1	Cage 2
Rocket	Steffi
Tuffy	Daffy
Gypsy/Chilli	Gypsy/Chilli
Cage 1	Cage 2
Chilli	Rocket

Daffy	Gypsy
Steffi/Tuffy	Steffi/Tuffy
Cage 1	Cage 2
Chilli	Rocket
Steffi/Tuffy	Daffy
Gypsy	Steffi/Tuffy

**Set 3 :**

Ans 9 : Option c

Option c is incorrect because for 4 fast bowlers selected, there should be 2 spinners selected in the team while in option c, there is only 1 spinner.

Ans 10 : Option a

If Suresh is selected, neither Ravi nor Khan can be selected. Since, we have chosen 7 batsmen, 4 bowlers need to be selected. We have to select from Fast Bowlers : Bhaj, Ashish and Sree and spinners chawla and Khan. This could be done as follows :

1. All the 3 fast bowlers and chawla since bhaj will play only if Chawla is also selected.
2. 2 Fast bowlers and 2 spinners ie both chawla and khan and any 2 fast bowlers from the available 3 fast bowlers which can be done in 3 different ways.

Therefore total number of ways is 4 ways.

Ans 11 : Option a

Since MSD decides to play with 6 Batsmen, 5 bowlers need to be selected. Sree is injured and therefore not eligible to play. Therefore, there are only 6 bowlers from which the selection is to be done. Now one of the possibilities is to leave out Chawla and play the other 5 bowlers. This is definitely not possible because Bhaj will play only if Chawla is also selected which indicates that in any situation, Chawla cannot be left out and must be definitely selected.

**Set 4 :**

Ans 12 : Option d



Since Aman orders Burger, Bala will order the same item as ordered by Chander. This cannot be Sandwich because if Chander orders Sandwich, all three of them will order different Items. Therefore, Bala and Chander will both either order Burger or Pizza.

Ans 13 : Option b

If Bala orders Burger, then as per condition 2, Chander will order the same item as ordered by Aman. This cannot be Sandwich because it would violate condition 3. It could be either Burger or Pizza.

Ans 14 : Option a

If Bala does not order Pizza, Chander will order the same item as ordered by Aman.

Ans 15 : Option b

If Chander orders Sandwich, all 3 of them have to order different items. Therefore, Aman and Bala will have to order one item each from Burger and Pizza not in any order. But Aman cannot order Burger because it would violate condition 1. So, Aman will have to order Pizza and Bala will have to order Burger. This in turn would violate condition 2. Therefore, Chander cannot order Sandwich. ie the 3 friends will not be able to place their orders.

### **Set 5 :**

Ans 16 : Option c

If Rawat is selected, Shalini cannot be selected and therefore Kapil also cannot be selected. Further Vatsala is definitely selected. Exactly one from Prateek or Tarun has to be selected. This can happen in 2 ways. Now the 4<sup>th</sup> member can be any one from Abhishek and Vinod which can happen in 2 ways.

Therefore, total number of ways =  $2 \times 2 = 4$  ways.

Ans 17 : Option b

If Shalini is selected, Rawat is definitely not selected. Also, exactly 1 from Prateek or Tarun is selected ie the team can have a maximum of 6 members.

Ans 18 : Option d

Rawat cannot be a member of a team having 6 members.

Ans 19 : Option c

Kapil and Rawat cannot be the members of the same team since Kapil and Shalini are to be always selected together while Rawat and Shalini can never be selected in the same team.

Ans 20 : Option b

Shalini and Kapil have to be selected together.

## **Grouping / Condition Based 2**

### **Set 1 :**

Ans 1 : Option b

Ans 2 : Option d

Ans 3 : Option c

If P works on the 2<sup>nd</sup> day, P must have done Filling since Rolling cannot be done on the 2<sup>nd</sup> day ie before both the Filling activities are completed. Since Watering is done on Thursday, the activity on Wednesday must be Rolling.

Ans 4 : Option b

Filling, Watering, Filling, Rolling, Watering, Rolling  
Filling, Filling, Watering, Rolling, Watering, Rolling  
Filling, Filling, Rolling, Watering, Rolling, Watering

### **Set 2 :**

Ans 5 : Option b

Since Swing is practiced on Wednesday and Putt on Thursday, Swing will be practiced on Wednesday afternoon. Also, Plan and Stance both have to be practiced in the afternoon. Therefore, the aspects practiced in the morning will be Putt, Push and Drive.

Ans 6 : Option a

The aspect practiced on Thursday morning cannot be Putt, Plan, Stance or Drive. Therefore, the aspect practiced on Thursday morning must be Push.

Ans 7 : Option c

Ans 8 : Option a

If Putt has to be practiced on Friday, it has to be Friday afternoon. Plan has to be practiced on Wednesday afternoon and Stance on Thursday afternoon. Since Putt is practiced on Friday, Stance cannot be practiced on Thursday morning so, Stance has to be practiced on Wednesday morning and Push on Thursday morning.

**Set 3 :** General Explanation

1. Group A based on Personality is M,P,Q and S ie these people must have got the Ranks 1,2,7 and 8 in no particular order based on Personality.
2. Therefore N,O,R and T must have got Ranks of 3,4,5 and 6 in no particular order.
3. Group B based on overall thinking is P,T,Q and O. ie these people must have got ranks of 3,4,5 and 6 based on overall thinking.
4. M,T and O are the only contestants to get the same Rank in both the aspects.
5. Since R got Rank 4 in Personality, T and O must have got any 2 Ranks out of 3, 5 and 6. Similarly, since N got Rank 2 in Overall Thinking, M must have got either Rank 1,7 or 8 in both the aspects.

Ans 9 : Option a

If M and T got consecutive Ranks in Overall Thinking, then M must have got Rank 7 in both aspects and T must have got Rank 6 in both aspects.

Ans 10 : Option b

R can get any on the position out of 7 or 8 in Overall Thinking.

Ans 11 : Option d

N can get either Rank 5 or 6.

Ans 12 : Option c

M must have got Rank 8 in Overall Thinking.

Set 4 :

Ans 13 : Option c

Sri Lanka and Germany cannot be selected together.

Ans 14 : Option b

Ans 15 : Option c

Ans 16 : Option d

India has to be definitely selected and therefore Japan cannot be selected.

**Set 5 :**

Ans 17 : Option d

It can be either Floor number 1 or 2.

Ans 18 : Option b

Ans 19 : Option c

Ans 20 : Option d

## **Blood Relations 1 :**

### **Set 1 :** General Explanation

1. E must be married to C. Also, C must be a Tennis player.
2. B is neither a Tennis player nor a Chess player ie B must be a Badminton player. Therefore, E must be a Chess player.

Ans 1 : Option d

The Group having only ladies will be ADC

Ans 2 : Option b

Ans 3 : Option d

Ans 4 : Option b

Ans 5 : Option a

The Lady's Father-in-Law's son must be the Lady's Husband. This man's wife is the lady herself and she is talking about her son.

Ans 6 : Option c

Ans 7 : Option c

Lady A and Lady B must be sisters.

Ans 8 : Option b

If A belongs to the first generation, then E belongs to the 3<sup>rd</sup> generation.

Ans 9 : Option a

A is the Mother of E, E is the sister of B and B is the brother of C. Therefore, A will be the Mother of C.

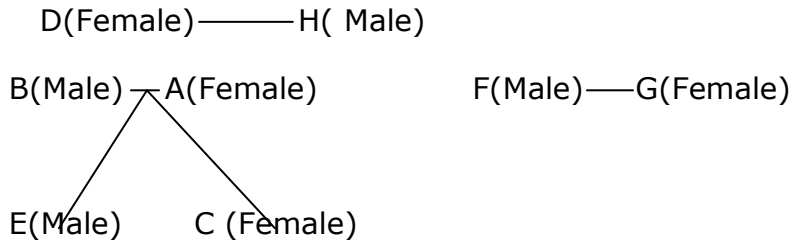
Ans 10 : Option b

E is the Father of A and A is the Father of B. Also, B is the son of D and D is the Mother of C. Therefore, A and D are married and their children are B and C. But D is a female and so the wife of A.

### **Ans 11 to 14 :** General Explanation

1. E is the son of A and brother of C. F is B's Brother-in-law and is married to G. Therefore, B and A must be married.
2. The 3<sup>rd</sup> Couple must be D and H where H is a male and D is a female.

The partial data can be compiled as follows :



First Car : A, H, C, B or F

Second Car : E, G, D, B or F

Ans 11 : Option d

Ans 12 : Option b

Ans 13 : Option a

Ans 14 : Option d

Ans 15 : Option c

Ans 16 : Option a

Ans 17 : Option b

Ans 18 : Option b

Ans 19 : Option c

Ans 20 : Option b

## **Blood Relations 2 :**

### **Set 1 : General Explanation**

1. H belongs to the first generation and is the Grandmother of the Lawyer. ie H is in the first generation and the lawyer in the 3<sup>rd</sup> generation.
2. The lawyer is married to one of the Housewives.
3. C, the teacher does not belong to the 1<sup>st</sup> generation and is the sister of B's Mother ie B must be the Lawyer.
4. Since, G the Dentist is the brother-in-law of the Teacher, G must be married to B's Mother.
5. D, the doctor is the Father of the Banker ie the Banker must be B's Mother.

Based on this, the partial information can be compiled as follows:

H(Housewife)-----D(Doc.)

(F) (M)

G(Dentist)-----A(Banker)

C(Teacher)-----E(Engr.)

(M) (F)

(F) (M)

B(Lawyer)----- F (Housewife)

(M) (F)

Ans 1 : Option a

Ans 2 : Option c

Ans 3 : Option d

Ans 4 : Option a

Ans 5 : Option b

Ans 6 : Option c

Ans 7 : Option a

Ans 8 : Option b

Ans 9 : Option d

Ans 10 : Option b

**Ans Q11 to Q14 : General Explanations:**

Let us first try to put the children in the order of their birth.

Sourav

Mahi/Nilesh : Cricket : Mansarover

Mahi/Nilesh : Cricket : Mansarover

Kuntala : Chess

Tamanna : St. Stefan

Arun : Football

Rohit : Hockey : St. Stefan

Janaki

Ans 11 : Option c

Ans 12 : Option d

Ans 13 : Option d

Ans 14 : Option b

Ans 15 : Option c

Ans 16 : Option d

Ans 17 : Option d

Ans 18 : Option c

Ans 19 : Option a

Ans 20 : Option d

### **Mathematical Reasoning 1 :**

#### **Set 1 :** General Explanation

1. Each Team would play 4 Matches in the 2<sup>nd</sup> Round. But no team has played all it's Matches till the 5<sup>th</sup> Match.
2. India has got 5 points which can only be possible through 1 win and 2 draws. The Win is against Australia.
3. Netherlands has also played 3 Matches till the 5<sup>th</sup> Match ie Netherlands must have drawn 2 Matches and lost 1 Match. This Match must have been against Pakistan since Pakistan is the only other Team to have won a Match.
4. Also, since the total number of Matches played is 5, one of the drawn Matches of Netherlands must have been against India. Also, India must have drawn it's Match against Pakistan.
5. The Matches played can be as follows:  
India – Australia : India won  
India – Netherlands : Drawn  
India – Pakistan : Drawn  
Netherlands – Pakistan : Pakistan won  
Netherlands – England : Drawn

Ans 1 : Option a

Ans 2 : Option d

Ans 3 : Option b

Ans 4 : Option c

#### **Set 2 :** General Explanation

- At the end of the 4<sup>th</sup> Round each person had Rs.32000 with them. The total amount of money with all of them together will be Rs.128000.
- Also Since Dinesh lost the 4<sup>th</sup> Round, he would have doubled the money with each of the other 3 persons ie all of them must have had Rs.16000 each after the 3<sup>rd</sup> round and Dinesh must have had  $128000 - 48000 = \text{Rs.}80000$ .

3. End of the 3<sup>rd</sup> Round

Mohit	Manohar	Prashant	Dinesh
16000	16000	16000	80000

- The 3<sup>rd</sup> Round was lost by Prashant. Therefore, using the same logic we can find out the money with each person at the end of the 2<sup>nd</sup> Round.

Mohit	Manohar	Prashant	Dinesh
8000	8000	72000	40000

5. Manohar lost the 2<sup>nd</sup> Round. Position at the end of the first round is as follows :

Mohit	Manohar	Prashant	Dinesh
4000	68000	36000	20000

6. At the beginning of the game, the position would have been as follows :

Mohit	Manohar	Prashant	Dinesh
66000	34000	18000	10000

Ans 5 : Option c

Ans 6 : Option a

Ans 7 : Option a

Ans 8 : Option b

**Set 3** : General Explanation :

Let the number of Cards with E and D be x and Y respectively. Therefore, the number of Cards with A and B will be x-5 and y-5 respectively.

$$\text{Also } x-5+x = y-5+y+20$$

$$x = y+10 \text{-----(1)}$$

$$\text{Number of Cards with C} = y-5-4 = y-9.$$

$$\text{Also } x+x-5+y+y-5+y-9 = 201$$

$$2x+3y=220.$$

$$2(y+10)+3y=220$$



$$2y+20+3y=220$$

$$5y=200, y=40, x=50$$

$$A=45, B=35, C=31, D=40, E=50$$

Ans 9 : Option c

Ans 10 : Option d

Ans 11 : Option d

Ans 12 : Option b

**Set 4** : General Explanation :

1. The total earning of Ramesh and Chandu is Rs.500.
2. This would mean the total earnings of the other 2 people together ie Bhola and Yogesh must be 700.
3. The person selling Newspaper is not Ramesh, Chandu or Bhola ie the Person selling Newspaper must be Yogesh.
4. Bhola earned Rs.300 more than Yogesh and together they earned Rs.700 ie Bhola must have earned Rs.500 and Yogesh Rs.200.
5. The person selling Chatpata earned Rs.100 less than Yogesh. This person cannot be either Bhola or Ramesh. Therefore, the person selling Chatpata must be Chandu and earned Rs.100 on that day.
6. Ramesh must have earned Rs.400 on that day.
7. Since the person who sold Colddrink earned the maximum amount, therefore, Bhola must have sold Colddrink and Ramesh must have sold Apples.

Ans 13 : Option d

Ans 14 : Option b

Ans 15 : Option b

Ans 16 : Option c

**Set 5** : General Explanation for 17 and 18 :

This is the property of numbers that are powers of 2. It is the only number where the next power is available immediately after all possible combinations through additions of it's previous powers get exhausted.

Example :  $2^0 = 1, 2^1 = 2, 2^2 = 4$

Now 1 can be formed, 2 can be obtained,  $3=1+2$ , 4 can be used,  $5=1+4$ ,  $6=2+4$ ,  $7=1+2+4$ . Now all possible combinations of addition have got exhausted and the next power of 2 ie  $2^3$  is available.

Ans 17 : Option b

1, 2, 4, 8, 16, 32 and 64.

Ans 18 : Option c

Ans 19 : Option d

It is the property of the powers of 3. Weights required will be 1,3,9 and 27.

Ans 20 : Option a

## **Mathematical Reasoning 2 :**

### **Set 1 : General Explanation**

1. The number of runs scored by the players can be 2,3,5,7,11,13,17 and 19 not in any order.
2. Since the difference between the number of runs scored by any 2 of the players is at least 2, therefore both 2 and 3 together cannot be the scores of any 2 people.
3. There were 2 players who scored in single digits and P was one of them.
4. Since R scored 2 runs more than S, the scores of R and S must be either 11 and 13 or 17 and 19. Also, there is at least 1 player who has scored more than R. Therefore, R cannot score 19 runs ie R must have scored 13 and S must have scored 11 runs.
5. Also one player from Q or T must have scored either 17 or 19 runs while the other must have scored in single digits.
6. There was exactly 2 pairs where the difference between the runs scored was exactly 8.
7. If the highest score is 17, then 17 cannot form such a pair. Therefore, the only possibility is for 13 to form the pair with 5 and 11 to form the pair with 3. The runs scored being 3,5,11,13 and 17.
8. If the highest score is 19, then one pair is already formed with 19 and 11. The other pair can be 11 and 3 or 13 and 5 ie exactly one of the 2 numbers 3 or 5 can be scored in this case. This would mean that 7 is definitely one of the runs scored.  
Runs scored will be either 3 or 5 , 7 , 11 , 13 and 19.

Ans 1 : Option d

Either 17 or 19 runs.

Ans 2 : Option c

Ans 3 : Option b

Ans 4 : Option d

Ans 5 : Option b

**Set 2** : General Explanation:

1. The Ratio of the total number of boys and girls in PKG. is 3:5 . Let it be  $3x$  and  $5x$  respectively. The number of Boys is 48 less than the number of Girls. ie  $2x=48$  or  $x=24$  ie there will be a total of 72 Boys and 120 Girls.
2. The Ratio of the number of Boys in the 3 section is 1:1:2 ie the number of Boys will be 24,24 and 48 respectively.
3. There were 30 Girls in Section B which means that there were 90 Girls in A and C together with Sections A having 10 girls more than Section B.

The Distribution of Boys and Girls is as follows:

Section A	Section B	Section C
Boys 24	24	48
Girls 55	30	35

Ans 6 : Option b

Ans 7 : Option c

Ans 8 : Option a

Ans 9 : Option a

Ans 10 : Option c

**Set 3** :

Ans 11 : Option a

The Punter has placed Rs.100 on each of the Events happening ie he has placed a Bet of Rs.300/-. If he wants the maximum return, he would want each of the events to happen. Therefore, total Returns will be =  $200+150+100= 450$

Return =  $(450-300/300)*100 = 50\%$ .

Ans 12 : Option b

Exactly 2 Events Event A and Event C must have happened.

Ans 13 : Option b

Ans 14 : Option a

Minimum Percentage return will be when none of the events have happened.

The total money that he will get back is Rs.50/-

Percentage Return =  $(50/300)*100 = 16.66 \%$

**Set 4** : General Explanation:

1. There is only 1 Bag which contains equal number of Balls of each type. This must be Bag B having 10 Balls of each type.
2. The Number of Yellow balls in B and C must be the same. Since Bag B has 10 Yellow balls, Bag C must also have 10 Yellow balls. Therefore, the Number of Green balls in Bag C must be 8.
3. The Number of Green Balls in Bag A must also be 8. The Number of Yellow balls in Bag A must be 17.

	<b>A</b>	<b>B</b>	<b>C</b>
Red Balls	<b>5</b>	<b>10</b>	<b>12</b>
Green Balls	<b>8</b>	<b>10</b>	<b>8</b>
Yellow Balls	<b>17</b>	<b>10</b>	<b>10</b>
Total weight (in gms.)	<b>510</b>	<b>450</b>	<b>440</b>

Ans 15 : Option a

Ans 16 : Option b

$=(14/11)*100$

Ans 17 : Option a

Ans 18 : Option c

Ans 19 : Option b

Ans 20 : Option c

## Miscellaneous 1 :

### Set 1 : General Explanation :

1. Let Mehu's 1<sup>st</sup> Statement be true. Therefore, Mehu was the First one to finish. Also, her 2<sup>nd</sup> statement must be false ie Dan Bhai must have been given Milk.
2. Reyu's 2<sup>nd</sup> Statement is therefore True and so his 1<sup>st</sup> Statement must be False ie Reyu was not given Boost. Therefore, Reyu must have been given Juice.
3. Dan Bhai's 2<sup>nd</sup> Statement is False and therefore the 1<sup>st</sup> Statement must be true. If Dan Bhai is not the last to finish, Dan Bhai must have finished 2<sup>nd</sup> and Reyu must have finished last.

Mehu : First : Boost

Dan Bhai : Second : Milk

Reyu : Third : Juice

4. Let Mehu's 2<sup>nd</sup> Statement be true. ie Dan Bhai was not given Milk. Also her first Statement is False ie Mehu actually did not finish First.
5. Reyu's 2<sup>nd</sup> Statement is False and so his First Statement must be True ie Reyu was given Boost to drink.
6. Dan Bhai's 2<sup>nd</sup> Statement is False and so his First Statement is True ie Dan Bhai did not finish last.

Possibilities are :

First : Reyu : Boost

Second : Dan Bhai : Juice

Third : Mehu : Milk

Or

First : Dan Bhai : Juice

Second : Mehu : Milk

Third : Reyu : Boost

Or

First : Dan Bhai : Juice

Second : Reyu : Boost

Third : Mehu : Milk

Ans 1 : Option c

Ans 2 : Option d

Ans 3 : Option a

Ans 4 : Option d

**Set 2** : This set can be done by simple observation

Ans 5 : Option a

Ans 6 : Option b

Ans 7 : Option c

All the other pairs have dissimilarity level of 4.

Ans 8 : Option a

**Set 3** : General Explanation :

1. If  $n$  is the number of cuts in each direction, in this case, all the answers can be generalized.
2. The number of Cubes with 3 sides painted will be on the Corners of the Main Cube. Since a Cube has 8 Corners, the number of Cubes with 3 faces painted will be = 8.
3. The number of Cubes with 2 faces painted will be along the edge of the Main Cube and there will be  $(n-2)$  such Cubes along each edge.  
Number of such Cubes =  $(n-2)*12$
4. The number of Cubes with 1 face painted will be on the Faces of the Main Cube and there will be  $(n-2)^2$  Cubes on each Face.  
Number of such Cubes =  $6x(n-2)^2$ .
5. The Number of Cubes with no face painted will be =  $(n-2)^3$

Ans 9 : Option d

There will be a total of  $6*(n-2)^2$  Cubes =  $6*(4-2)^2 = 24$

Ans 10 : Option b

Ans 11 : Option c

Ans 12 : Option d

**Set 4 :**

Ans 13 : Option d

Ans 14 : Option a

Ans 15 : Option c

Ans 16 : Option a

**Set 5 : General Explanation:**

1. Let the statement of Z be true. Therefore exactly one of V or Y is true and one is false. Also, W's statement is False.
2. Since 3 people gave false Statements, therefore Y has definitely given a False statement.
3. Out of the other 3 people, U,V and X exactly 2 people gave True Statements.

2<sup>nd</sup> Case :

1. Let the Statement of Z be False ie either both V and Y gave true statements or both gave false statements. But since Y has definitely given a false statement, therefore, V must also have given a false statement.
2. All the other 3 people U,X and W must have given true Statements.

Ans 17 : Option c

Ans 18 : Option d

Either Son or Daughter

Ans 19 : Option b

Ans 20 : Option a

**Miscellaneous 2 :****Set 1: General Explanations :**

1. If we look at the total cost of all the items put together, it is Rs.44 ie the average amount spent by all the 4 people together is Rs.11 which is not the price of any of the items. Therefore, Omita's first statement is False and therefore the second statement will be true, ie Pradeep did not have a Dhokla.
2. From the above point, Neetu's second statement is False and so the first statement will be true.

3. Omita had the costliest item and therefore, Madan's second statement will be False and the first will be True. Madan had a Dhokla which was priced at 12/-
4. If Pradeep's second statement is False, then it would mean that a Samosa is priced at Rs.14 and so Omita must have had a Samosa. This also means Pradeep's first statement is true which says that Omita had a Kachori which in turn contradicts the first part.
5. Therefore, Pradeep's first statement is False ie Omita must have had either a Samosa or Rasmalai. The second statement is true ie a Samosa is not priced at Rs.14/-and so Omita must have had a Rasmalai.
6. Madan : Dhokla : Rs.12/-  
Omita : Rasmalai : Rs.14/-  
Neetu : Dhokla : Rs.8 or 10/-  
Pradeep : Kachori : Rs.8 or 10/-

Ans 1 : Option c

Ans 2 : Option b

Ans 3 : Option a

Ans 4 : Option c

Ans 5 : Option d

**Set 2 :** General Explanation :

1. Let us try to arrange them in order of Fairness and Height.
2. Fairness :  $B < A, C < D, E < B, A < F, C < E, D < E$   
Compiling the data together, we get  
 $C < D < E < B < A < F$
3. Height :  $A < F, A < C, F < B, C < F, E < C, D < E$   
Compiling the data together, we get  
 $D < E < C < F < B$  and  $A < C$

Ans 6 : Option d

Ans 7 : Option b

Ans 8 : Option b

Ans 9 : Option c

Ans 10 : Option c

**Set 3 :**



Ans 11 : Option a

Ans 12 : Option b

Ans 13 : Option c

Ans 14 : Option d

Ans 15 : Option d. There will be 90 such cubes which will not have Red colour on any of it's faces.

**Set 4 :**

Ans 16 : Option b

By counting we can observe that the 4 candidates who had taken a Group A subject in Prelims cannot choose Sociology a Group A subject in the Mains.

Ans 17 : Option a

Since E has chosen Hindi in Prelims, he or she cannot choose a Group A subject in Mains. Further, Sanskrit has to be definitely chosen. The second subject can be any one out of Geography, Physics, History and Pub.Ad. The 2<sup>nd</sup> subject cannot be Physics, since Geography has to be definitely chosen with Physics. Also, History and Sanskrit cannot be chosen together for Mains.

The 2<sup>nd</sup> Subject for Mains can be either Geography or Pub.Ad.

Ans 18 : Option d

If a person has chosen Geography as one of the subjects in Mains, the 2<sup>nd</sup> subject can be any one of the other 8 subjects except Hindi.

Ans 19 : Option b

Ans 20 : Option c

Required number of ways will be =  $10C2$ .

**Coding Decoding, Series Completion, Direction Sense 1 :**

Ans 1 : Option b

Coding is in the Reverse order alphabet+1, alphabet+2 and so on

Ans 2 : Option c

Ans 3 : Option a

Ans 4 : Option d

Difference between consecutive terms of 17,24,31 and so on

Ans 5 : Option a

$x^4+4$ ,  $x^6+6$ ,  $x^8+8$  and so on

Ans 6 : Option b

Differences of squares of numbers ie differences of 1,4,9,16 and so on.

Ans 7 : Option c

Ans 8 : Option c

**General Explanation for Qs 9 to 11 :**

The machine is doing the arrangement based on the last alphabet in the word and the entire arrangement is being done from Z to A.

Ans 9 : Option b

Ans 10 : Option d

It would be the 5<sup>th</sup> step.

Ans 11 : Option d

Ans 12 : Option c

Ans 13 : Option b

Ans 14 : Option a

Immediate next alphabet but coding is one from beginning followed by one from end.

Ans 15 : Option b

Ans 16 : Option c

(Squares of odd numbers)-1

Ans 17 : Option d

Ans 18 : Option d

The answer is cannot be determined because it will depend on whether Seema is to the right or left of Rekha.

Ans 19 : Option c

Ans 20 : Option c

### **Coding Decoding, Series Completion, Direction Sense 2 :**

**Set 1 :** General Explanation:

1. Compare the first 2 words, 1,4,3 represents e,l,p in no particular order.  
Therefore  $a=2$  and  $O=7$ .
2. Compare words 1 and 3.  $L=1$
3. Compare words 3 and 4,  $y=5$
4.  $e=3, r=8, p=4, z=6$

Ans 1 : Option c

Ans 2 : Option a

Ans 3 : Option a

All the terms are products of consecutive prime numbers.

Ans 4 : Option c

The Series is  $1^1, 2^2, 3^3, 4^4$  and so on.

Ans 5 : Option d

The series is (Each term  $\times 2$ ) + or - 1 alternately.

Ans 6 : Option b

Ans 7 : Option b

### **General Explanation for Questions 8 to 11 :**

1. The Machine arranges each item based on the sum of it's digits from left to right.

Ans 8 : Option c

Ans 9 : Option c

Ans 10 : Option d

Ans 11 : Option c

Ans 12 : Option b

The Series is  $(x_1+1), (x_2+2), (x_3+3)$

Ans 13 : Option d

The Series is made using the product of the digits.

Ans 14 : Option c

(Squares of Numbers-1) and (Squares of Numbers+1)

Ans 15 : Option a

Ans 16 : Option d

Ans 17 : Option b

Ans 18 : Option c

Ans 19 : Option c

Two alphabets are used for each code, one the immediately preceding alphabet and the other the immediate following one.

Ans 20 : Option b