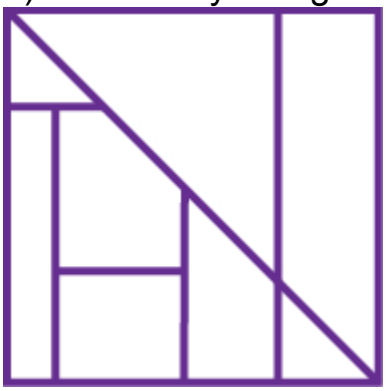
Counting of Numbers

1) How many triangles does the figure have?



a) 6
b) 2
c) 5
d) 7

Correct Choice: c

Solution

There are 5 triangles in the figure.

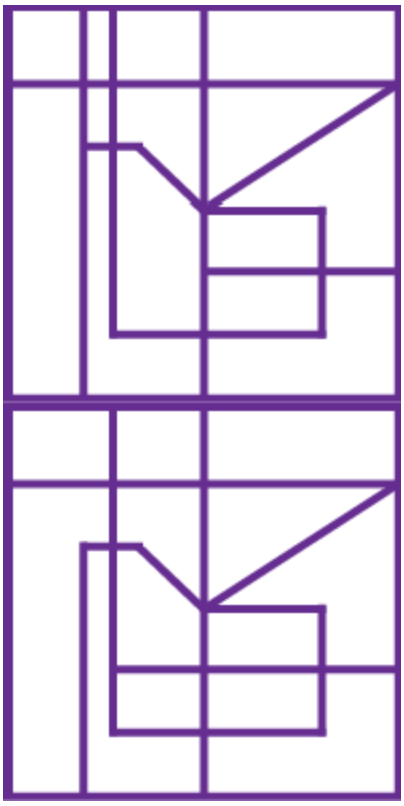
Hence, option c.

Mirror Image

2) If a mirror is placed on the line OR, then which of the answer figures is the right image of the given figure?

a)

b)

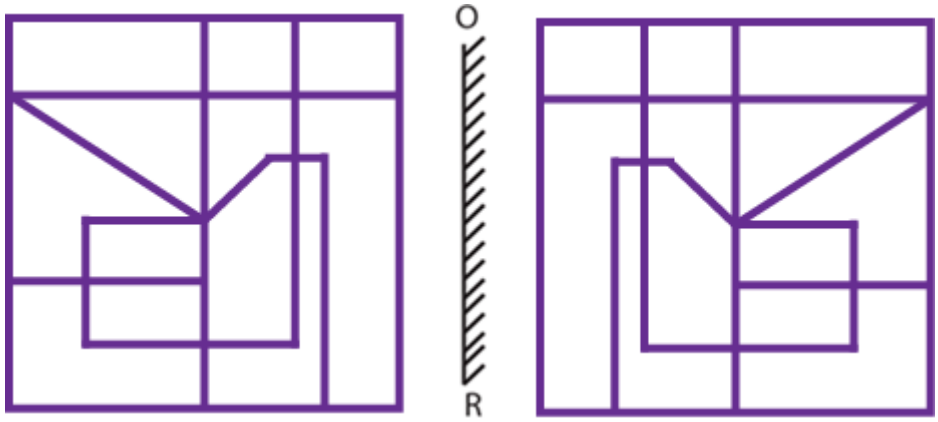


c)

d)

Correct Choice: c

Solution



Hence, option c.

Coding – Decoding (Matrix coding)

3) In the question, a word is represented by only one set of number as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by 2 classes of alphabets as in two matrices given below. The columns and rows of matrix I are numbers from 0-4 and that of matrix II are numbers from 5-9. A letter from this matrix can be represented 1st by its row and next by its column. Ex- 'A' can be represented by 20, 79 etc. and 'B' can be represented by 11, 67, 96 etc. Similarly, you have to identify the set of word 'PREVENT'.

Matrix - I

	0	1	2	3	4
0	K	H	T	R	E
1	P	B	C	S	T
2	A	L	N	G	D
3	H	K	R	B	M
4	P	N	F	E	S

Matrix - II

	5	6	7	8	9
5	J	R	G	D	W
6	K	N	B	G	Y

7	C	S	W	R	A
8	N	U	V	P	T
9	K	B	C	X	D

a) 10, 32, 34, 78, 22, 66, 14
b) 40, 56, 43, 87, 04, 85, 14
c) 40, 56, 43, 87, 04, 58, 14
d) 40, 65, 43, 87, 04, 85, 14

Correct Choice : b

Solution

As the digits of the numbers represented by rows and columns respectively,

P	R	E	V	E	N	T
10, 40, 88	03, 32, 56, 78	04, 43	87	04, 43	22, 66, 85, 41	02,14, 89

Hence, option b.

Syllogisms

4) Three statements are given followed by three conclusions numbered I, II, and III assuming the statements to be true, even if they seem to be at variance with commonly known facts. Decide which of conclusions logically follow(s) from the statement.

Statements:

Some apples are bananas.

No bananas are guavas.

Mostly guavas are grapes.

Conclusions:

I. Some grapes are bananas.

II. Mostly guavas are apples.

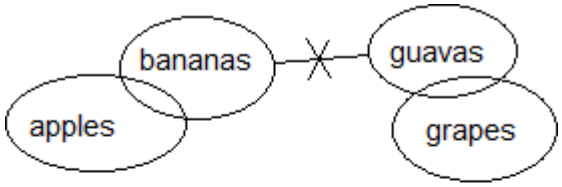
III. Some grapes are apples.

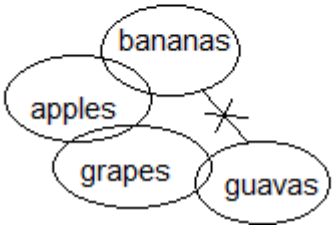
a) None follows
b) Only conclusion II follows
c) Conclusion II and conclusion III follow
d) Conclusion I and conclusion III follow

Correct Choice: a

Solution

Following figure can be formed from the statements.





None follows.

Hence, option a.

Inserting the Missing number

5) Select the digit which can replace the ? from the given four alternatives.

8	9	12
4	7	6
3	5	2
9	11	?

a. 14
b. 16
c. 17
d. 15

Correct Choice: b

Solution

Given

8	9	12
4	7	6
3	5	2
9	11	?

The pattern is 8 + 4 - 3 = 9, 9 + 7 - 5 = 11, similarly, 12 + 6 - 2 = 16.

Hence, option b.

Alphabet Series

6) A letter series is given below in which some letters are missing. Select the option that gives the letters that can fill these blanks in that order.

q_rs_uu_rrst_uq_rstuu

a. Rtqur
b. Qturq
c. Rsqur
d. Rtqru

Correct Choice: a

Solution

From option (a),

q r r s t u u / q r r s t u u / q r r s t u u

Hence, option a.

North – South Sitting Row arrangement

(7-11) Directions: Answer the questions based on the information given below.

Ten persons A, B, C, D, E, F, G, H, I and J are sitting in two parallel rows i.e. Row 1 and Row 2. The persons are sitting in row 1 face south and the persons sitting in row 2 face north. Each of them works in different companies viz. Infosys, Wipro, HP, HCL, TCS, Tata, IBM, Samsung, Nokia and LG but not in the same order. The persons sitting in row I are sitting exactly opposite to the persons sitting in row 2 and are facing each other.

F works in HP and sits at one of the extreme ends. F sits opposite to the one who sits second to the left of J. I does not work in Nokia. E sits opposite to the one who sits second to the right of the one who works in Tata. H works in HCL. E and J are immediate neighbors. J faces south. C sits to the immediate right of the one who works in IBM. I does not work in IBM. Only one person sits between the one who works in Tata and the one who works in HCL. B works in Wipro and sits third to the right of the one who works in Infosys. B sits opposite to C. The one who works in LG sits opposite to G, who works in TCS. A sits opposite to F.

7) Who sits 2nd to the right of D?

a. The one who works in HP
b. The one who works in HCL
c. The one who works in Nokia
d. The one who works in TCS

Correct Choice: d

Solution

Starting Point: Start with placing F and J as, F sits opposite to the one who sits 2nd to the left of J which means both J and F are not sitting in the same row.

Clues: E and J are immediate neighbors. J faces south. F works in HP and sits at one of the extreme ends. A sits opposite to F.

Inference: So, E either sits to the right or left of J. So, we have 2 cases.

Case I: When E sits to the left of J in row 1:

Row - 1			J	E	A
Row - 2					F(HP)

Case II: When E sits to the right of J in row 1:

Row - 1		E	J		A

Row - 2					F(HP)

Clues: E sits opposite to the one who sits second to the right of the one who works in Tata. H works in HCL. Only one person sits between the one who works in Tata and the one who works in HCL. B works in Wipro and sits third to the right of the one who works in Infosys. B sits opposite to C. C sits to the immediate right of the one who works in IBM.

Inference: So, case II is rejected because E sits opposite to the one who sits 2nd to the right of the one works in Tata which is not possible in case II. Also, A must be working in Infosys so, that C sits immediate right of the one who works in IBM.

Row - 1		B(Wipro)	J	E	A(Infosys)
Row - 2	(IBM)	C (Tata)		H(HCL)	F(HP)

Clues: The one who works in LG sits opposite to G, who works in TCS. I does not work in Nokia. I does not work in IBM.

Inference: So, J must be working in LG so, that G sits opposite to the one who works in LG. Also, E works in Nokia and I works in Samsung.

The final arrangement is as follows:

Row - 1	I(Samsung)	B(Wipro)	J (LG)	E (Nokia)	A(Infosys)
Row - 2	D(IBM)	C (Tata)	G(TCS)	H(HCL)	F(HP)

The one who works in TCS sits 2nd to the right of D.

Hence, option d.

8) Who sits opposite to the one who works in Tata?

a. I
b. D
c. B
d. F

Correct Choice: c

Solution

Starting Point: Start with placing F and J as, F sits opposite to the one who sits 2nd to the left of J which means both J and F are not sitting in the same row.

Clues: E and J are immediate neighbors. J faces south. F works in HP and sits at one of the extreme ends. A sits opposite to F.

Inference: So, E either sits to the right or left of J. So, we have 2 cases.

Case I: When E sits to the left of J in row 1:

Row - 1			J	E	A
Row - 2					F(HP)

Case II: When E sits to the right of J in row 1:

Row - 1		E	J		A
Row - 2					F(HP)

Clues: E sits opposite to the one who sits second to the right of the one who works in Tata. H works in HCL. Only one person sits between the one who works in Tata and the one who works in HCL. B works in Wipro and sits third to the right of the one who works in Infosys. B sits opposite to C. C sits to the immediate right of the one who works in IBM.

Inference: So, case II is rejected because E sits opposite to the one who sits 2nd to the right of the one works in Tata which is not possible in case II. Also, A must be working in Infosys so, that C sits immediate right of the one who works in IBM.

Row - 1		B(Wipro)	J	E	A(Infosys)
Row - 2	(IBM)	C (Tata)		H(HCL)	F(HP)

Clues: The one who works in LG sits opposite to G, who works in TCS. I does not work in Nokia. I does not work in IBM.

Inference: So, J must be working in LG so, that G sits opposite to the one

who works in LG. Also, E works in Nokia and I works in Samsung.
The final arrangement is as follows:

Row - 1	I(Samsung)	B(Wipro)	J (LG)	E (Nokia)	A(Infosys)
Row - 2	D(IBM)	C (Tata)	G(TCS)	H(HCL)	F(HP)

B sits opposite to the one who works in Tata.

Hence, option c.

9) Who sits 3rd to the left of the one who works in Samsung?

a. E
b. J
c. F
d. D

Correct Choice: a

Solution

Starting Point: Start with placing F and J as, F sits opposite to the one who sits 2nd to the left of J which means both J and F are not sitting in the same row.

Clues: E and J are immediate neighbors. J faces south. F works in HP and sits at one of the extreme ends. A sits opposite to F.

Inference: So, E either sits to the right or left of J. So, we have 2 cases.

Case I: When E sits to the left of J in row 1:

Row - 1			J	E	A
Row - 2					F(HP)

Case II: When E sits to the right of J in row 1:

Row - 1		E	J		A

Row - 2					F(HP)

Clues: E sits opposite to the one who sits second to the right of the one who works in Tata. H works in HCL. Only one person sits between the one who works in Tata and the one who works in HCL. B works in Wipro and sits third to the right of the one who works in Infosys. B sits opposite to C. C sits to the immediate right of the one who works in IBM.

Inference: So, case II is rejected because E sits opposite to the one who sits 2nd to the right of the one works in Tata which is not possible in case II. Also, A must be working in Infosys so, that C sits immediate right of the one who works in IBM.

Row - 1		B(Wipro)	J	E	A(Infosys)
Row - 2	(IBM)	C (Tata)		H(HCL)	F(HP)

Clues: The one who works in LG sits opposite to G, who works in TCS. I does not work in Nokia. I does not work in IBM.

Inference: So, J must be working in LG so, that G sits opposite to the one who works in LG. Also, E works in Nokia and I works in Samsung.

The final arrangement is as follows:

Row - 1	I(Samsung)	B(Wipro)	J (LG)	E (Nokia)	A(Infosys)
Row - 2	D(IBM)	C (Tata)	G(TCS)	H(HCL)	F(HP)

E sits 3rd to the left of the one who works in Samsung.

Hence, option a.

10) Who works in IBM?

a. The one who sits immediate right of A
b. The one who sits 2nd to the right of B
c. The one who sits immediate right of C
d. The one who sits opposite to I

Correct Choice: d

Solution

Starting Point: Start with placing F and J as, F sits opposite to the one who sits 2nd to the left of J which means both J and F are not sitting in the same row.

Clues: E and J are immediate neighbors. J faces south. F works in HP and sits at one of the extreme ends. A sits opposite to F.

Inference: So, E either sits to the right or left of J. So, we have 2 cases.

Case I: When E sits to the left of J in row 1:

Row - 1			J	E	A
Row - 2					F(HP)

Case II: When E sits to the right of J in row 1:

Row - 1		E	J		A
Row - 2					F(HP)

Clues: E sits opposite to the one who sits second to the right of the one who works in Tata. H works in HCL. Only one person sits between the one who works in Tata and the one who works in HCL. B works in Wipro and sits third to the right of the one who works in Infosys. B sits opposite to C. C sits to the immediate right of the one who works in IBM.

Inference: So, case II is rejected because E sits opposite to the one who sits 2nd to the right of the one works in Tata which is not possible in case II. Also, A must be working in Infosys so, that C sits immediate right of the one who works in IBM.

Row - 1		B(Wipro)	J	E	A(Infosys)	
Row - 2	(IBM)	C (Tata)		H(HCL)	F(HP)	

Clues: The one who works in LG sits opposite to G, who works in TCS. I does not work in Nokia. I does not work in IBM.

Inference: So, J must be working in LG so, that G sits opposite to the one who works in LG. Also, E works in Nokia and I works in Samsung.

The final arrangement is as follows:

Row - 1	I(Samsung)	B(Wipro)	J (LG)	E (Nokia)	A(Infosys)
Row - 2	D(IBM)	C (Tata)	G(TCS)	H(HCL)	F(HP)

The one who sits opposite to I i.e. D works in IBM.

Hence, option d.

11) Find the odd one out?

a. A
b. C
c. D
d. I

Correct Choice: b

Solution

Starting Point: Start with placing F and J as, F sits opposite to the one who sits 2nd to the left of J which means both J and F are not sitting in the same row.

Clues: E and J are immediate neighbors. J faces south. F works in HP and sits at one of the extreme ends. A sits opposite to F.

Inference: So, E either sits to the right or left of J. So, we have 2 cases.

Case I: When E sits to the left of J in row 1:

Row - 1			J	E	A
Row - 2					F(HP)

Case II: When E sits to the right of J in row 1:

Row - 1		E	J		A

Row - 2					F(HP)

Clues: E sits opposite to the one who sits second to the right of the one who works in Tata. H works in HCL. Only one person sits between the one who works in Tata and the one who works in HCL. B works in Wipro and sits third to the right of the one who works in Infosys. B sits opposite to C. C sits to the immediate right of the one who works in IBM.

Inference: So, case II is rejected because E sits opposite to the one who sits 2nd to the right of the one works in Tata which is not possible in case II. Also, A must be working in Infosys so, that C sits immediate right of the one who works in IBM.

Row - 1		B(Wipro)	J	E	A(Infosys)	
Row - 2	(IBM)	C (Tata)		H(HCL)	F(HP)	

Clues: The one who works in LG sits opposite to G, who works in TCS. I does not work in Nokia. I does not work in IBM.

Inference: So, J must be working in LG so, that G sits opposite to the one who works in LG. Also, E works in Nokia and I works in Samsung.

The final arrangement is as follows:

Row - 1	I(Samsung)	B(Wipro)	J (LG)	E (Nokia)	A(Infosys)	
Row - 2	D(IBM)	C (Tata)	G(TCS)	H(HCL)	F(HP)	

All are sitting at the extreme ends of the row except C.

Hence, option b.

Logical Inequalities

12) In the question, relationship between some elements is shown in the statements (s). These statements are followed by two conclusions. Read

the statements and give answer.

Statements: Q ≤ D ≥ E > F; H = F > X ≥ Y

Conclusions:

I. D > Y

II. E> H

a) Only conclusion I is true
b) Only conclusion II is true
c) Either conclusion I or II is true
d) Both conclusions I and II are true

Correct Choice: d

Solution

Given statement: Q ≤ D ≥ E > F; H = F > X ≥ Y

On combining statements, we get,

D ≥ E > F > X ≥ Y and D ≥ E > F = H

Conclusions:

I. D > Y: True (As, D ≥ E > F > X ≥ Y, so, D > Y)

II. E > H: True (As, E > F = H, so, E >H)

Hence, option d.

Syllogisms

13) In the question below there are three statements followed by two conclusions I and II. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three statements disregarding commonly known facts.

Statements:

Only a few cotton is jean

All jean is shirt

All shirt is trouser

Conclusions

I. Some shirt is not cotton

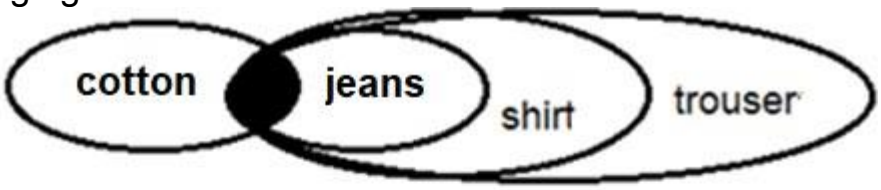
II. Some cotton is not trouser

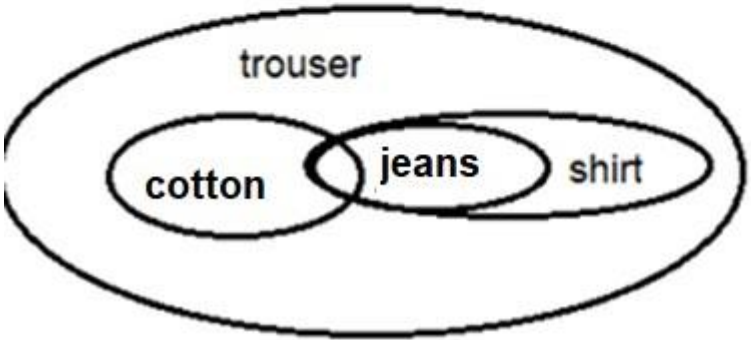
a) Only conclusion I follows
b) Both the conclusions I and II follow
c) Neither conclusion I nor II follows
d) Only conclusion II follows

Correct Choice : c

Solution

Following figures can be formed from the statements.





So, neither conclusion I nor II follows.

Hence, option c.

14) In the question below there are three statements followed by two conclusions I and II. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three statements disregarding commonly known facts.

Statements:

Only group is single

Some group is online

Some online is offline

Conclusions:

I. No single is online

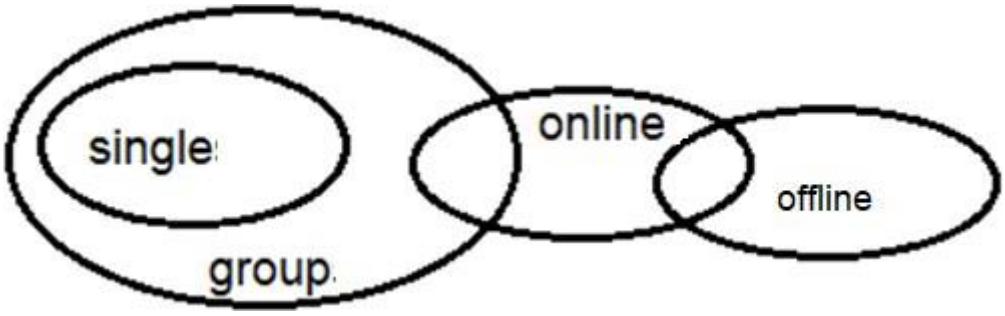
II. All single being offline is a possibility

a) Only conclusion I follows
b) Both the conclusions I and II follow
c) Neither conclusion I nor II follow
d) Only conclusion II follows

Correct Choice : a

Solution

Following figure can be formed from the statements.



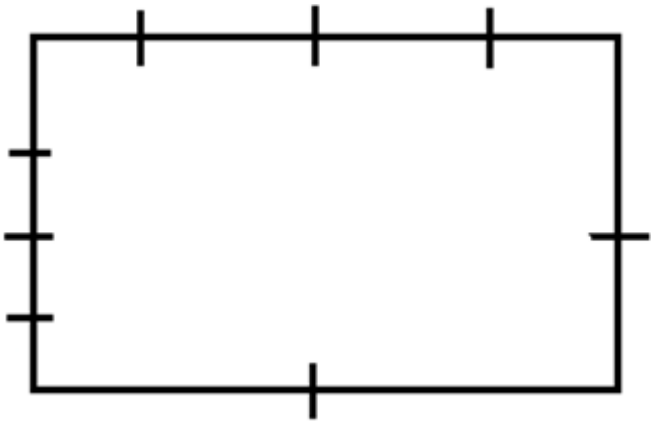
Since, only group is single is given which means all single is only part of group so, conclusion I follows.

Hence, option a.

(15-16) Directions: Answer the questions based on the information given below.

Eight persons P, Q, R, S, T, U, V and W are sitting in eight seats around a rectangular table such that three persons are sitting on one of the longer

side and three are sitting on one of the shorter side and one is sitting on other longer and one is sitting on other shorter side of the table. Also, one of the three who are sitting on longer side and the one who sits alone on the shorter side are facing away from the table and rest all are facing towards the table.



P and T are not adjacent to each other. P sits on longer side and S sits third to the left of P, who does not sit in the middle of the longer side. Two persons sit between S and W. R and Q are not immediate neighbors of each other. T faces away from the centre and U sits 2nd to the left of T. Q sits second to the right of V.

Rectangular Sitting arrangement

15) Who sits immediate right of T?

a. V
b. Q
c. S
d. W

Correct Choice : b

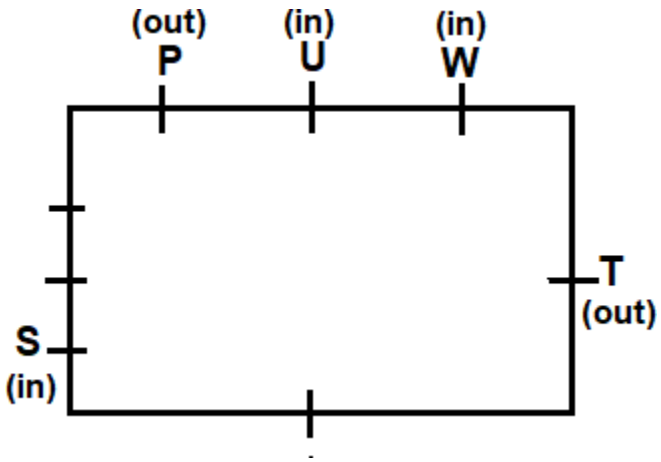
Solution

Starting Point: As, P sits in the longer side of table but does not sit in the middle of longer side so, start with placing P and S as S sits 3rd to the left of P so, P either face away or towards the table.

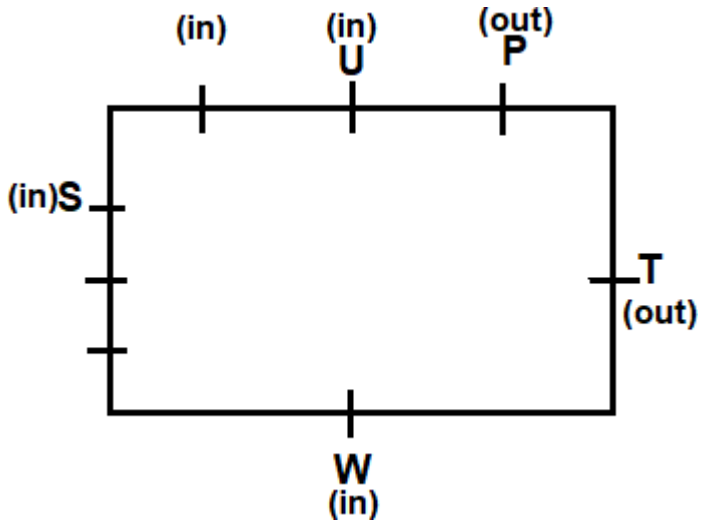
Clues: Two persons sit between S and W. T faces away from the centre and U sits 2nd to the left of T. P and T are not adjacent to each other.

Inference: So, there are 4 possibilities of P i.e. either P faces away and sit either of the two seats of longer side or P faces towards and sits either of the two seats of longer sides. Now, T and P are not adjacent to each other and T faces outside which means T either sit alone in shorter side or sit in longer side so, two of the possibilities are rejected here. So, we have left with two possibilities of P faces away from the table.

Case I: When P sitting immediate right of U:



Case II: When P sits immediate left of U:

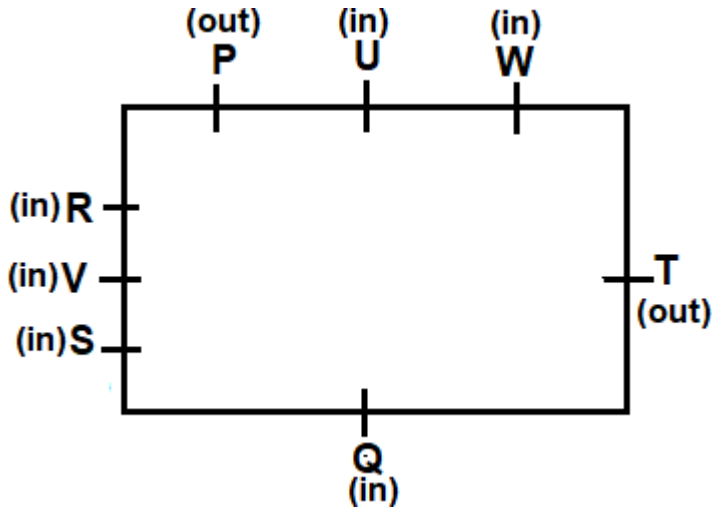


Clues: Q sits second to the right of V. R and Q are not immediate

neighbors of each other.

Inference: So, in case II, V must be sitting adjacent to U and Q is sitting adjacent to S which means R must be sitting adjacent to Q so, case II is rejected.

The final arrangement is as follows:



Q sits immediate right of T.

Hence, option b.

16) Who sits immediate left of R?

a. U
b. Can't be determined
c. W
d. P

Correct Choice: d

Solution

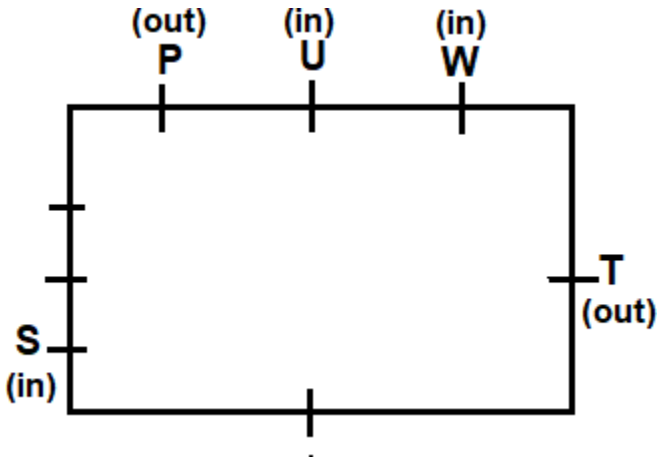
Starting Point: As, P sits in the longer side of table but does not sit in the middle of longer side so, start with placing P and S as S sits 3rd to the left of P so, P either face away or towards the table.

Clues: Two persons sit between S and W. T faces away from the centre and U sits 2nd to the left of T. P and T are not adjacent to each other.

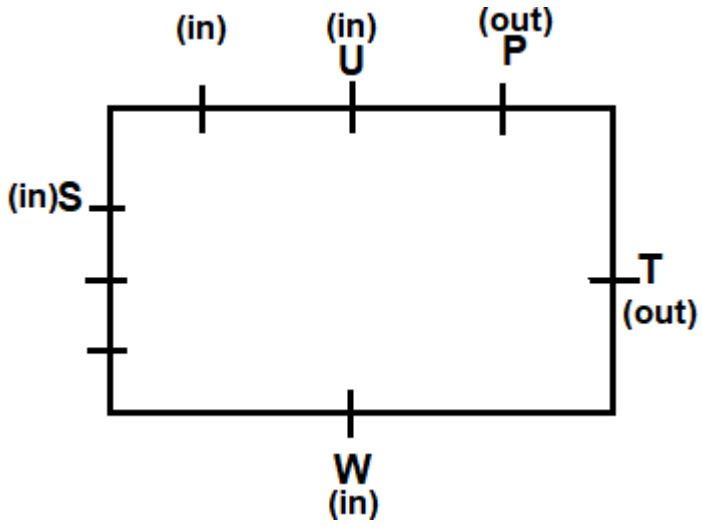
Inference: So, there are 4 possibilities of P i.e. either P faces away and sit either of the two seats of longer side or P faces towards and sits either of

the two seats of longer sides. Now, T and P are not adjacent to each other and T faces outside which means T either sit alone in shorter side or sit in longer side so, two of the possibilities are rejected here. So, we have left with two possibilities of P faces away from the table.

Case I: When P sitting immediate right of U:



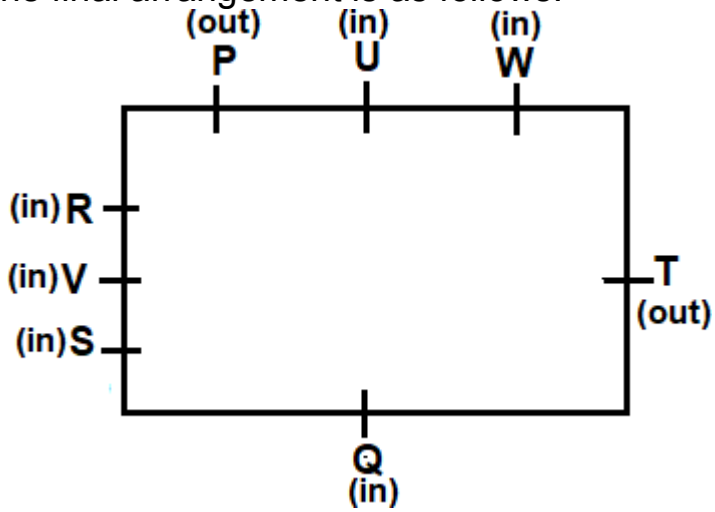
Case II: When P sits immediate left of U:



Clues: Q sits second to the right of V. R and Q are not immediate neighbors of each other.

Inference: So, in case II, V must be sitting adjacent to U and Q is sitting adjacent to S which means R must be sitting adjacent to Q so, case II is rejected.

The final arrangement is as follows:



P sits immediate left of R.

Hence, option d.

Ordering & Ranking

(17-18) Directions: Answer the questions based on the information given below.

There are seven students A, B, C, D, E, F and G, who secured different marks in an examination. A secured more than D, but less than G. F secured more than only B and C. G doesn't secure the highest marks. The one who secured the second lowest marks scored 48 and the one who secured the highest marks scored 78 marks.

17) If C secured 12 marks more than B, then what is the sum of the marks obtained by B and E?

a) 114
b) 112
c) 116
d) 122

Correct Choice: a

Solution

F secured more than only B and C. A secured less than G who does not secure the highest marks which means E secured the highest marks.

E(78) > G > A > D > F > B/C(48)> C/B

So, if the marks obtained by C is 12 more than B which means B secured 36 marks so, the sum of B and E is 114(36+78).

Hence, option a.

18) Who secured the highest marks?

a. A
b. B
c. E
d. C

Correct Choice: c

Solution

F secured more than only B and C. A secured less than G who does not secure the highest marks which means E secured the highest marks.

E(78) > G > A > D > F > B/C(48)> C/B

E secured the highest marks.

Hence, option c.

Months Based Puzzle

(19-23) Directions: Answer the questions based on the information given below.

Seven persons P, Q, R, S, T, U and V likes 7 IPL teams KKR, RCB, DD, CSK, SRH, KXIP and RR but not in the same order. They have their birthdays on 8th of different months viz. January, March, April, June, July, September and December of the same year but not necessarily in the same order.

P does not like RCB. V's birthday does not fall in January. P's birthday falls

in the month which have 31 days. Q's birthday month is after P's birthday month. U's birthday falls in the month having 31 days. The one who likes CSK has birthday in April. Q's birthday month is immediately before U's birthday month. S does not like RR. The ones who like RR and SRH have their birthday in the month which have 30 days. The one who likes RCB has his birthday in the month which has 31 days. T's birthday falls in the month having 30 days but before September. R has his birthday in December. V and U like KXIP and KKR teams respectively. V's birthday falls before Q's birthday. V's birthday is not in June.

19) Who likes SRH team?

a. P
b. S
c. R
d. T

Correct Choice: b

Solution

Starting Point: Start with the direct information we have i.e. R has his birthday in December. The one who likes CSK has birthday in April.

Clues: P's birthday falls in the month which have 31 days. Q's birthday month is after P's birthday month. U's birthday falls in the month having 31 days. Q's birthday month is immediately before U's birthday month. T's birthday falls in the month having 30 days but before September.

Inference: So, both P and U have their birthday in the month having 31 days which means they have birthday on one of the months among January, March, July and December but Q's birthday is after the birthday of P also, R has birthday in December. Now, Q's birthday must be in June as his birthday month followed by birthday month of U who has birthday in month having 31 days so, U has birthday in July, and P has birthday either in January or March. T must have his birthday in April.

Months	Persons	Teams

January	P/	
March	P/	
April	T	CSK
June	Q	
July	U	
September		
December	R	

Clues: P does not like RCB. V's birthday does not fall in January. The ones who like RR and SRH has their birthday in the month which have 30 days. The one who likes RCB has his birthday in the month which has 31 days. S does not like RR. V and U like KXIP and KKR teams respectively. V's birthday falls before Q's birthday. V's birthday is not in June.

Inference: So, V has his birthday in March because he has birthday before Q but not in January which means S has his birthday in September. Now, R must like RCB as the one who likes RCB has his birthday in month having 31 days. Also, S must like SRH as the ones who like RR and SRH have their birthday in the month having 30 days but S does not like RR.

The final arrangement is as follows:

Months	Persons	Teams
January	P	DD
March	V	KXIP
April	T	CSK
June	Q	RR

July	U	KKR
September	S	SRH
December	R	RCB

S likes SRH team.

Hence, option b.

20) Who among the following has birthday in June?

a. The one who likes CSK
b. P
c. The one who likes DD
d. The one who likes RR

Correct Choice: d

Solution

Starting Point: Start with the direct information we have i.e. R has his birthday in December. The one who likes CSK has birthday in April.

Clues: P's birthday falls in the month which have 31 days. Q's birthday month is after P's birthday month. U's birthday falls in the month having 31 days. Q's birthday month is immediately before U's birthday month. T's birthday falls in the month having 30 days but before September.

Inference: So, both P and U have their birthday in the month having 31 days which means they have birthday on one of the months among January, March, July and December but Q's birthday is after the birthday of P also, R has birthday in December. Now, Q's birthday must be in June as his birthday month followed by birthday month of U who has birthday in month having 31 days so, U has birthday in July, and P has birthday either in January or March. T must have his birthday in April.

Months	Persons	Teams

January	P/	
March	P/	
April	T	CSK
June	Q	
July	U	
September		
December	R	

Clues: P does not like RCB. V's birthday does not fall in January. The ones who like RR and SRH has their birthday in the month which have 30 days. The one who likes RCB has his birthday in the month which has 31 days. S does not like RR. V and U like KXIP and KKR teams respectively. V's birthday falls before Q's birthday. V's birthday is not in June.

Inference: So, V has his birthday in March because he has birthday before Q but not in January which means S has his birthday in September. Now, R must like RCB as the one who likes RCB has his birthday in month having 31 days. Also, S must like SRH as the ones who like RR and SRH have their birthday in the month having 30 days but S does not like RR.

The final arrangement is as follows:

Months	Persons	Teams
January	P	DD
March	V	KXIP
April	T	CSK
June	Q	RR

July	U	KKR
September	S	SRH
December	R	RCB

The one who likes RR team has birthday in June.

Hence, option d

21) ____has birthday in March?

a. V
b. The one who likes KXIP
c. Either T or P
d. Both (a) or (b)

Correct Choice: d

Solution

Starting Point: Start with the direct information we have i.e. R has his birthday in December. The one who likes CSK has birthday in April.

Clues: P's birthday falls in the month which have 31 days. Q's birthday month is after P's birthday month. U's birthday falls in the month having 31 days. Q's birthday month is immediately before U's birthday month. T's birthday falls in the month having 30 days but before September.

Inference: So, both P and U have their birthday in the month having 31 days which means they have birthday on one of the months among January, March, July and December but Q's birthday is after the birthday of P also, R has birthday in December. Now, Q's birthday must be in June as his birthday month followed by birthday month of U who has birthday in month having 31 days so, U has birthday in July, and P has birthday either in January or March. T must have his birthday in April.

Months	Persons	Teams
January	P/	

March	P/	
April	T	CSK
June	Q	
July	U	
September		
December	R	

Clues: P does not like RCB. V's birthday does not fall in January. The ones who like RR and SRH has their birthday in the month which have 30 days. The one who likes RCB has his birthday in the month which has 31 days. S does not like RR. V and U like KXIP and KKR teams respectively. V's birthday falls before Q's birthday. V's birthday is not in June.

Inference: So, V has his birthday in March because he has birthday before Q but not in January which means S has his birthday in September. Now, R must like RCB as the one who likes RCB has his birthday in month having 31 days. Also, S must like SRH as the ones who like RR and SRH have their birthday in the month having 30 days but S does not like RR.

The final arrangement is as follows:

Months	Persons	Teams
January	P	DD
March	V	KXIP
April	T	CSK
June	Q	RR
July	U	KKR

September	S	SRH
December	R	RCB

V likes KXIP team and has birthday in March.

Hence, option d

22) How many persons have birthday in between the birthdays of U and P?

a. Two
b. One
c. Three
d. None

Correct Choice: c

Solution

Starting Point: Start with the direct information we have i.e. R has his birthday in December. The one who likes CSK has birthday in April.

Clues: P's birthday falls in the month which have 31 days. Q's birthday month is after P's birthday month. U's birthday falls in the month having 31 days. Q's birthday month is immediately before U's birthday month. T's birthday falls in the month having 30 days but before September.

Inference: So, both P and U have their birthday in the month having 31 days which means they have birthday on one of the months among January, March, July and December but Q's birthday is after the birthday of P also, R has birthday in December. Now, Q's birthday must be in June as his birthday month followed by birthday month of U who has birthday in month having 31 days so, U has birthday in July, and P has birthday either in January or March. T must have his birthday in April.

Months	Persons	Teams
January	P/	

March	P/	
April	T	CSK
June	Q	
July	U	
September		
December	R	

Clues: P does not like RCB. V's birthday does not fall in January. The ones who like RR and SRH has their birthday in the month which have 30 days. The one who likes RCB has his birthday in the month which has 31 days. S does not like RR. V and U like KXIP and KKR teams respectively. V's birthday falls before Q's birthday. V's birthday is not in June.

Inference: So, V has his birthday in March because he has birthday before Q but not in January which means S has his birthday in September. Now, R must like RCB as the one who likes RCB has his birthday in month having 31 days. Also, S must like SRH as the ones who like RR and SRH have their birthday in the month having 30 days but S does not like RR.

The final arrangement is as follows:

Months	Persons	Teams
January	P	DD
March	V	KXIP
April	T	CSK
June	Q	RR
July	U	KKR

September	S	SRH
December	R	RCB

Three persons have birthdays in between the birthdays of U and P.

Hence, option c.

23) Find the odd one out?

a. S
b. V
c. P
d. U
Correct Choice: a

Solution

Starting Point: Start with the direct information we have i.e. R has his birthday in December. The one who likes CSK has birthday in April.

Clues: P's birthday falls in the month which have 31 days. Q's birthday month is after P's birthday month. U's birthday falls in the month having 31 days. Q's birthday month is immediately before U's birthday month. T's birthday falls in the month having 30 days but before September.

Inference: So, both P and U have their birthday in the month having 31 days which means they have birthday on one of the months among January, March, July and December but Q's birthday is after the birthday of P also, R has birthday in December. Now, Q's birthday must be in June as his birthday month followed by birthday month of U who has birthday in month having 31 days so, U has birthday in July, and P has birthday either in January or March. T must have his birthday in April.

Months	Persons	Teams
January	P/	
March	P/	
April	T	CSK
June	Q	
July	U	
September		
December	R	

Clues: P does not like RCB. V's birthday does not fall in January. The ones who like RR and SRH has their birthday in the month which have 30 days. The one who likes RCB has his birthday in the month which has 31 days. S does not like RR. V and U like KXIP and KKR teams respectively. V's birthday falls before Q's birthday. V's birthday is not in June.

Inference: So, V has his birthday in March because he has birthday before Q but not in January which means S has his birthday in September. Now, R must like RCB as the one who likes RCB has his birthday in month having 31 days. Also, S must like SRH as the ones who like RR and SRH have their birthday in the month having 30 days but S does not like RR.

The final arrangement is as follows:

Months	Persons	Teams
January	P	DD
March	V	KXIP
April	T	CSK

June	Q	RR
July	U	KKR
September	S	SRH
December	R	RCB

All of them have birthdays in the months having 31 days except S.

Hence, option a.

Distance & Direction

(24-25) Directions: Answer the questions based on the information given below.

Rani started her journey from point ‘P’ and walked 10km eastwards to reach point ‘Q’ then she turned to her left and walked 3km to reach point ‘R’ and then she turned to her left again and walked 12km to reach point ‘S’. Again, she turned to her left and walked 3km to reach point ‘T’.

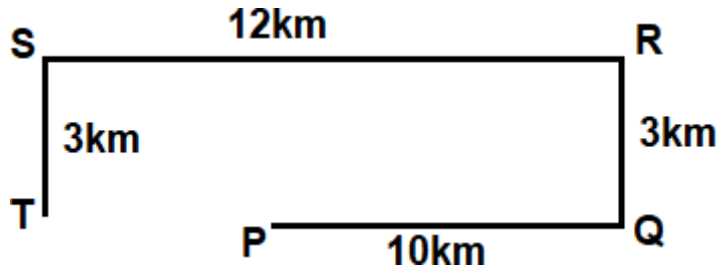
24) If point Z is south west of P and 8km south of point S then what is the shortest distance between point Z and point Q?

a. 10km
b. 13km
c. 8km
d. 11km

Correct Choice: b

Solution

According to the information given following figure can be formed:

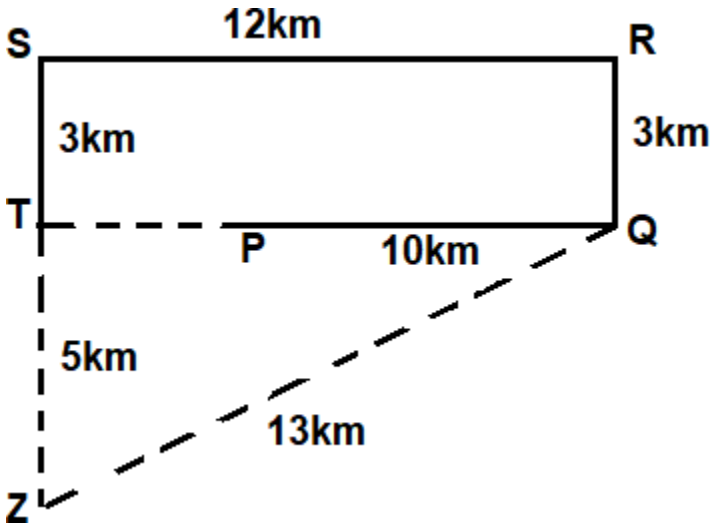


So, the shortest distance between point Z and point Q must be 13 km according to Pythagoras Theorem

$TZ^2 + TQ^2 = QZ^2$

$5^2 + 12^2 = QZ^2$

$QZ = 13$.



Hence, option b.

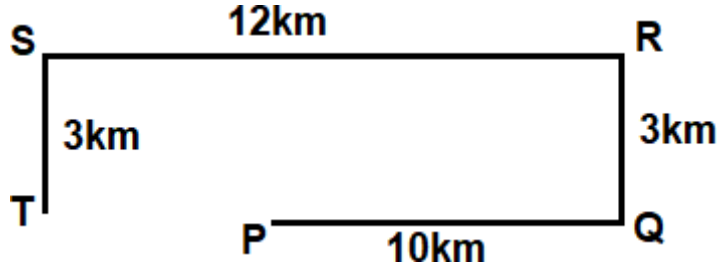
25) Point T is in which direction with respect to the point R?

a. South west
b. North west
c. North east
d. South east

Correct Choice: a

Solution

According to the information given following figure can be formed:



Point T is in south west of point R.

Hence, option a.

Alphabets, Numbers, Symbols sequence puzzle

(26-27) Directions: Study the given arrangement of number alphabets, numbers and symbols and answer the questions based on it.

7 O # % H & 6 8 @ P 3 E * 5 I $ 7 2 B ^ 4 & 1 L

26) In the given arrangement, how many such alphabets are there which are immediately preceded by a number, which is equal to their alphabetic positions?

a. 3
b. 2
c. 4
d. 1

Correct Choice: d

Solution

Given series:

7 O # % H & 6 8 @ P 3 E * 5 I $ 7 2 B ^ 4 & 1 L

There is only one such number, which is immediately preceded by a number equals to their alphabetic position.

Hence, option d.

27) What is the sum of the numbers between ‘H’ and ‘@’ in the given arrangement?

a. 9
b. 14
c. 15
d. 8

Correct Choice: b

Solution

Given series:

7 O # % H & 6 8 @ P 3 E * 5 I $ 7 2 B ^ 4 & 1 L

The sum of the numbers between ‘H’ and ‘@’ is 14(6+8).

Hence, option b.

Logical Inequalities

28) In the question, relationship between some elements is shown in the statements (s). These statements are followed by two conclusions. Read the statements and give answer.

Statements: P ≥ Q ≤ R < S; T ≥ U < S ≤ V

Conclusions:

I. U < R

II. P ≥ S

a) Only conclusion I is true
b) Only conclusion II is true
c) Either conclusion I or II is true
d) either conclusion I nor II is true

Correct Choice: d

Solution

Given statement: P ≥ Q ≤ R < S; T ≥ U < S ≤ V

On combining statements, we get,

Q ≤ R < S ≤ V; P ≥ Q ≤ R < S ≤ V

Conclusions:

I. U < R: False (As, U < S > R, we cannot establish the exact relation between U and R)

II. P ≥ S: False (As, P ≥ Q ≤ R < S, we cannot establish the exact relation between P and S)

Hence, option d.

Alphabet test (Letter word problems)

29) How many pairs of alphabets are there in the word 'EXPLANATION' which has as many letters between them in the word as in the alphabetical series?

a. Three

b. Four
c. One
d. Two

Correct Choice: a

Solution

Given word

'EXPLANATION' so, there are four such pairs i.e. AE, NL and NO

Hence, option a.

Alphabet-numeric Series

30) Which of the following pair replaces ? in series given.

?, JM12, ?, BW22

a. NH6, FQ17
b. NH7, FR17
c. OH7, EQ16
d. NG7, FR18

Correct Choice: d

Solution

Given series

?, JM12, ?, BW22

N – 4 = J, J – 4 = F, F – 4 = B

H + 5 = M, M + 5 = R, R + 5 = W

7 + 5 = 12, 12 + 5 = 17, 17 + 5 = 22

Hence, option b.