

GENERAL APTITUDE

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Today's topics

1. Coding & Decoding
2. Syllogism
3. Blood Relations
4. Seating Arrangements
 1. Linear & Circular
5. Puzzles
6. Directions
7. Data Interpretation
8. Data Sufficiency



Coding-Decoding

Q1. If in a certain code RASHMI is written as ODPKJL then, how would MODE be written in that code ?

- A. PLAB
- B. JRAH
- C. PRGH
- D. JLAB

Ans: B

1) Alphabet Position

Alphabet	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

2) Backward Alphabet Position

Reverse Alphabet	Z	Y	X	W	V	U	T	S	R	Q	P	O	N	M	L	K	J	I	H	G	F	E	D	C	B	A
Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26



Coding-Decoding

- A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
- Z Y X W V U T S R Q P O N
- A B C D E F G H I J K L M
- N O P Q R S T U V W X Y Z

1. DIRECT : WRIVXG :: SOME : _____

A. RPQS B. HNLK C. HLNK D. VNOP

Reverse order of Alphabets.....

SOME → HLNK

Ans C



Coding-Decoding

- A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
- Z Y X W V U T S R Q P O N
- A B C D E F G H I J K L M
- N O P Q R S T U V W X Y Z

2. RATES : ENGRF :: DWELT : _____

A. PRSTA B. RYJYM C. QJRYG D. RJMKN

Forward order of Alphabets.....

DWELT → QJRYG

Ans C



Series-Numerical

- **Series** : In case of a series there may not be a particular formula but the terms have definite relationship which has to be recognized.

- **Difference or Sum Type Series**

1, 4, 10, 19, 31, ?

Difference between 2 terms increases in multiples of 3

- **Cumulative Series**

1, 3, 4, 7, 11, 18....

Each term is the addition of the previous terms.

- **Power Series**

0, 6, 24, 60, 120,

Here each term is defined as $n^3 - n$

- **Alternate Series**

1, 5, 9, 10, 25, 15, 49,....

Consists of two series of alternate terms having relationship.



Series

Q2. Given a Series 2, 5, 12.5, ?, 78.125, 195.3125

Find what number would come in place of the question mark(?).

31.25

40.25

32.50

21.00

Ans: A

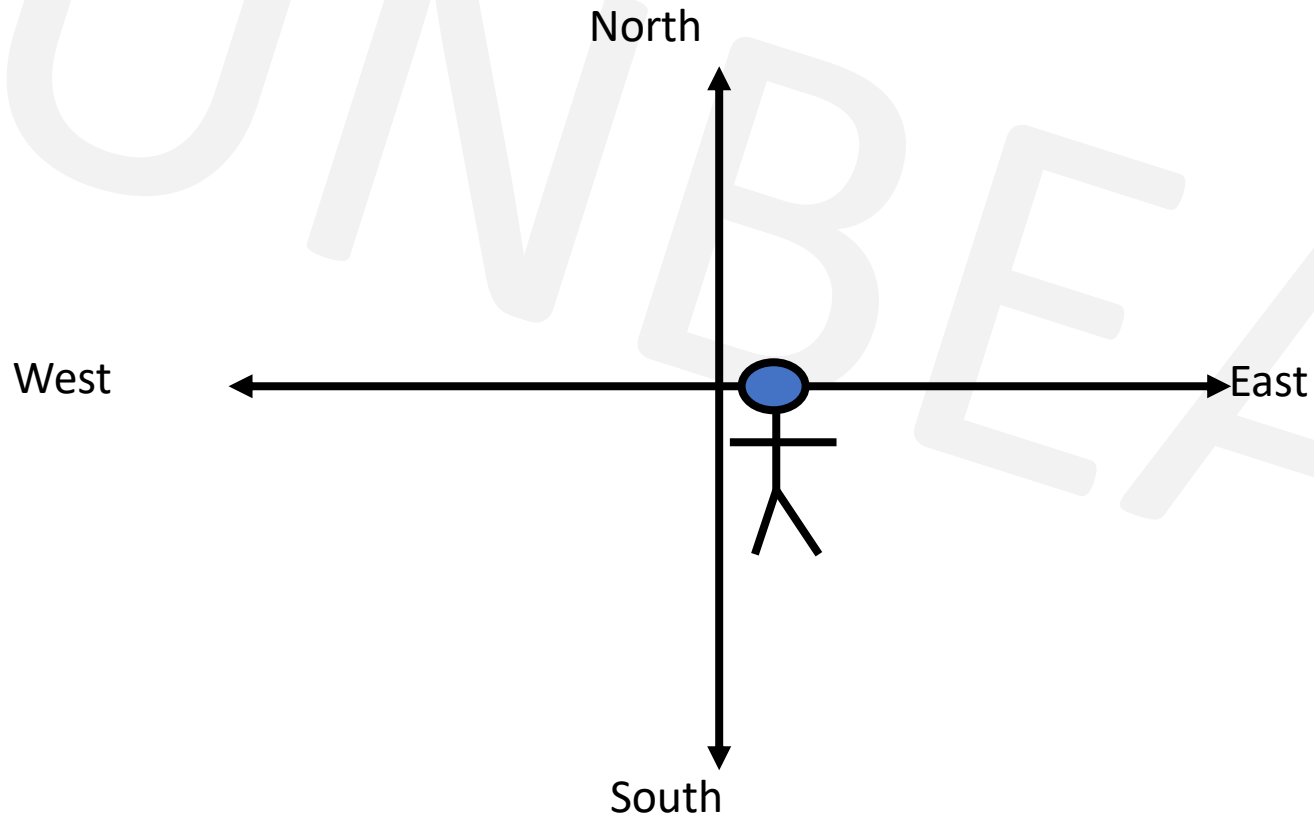


Directions

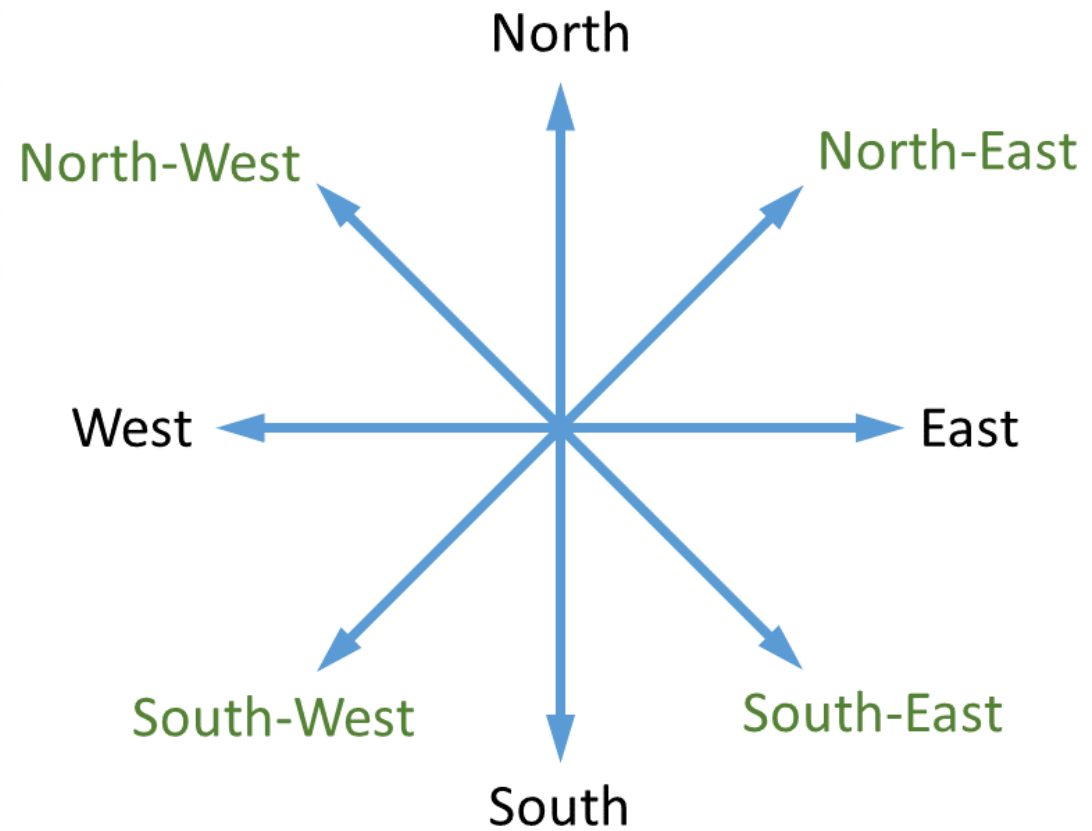
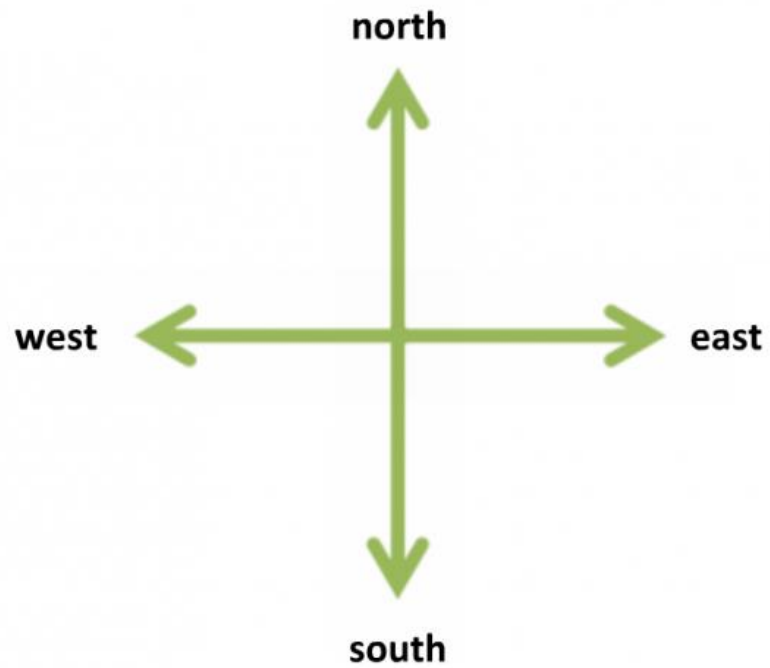
The key to solving these problems is **getting your directions right**.

It is the person's right or left not yours. The key is to think that you are walking as per the directions given in place of the man.

Visualize.



Directions



Direction

Q3. Ajay starts from point Facing East and travel 4m and take right to again travel 8m, from there Ajay take again right and travel 4m. After that Ajay take right to travel 9m, then finally, after taking the last right of 16m Ajay reached his final destination. In which direction Ajay is from his starting point?

- A. North
- B. Northeast
- C. Northwest
- D. South
- E. Southwest

Ans: B



Direction

Q4. Rohit walked 25 m towards south. Then he turned to his left and walked 20 m. He then turned to his left and walked 25 m. He again turned to his right and walked 15 m. At what distance is he from the starting point and in which direction?

- A. 35 m East
- B. 35 m North
- C. 30 m West
- D. 45 m East

Ans: A



Directions

Q. A man walks 1 km to East and then he turns to South and walks 5 km. Again he turns to East and walks 2 km. After this he turns to North and walks 9 km. Now, how far is he from his starting point?

- A. 3 km
- B. 4 km
- C. 5 km
- D. 7 km

Ans: C



Series

Q5. Given a Series 1, 30 5, 26, 9, 22, 13, 18, ?

Find what number would come in place of the question mark(?).

A. 17

B. 22

C. 28

D. 19

Ans: A



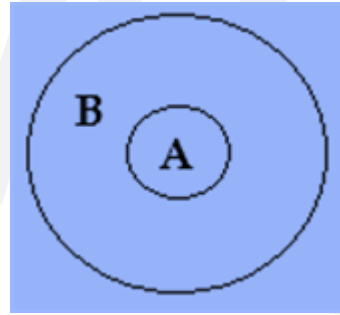
Syllogisms

- The syllogisms are just argument sentences that require deductive reasoning to arrive at some conclusions.
- **Steps to solve the Syllogism questions:-**
- Read the question thoroughly
- Start drawing the Venn diagram to make the explanation more clear and simplified.
- Follow the sequence of the question while drawing
- Analyse the conclusion from the Venn diagram
- Check for other alternative solutions at the end
- Always pay attention to words like 'some', 'a few', 'all', 'atleast', etc. These words form the base to solve the syllogism questions.
- Never assume anything while solving the syllogism questions. The only data that has to be followed while solving the question is the data mentioned in the question. No extra assumption must be made while solving questions.



Types of Syllogism

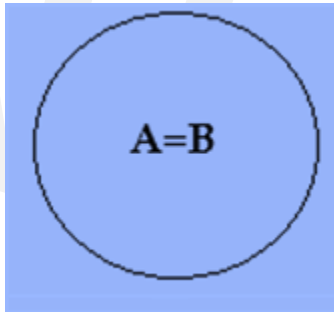
- **1. All A are B**
- A is contained in B but not necessarily vice versa.
- This means A is a subset of B, but B may not be a subset of A.



- It is visible that circle A is inside the circle B, which means that B contains the entire A, i.e. All A are B.

Types of Syllogism

- **2. $A = B$**
- In this case, the conclusion is similar to the first type, i.e. “All A are B”. Here not only “All A are B”, but also “All B are A”.
- This means A is a subset of B and B is also a subset of A.

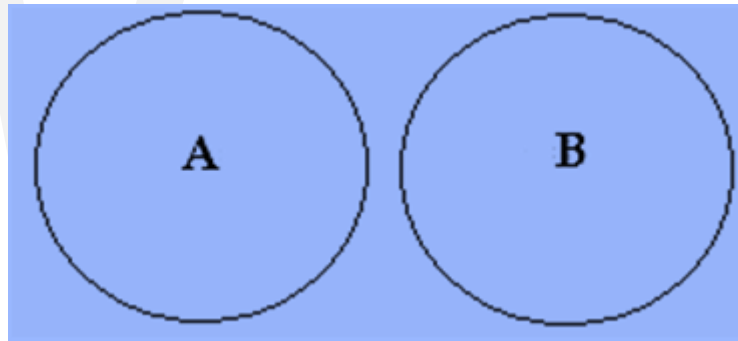


- Here A is contained in B and so is B contained in A. So, here A contains all B and again B also contains all A.



Types of Syllogism

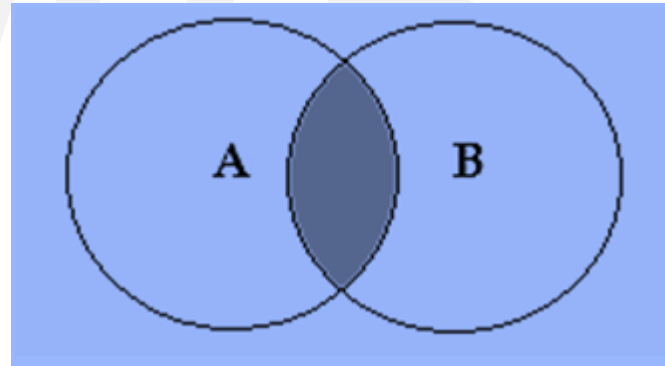
- **3. No A are B**
- B does not contain any of A and so A is not contained in B.
- This means that A and B are disjoint sets.



- Here no part of A is present inside of B and similarly, no part of A is present in A. So neither A nor B contain any part of B or A respectively.

Types of Syllogism

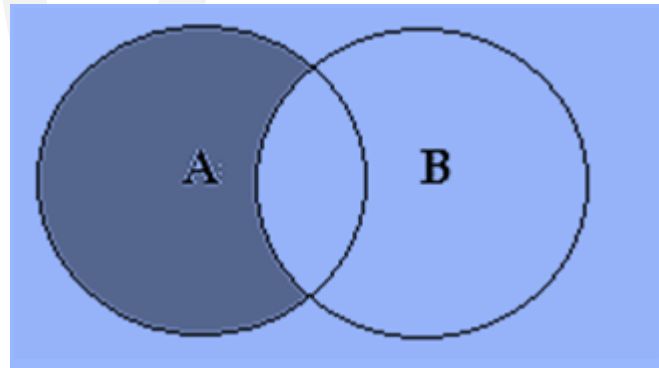
- **4. Some A are B**
- This is the case when some of A is in B that is A and B are intersecting, and thus some B are A will also be true.



- Here, the shaded portion indicates that some portion of A is contained in B while the unshaded portion is uncertain portion and does not indicate anything whether A is contained in B or not.

Types of Syllogism

- **5. Some A are not B**
- This means that some portion of A is not included in B for sure while the other part of A is uncertain whether it is included in B or not.



- Some portion of A is surely not included in B while there is no surety whether the shaded region is included in B or not.

Syllogisms

- Some rules that should be followed while solving the syllogism questions:
- Any “All” and “All” sentence will always imply an “All” conclusion.
- Any “All” and “No” sentence will always imply a “No” conclusion.
- Any “All” and “Some” sentence will always imply a “No” conclusion.
- Any “Some” and “All” sentence will always imply a “Some” conclusion.
- Any “Some” and “No” sentence will always imply a “Some not” conclusion.
- Any “Some” and “Some” sentence will always imply a “No” conclusion.



Syllogisms

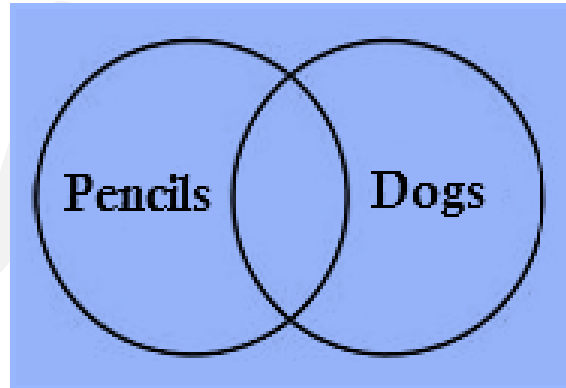
- **Statements:**

- Some pencils are dogs
- All dogs are pens
- All pens are cats

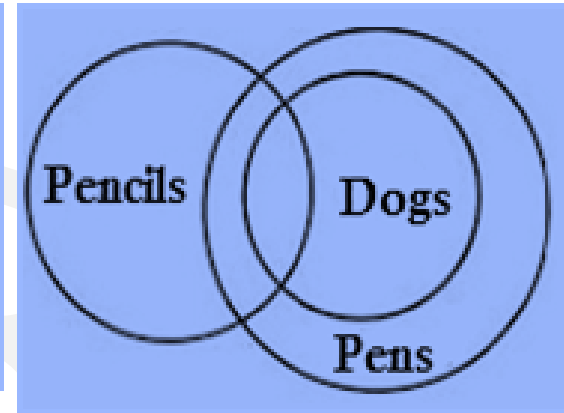
- **Conclusions:**

- All dogs are cats
- Some pens are pencils
- Some pencils are cats

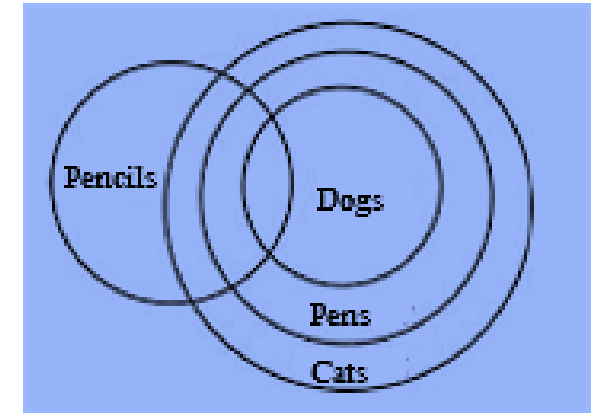
Some pencils are dogs



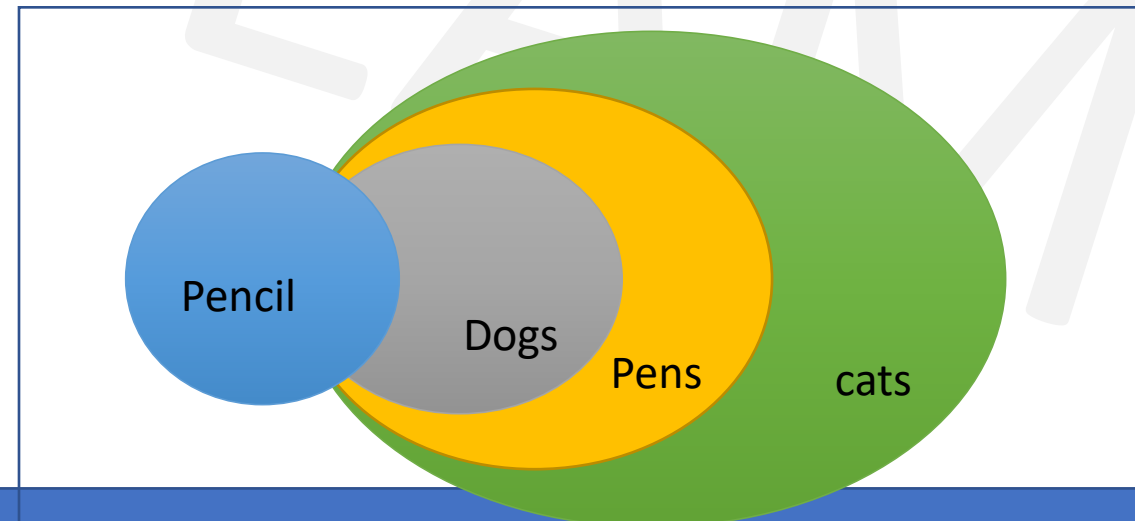
All dogs are pens



All pens are cats



OR



Syllogism

Q6. Statements:

Some CPUs are keyboards. No keyboard is a Mouse. All Mouse are CPU.

Conclusion:

I. Some keyboards are CPU

II. All CPU's are Mouse

III. No Mouse is a keyboard

IV. Some Mouse are keyboard

A. Only I follows

B. Only II and III follow

C. Only I and III follow

D. Only II follows

Ans: C



Reasoning

Q7. If + means -, - means \times , \times means \div and \div means +, then what will be the value of following? $480 \times 15 + 7 - 4 \div 12 = ?$

- A. -8
- B. 12
- C. 16
- D. None of the above

Ans: C



Coding Decoding

Q8. In a certain code language 'CREATIVE' is written as 'BDSBFUJS.' How is 'TRIANGLE' written in that code?

- A. BSHSFHKM
- B. BHSSMHFF
- C. BSSHFMKH
- D. BHSSFKHM

Ans: D



Reasoning

Q9. Ritu is younger than Suman but elder than Reena.

ii. Gayathri is elder than Suman.

iii. Sharmila is younger than Reena.

Who is the Eldest of all?

A. Ritu

B. Reena

C. Suman

D. Gayathri

Ans: D



Blood Relation

Type of Relationship	Terminology in Use
Mother's or Father's son	Myself/Brother
Mother's or Father's daughter	Myself/Sister
Mother's or Father's brother	Uncle
Mother's or Father's sister	Aunt
Mother's or Father's father	Grandfather
Mother's or Father's mother	Grandmother
Son's wife	Daughter-in-law
Daughter's husband	Son-in-law
Husband's or wife's sister	Sister-in-law
Husband's or wife's brother	Brother-in-law
Brother's son	Nephew
Brother's daughter	Niece
Uncle or aunt's son or daughter	Cousin
Sister's husband	Brother-in-law
Brother's wife	Sister-in-law
Grandson's or Granddaughter's daughter	Great-granddaughter



Blood Relation

Q10.

$A \times B$ means 'A is the father of B'.

$A \div B$ means 'A is the daughter of B'.

$A + B$ means 'A is the mother of B'.

$A - B$ means 'A is the brother of B'.

Which of the following means that R is the wife of P?

A. $P \times R - Q - T$

B. $P + T + R - Q$

C. $P + R - Q + T$

D. $P \times T - Q \div R$

E. None of the above

Ans: D



Data Sufficiency

Q11. How many gift boxes were sold on Monday ?

Statements :

I. It was 10% more than the boxes sold on the earlier day i.e. Sunday.

II. Every third visitor to the shop purchased the box and 1500 visitors were there on Sunday.

A. I alone is sufficient while II alone is not sufficient

B. II alone is sufficient while I alone is not sufficient

C. Either I or II is sufficient

D. Neither I nor II is sufficient

E. Both I and II are sufficient

Ans: E



Arrangement

Q12. Five friends L, M, N, O and P read a newspaper. The one who reads first gives it to N. The one who reads last had taken it from L. P was not the first or last to read it. There were two readers between M and L. Who read the newspaper last?

- A. L
- B. O
- C. M
- D. N

Ans: B



Arrangement

Q13. Eight friends, A, B, C, D, E, F, G and H, are sitting in a straight line, all facing the north.

F is sitting between D and G.

B is sitting between H and A.

E is third to the left of G.

G is sitting at one of the corners.

H is third to the left of C.

Who is sitting between A and E?

A. B

B. H

C. D

D. C

Ans: D



Arrangement

Q14. Eight friends, A, B, C, D, E, F, G and H, are sitting in a straight line, all facing the north. F is sitting between D and G. B is sitting between H and A. E is third to the left of G. G is sitting at one of the corners. H is third to the left of C.

Who is sitting immediately to right of C?

- A. E
- B. G
- C. E
- D. F

Ans: A



Arrangement

Q15. Amit, Gaurav, Hatim, Varun, Yukti and Zaid are sitting in a straight line, all facing the north.

Gaurav is fourth to the left of Amit.

Yukti is sitting at one corner.

Hatim is fourth to the left of Yukti.

Zaid is third to the right of Gaurav.

Who is sitting at the second place to the left of Zaid?

A. Yukti

B. Varun

C. Hatim

D. Amit

Ans: C



Arrangement

Q16. Amit, Gaurav, Hatim, Varun, Yukti and Zaid are sitting in a straight line, all facing the north. Gaurav is fourth to the left of Amit. Yukti is sitting at one corner. Hatim is fourth to the left of Yukti. Zaid is third to the right of Gaurav.

Who is sitting immediately to the right of Hatim?

- A. Yukti
- B. Varun
- C. Hatim
- D. Amit

Ans : B



Arrangement

Q17. Six friends are sitting in a circle. All of them are facing the centre.

Samir is an immediate neighbour of Kiran.

Gagan is an immediate neighbour of Pran and Vyom.

Suman sits second to the right of Gagan.

Kiran sits second to the right of Vyom.

Who sits fourth to the left of Vyom?

- A. Pran
- B. Samir
- C. Suman
- D. Kiran

Ans: D



Arrangement

Q18. Six friends are sitting in a circle. All of them are facing the centre. Samir is an immediate neighbor of Kiran. Gagan is an immediate neighbor of Pran and Vyom. Suman sits second to the right of Gagan. Kiran sits second to the right of Vyom.

Who sits third to right of Suman?

- A. Kiran
- B. Vyom
- C. Pran
- D. Samir

Ans: C



Blood Relation

Q19. Pointing to a photograph of a boy Suresh said, "He is the son of the only son of my mother." How is Suresh related to that boy?

- A. Brother
- B. Uncle
- C. Cousin
- D. Father

Ans: D



Reasoning

Q20. Choose the odd one out from the following.

- A. Sandy : beach
- B. Spiny : porcupine
- C. Warm : quilt
- D. Page : book

Ans: D



