DATA SUFFICIENCY

Directions: Each of the following consists of a question and some statements are given below it. You have to decide whether the data provided in the statements are sufficient to answer the question:

1. How is Tina related to Anu?

Statement I: Anu is the wife of Jai. Anu and Vini are the only children of Dev. Pal is the only daughter of Jai. Tina is the granddaughter of Dev.

Statement II: Pal is married to Siya. Anu is the mother in-law of Siya. Anu is the only daughter of Dev and Roy. Tina is the grandchild of Dev.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.
D. If the data in both statement I and II together are not sufficient to answer the question.
E. If the data in both statement I and II together are necessary to answer the question.

2. How many persons are sitting between Suresh and Swami?

Statement I: Suresh is ninth from left and Swami is thirteenth from right. If Suresh and Swami interchange their position

Swami becomes seventeenth from right.

Statement II: Suresh and Swami are in odd numbered positions when counted from left and there are 28 boys in the row.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.
D. If the data in both statement I and II together are not sufficient to answer the question.

E. If the data in both statement I and II together are necessary to answer the question

3. There are five tea manufacturing companies namely A, B, C, D and E.

I. The production of Company B is more than that of Company A but not more than that of company E.

II. Production of Company C is more than the production Company B but not as much as that of company D

III. Production of E is not as much as the production of company D.

Which of these statements is/are sufficient to answer the question that production of which of the following companies is the highest?

A. Statement (I) and Statement (II) together are sufficient.
B. Any two statements together are sufficient.
C. Either statement (I) and statement (II) together or statement (III) are statement
D. All the statement (I), statement (II) and statement (III) together are sufficient.
E. None is sufficient.

4. What is Rohit's rank in the class?

I. Rohit's rank is 24 less than Nandani's rank.

II. Archana's rank is 38 more than Rohit's rank. Nandani's rank is 10 less than Archana's rank.

A. First set of statements I alone is sufficient.
B. Second set of statements II alone is sufficient.
C. Either set of statements I or II alone is sufficient.
D. Both sets of statements I and II together are not sufficient
E. Both sets of statements I and II together are sufficient

5. In which month of the year is Pratibha’s birthday?

I. Pratibha correctly remembers that her birthday is in the first half of the year.

II. Pratibha’s mother correctly remembers that his birthday is after 31st March but before 1st May.

A. First set of statements I alone is sufficient.
B. Second set of statements II alone is sufficient.
C. Either set of statements I or II alone is sufficient.
D. Both sets of statements I and II together are not sufficient
E. Both sets of statements I and II together are sufficient

6. Five persons – P, Q, X, Y and Z are sitting around a circular table with all of them facing towards the center. Who sits to the immediate left of Q?

Statement I: P sits third to right of Q. X sits third to right of P.

Statement II: Q sits immediate left of X who sits second to left of P. Y does not sit adjacent to Q.

A. If the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient in answer the question.
B. If the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
C. If the data in either in statement I alone or in statement II alone are sufficient to answer the question.
D. If the data in both the statements I and II together are not sufficient to answer the question.
E. If the data in both the statements I and II are together necessary to answer the question.

7. Who is oldest among P, K, J, R, S and T?

Statement I: R is older than P and J. R is younger than K. S is older than only T.

Statement II: S is older than J but younger than P. T is older than only R. P is not the oldest.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.
D. If the data in both statement I and II together are not sufficient to answer the question.
E. If the data in both statement I and II together are necessary to answer the question.

8. What is the code of ‘Party’ in the given code language?

Statement I: In the same code language ‘party was great’ is coded as ‘ar jv cu’ and ‘that was great’ is coded as ‘dt jv cu’.\

Statement II: In the same code language ‘how was the party’ ismcoded as ‘ft pd ar lv’ and ‘when did party start’ is coded as ‘kl aj rc ar’.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.
D. If the data in both statement I and II together are not sufficient to answer the question.
E. If the data in both statement I and II together are necessary to answer the question.

9. Seven persons – Reema, Naina, Zeba, Bhanu, Rony, Avni and Manav, lives in a seven floored building where bottom floor is numbered 1 and top floor is numbered 7, then Rony lives on which floor?

I. Reema lives on fifth floor and Bhanu doesn't live on top floor. There is a gap of two floors between Reema and Avni, who lives immediately below Naina.

II. Naina lives on third floor and Zeba lives on top floor. There is a gap of two floors between Reema and Avni. Avni lives immediately above Manav. Reema lives on odd numbered floor.

III. Bhanu, who lives on fourth floor, lives exactly between Manav and Zeba. Zeba lives on top floor.

A. Both statements I and II together are sufficient.
B. Both statements II and III together are sufficient.
C. Either statement I and III or II and III together are sufficient.
D. All statements I, II and III together are not sufficient.
E. All statements I, II and III together are necessary.

10. A + B' means 'A is mother of B'

'A – B' means 'A is the sister of B'

'A * B' means 'A is father of B'

'A = B' means 'A is the brother of B'

'A @ B' means 'A is the daughter of B'

How is Q related to U?

Statement I: P * Q – S = T @ V

Statement II: P * Q + R – S – W

Statement III: T + R * U – Y

A. The data in statement I and III are sufficient to answer the question.
B. The data in statement II and III are sufficient to answer the question.
C. The date in statement III and either I or II is sufficient to answer the question.
D. All I, II, III statements are together not sufficient to answer the question
E. All I, II, III statements are together sufficient to answer the question

11. There are five students Veta, Viji, Veer, Viki and Vinu in a class. Who scored the second lowest marks?

Statement I: Veta got the same marks as Viji. Veer got lower marks than exactly two of them. Viki is not the highest or lowest scorer and didn't get the same marks as any of them.

Statement II: Veta and Viji are the only ones who got the same marks. Viki scored more than either Veer or Vinu. Only two of them scored more than Veer.

A. The data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question
B. The data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question
C. The data either in statement I alone or in statement II alone are sufficient to answer the question
D. The data given in both statements I and II together are not sufficient to answer the question
E. The data in both statements I and II together are necessary to answer the question.

12. What is the distance between X and Y?

Statement I: Point X is 7 m north of point J. Point C is 10 m east of point E. Point O is 4 m west of point Y. Point E is 12 m north of point M. Point Y is 15 m south of point C. Point J is 9 m west of point M.

Statement II: Point X is 12 m west of point J. Point E is 11 m north of point C. Point O is 5 m north of point Y. Point M is 14 m north of point J and is also 8 m west of point E.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.

D. If the data in both statement I and II together are not sufficient to answer the question.
E. If the data in both statement I and II together are necessary to answer the question.

13. Five persons – Anshu, Vinod, Nari, Javed and Aslam are sitting in a line facing north then who among these persons sit third from the left end of the line?

Statement I: Anshu sits second to the left of Vinod. Vinod sits second to the left of Nari.

Statement II: Vinod is an immediate neighbour of both Aslam and Javed. Neither Aslam nor Javed sits at the extreme end of the line.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.
D. If the data in both statement I and II together are not sufficient to answer the question.
E. If the data in both statement I and II together are necessary to answer the question.

14. What is the code for "sweet candy"?

Statement I : 'candy chocolate sweet' is coded as hi ni mi and 'sweet bite candy' is coded as ti mi ni.

Statement II : 'drink water candy' is coded as fi mi gi and 'chocolate sweet water' is coded as ti ni gi.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.
D. If the data in both statement I and II together are not sufficient to answer the question.
E. If the data in both statement I and II together are necessary to answer the question.

15. Six persons from A to F are seated around a triangular table such that three of them sit at the corners and three in the middle of the sides. All of them face center.

What is the position of B with respect to F?

Statement I: C sits immediate left of D, who is second to the right of B. F is neither an immediate neighbor of D nor C.

Statement II: C is second to the right of E, who is not seated next to A. B and C are adjacent to each other.

Statement III: A is second to the left of E. Number of persons between A and C is equal to the number of persons between B and D.

A. If the data in both statement I and II together is sufficient to answer the question.
B. If the data in both statement II and III together is sufficient to answer the question.
C. If the data in both statement I and III together is sufficient to answer the question.
D. If the data in all the statements together are necessary to answer the question.
E. If the data in statement I and either statement II or III together are sufficient to answer the question.

16. Six batsmen are doing net practice on six days of a week starting from Monday to Saturday. Only one player practises on one day. Dhoni practises on which day?

Statement I : Virat practises just before Dhoni, who is not the last one to practice. Rohit practises on the first day of the week immediatley followed by Shikhar.

Statement II : Rohit and Virat practise at a gap of one day such that Rohit practises on Monday. Dhoni practises just before Rahul.

A. If the data in statement I is sufficient to answer the question.
B. If the data in statement II is sufficient to answer the question.
C. If the data in either statement I or statement II is sufficient to answer the question.
D. If the data in both statement I and statement II are necessary to answer the question.
E. If the data in statement I and statement II together are not sufficient to answer the question.

17. 8 different letters – A,E,F,G,M,N,R and T are arranged to form an English word.

Find which letter is placed at fifth position?

Statement I : The word has only two letters placed between the vowels. The word starts with F. Only three letters are between R and E. One of the vowels is placed at an odd numbered position.

Statement II : The second last letter of the word is N. Only one letter is placed between M and N. F and A are placed at a gap of one letter. F and T are placed at extreme ends.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.
D. If the data in both statement I and II together are not sufficient to answer the question.
E. If the data in both statement I and II together are necessary to answer the question.

18. Find Point D is in which direction from Point A?

Statement I : Point A is in the west of Point B, which is to the north-east of Point D. Point C is in the north of Point D and Point A. Point A is in the middle of Point E and Point C.

Statement II : Point B is to the north of Point F, which is to the east of Point E. Point D is to the west of Point B. Point A is to the north of Point E.

A. If the data in statement I is sufficient to answer the question.
B. If the data in statement II is sufficient to answer the question.
C. If the data in either statement I or statement II is sufficient to answer the question.
D. If the data in both statement I and statement II is necessary to answer the question.
E. If the data in neither statement I nor statement II is sufficient to answer the question.

19. 5 students from L to P were standing in a south facing queue, Who was standing at the extreme right end?

Statement I : M was not at any of the extreme ends. L was to the left of M but not to the right of O and N.

Statement II : L was at the extreme left end of the row. P was exactly in the middle of the queue. N and M were adjacent.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. If the data in statement II alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.

C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.
D. If the data in both statement I and II together are not sufficient to answer the question.
E. If the data in both statement I and II together are necessary to answer the question.

20. Rima studies six subjects viz. Hindi, English, Maths, History, Science and Computer on six different days of a week that starts from Monday. Only one subject is studied each day and one of the days is Holiday.

Which day is Holiday?

Statement I : Hindi is studied just after Science, which is studied on the fourth day of the week. Saturday is not a Holiday. Computer is studied just before Holiday.

Statement II : Hindi and Computer are studied at a gap of three days. Maths is studied on the last day of the week. English and Hindi are studied on consecutive days.

A. If the data in statement I is sufficient to answer the question.
B. If the data in statement II is sufficient to answer the question.
C. If the data in either statement I or statement II is sufficient to answer the question.
D. If the data in both statement I and statement II is necessary to answer the question.
E. If the data in neither statement I nor statement II is sufficient to answer the question.

Answers:

1. A

Solution: Checking Statement I:

Statement I: Anu is the wife of Jai. Anu and Vini are the only children of Dev. Pal is the only daughter of Jai. Tina is the grand-daughter of Dev.

Reference:

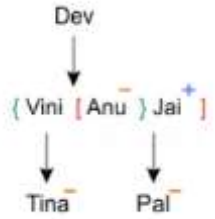
Anu is the wife of Jai. Anu and Vini are the only children of Dev.

Pal is the only daughter of Jai.

Tina is the grand-daughter of Dev.

Inference:

After using the above references, we have:



Here, we can say that Tina is the niece of Anu.

Clearly, Statement I alone is sufficient to answer the question.

Checking Statement II:

Statement II: Pal is married to Siya. Anu is the mother in-law of Siya. Anu is the only daughter of Dev and Roy. Tina is the grandchild of Dev.

Reference:

Pal is married to Siya.

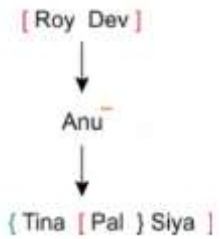
Anu is the mother in-law of Siya.

Anu is the only daughter of Dev and Roy.

Tina is the grandchild of Dev.

Inference:

After using the above references, we have:



Here, we have no information about the gender of Tina so we cannot find out the relation of Anu and Tina.

Clearly, Statement II alone is not sufficient to answer the question.

Here, the data in Statement I alone is sufficient to answer the question.

2. A

Solution: Checking Statement I:

Statement I: Suresh is ninth from left and Swami is thirteenth from right. If Suresh and Swami interchange their position Swami becomes seventeenth from right.

Reference:

Suresh is ninth from left and Swami is thirteenth from right.

If Suresh and Swami interchange their position Swami becomes seventeenth from right.

Inference:

After using the above references, we have:

Order of persons in the row = 8 persons + Suresh + ... + Swami + 12 persons

After interchanging,

Order of persons in the row = 8 persons + Swami + 3 persons + Suresh + 12 persons

Here, we can say that three persons are sitting between Suresh and Swami.

Clearly, Statement I alone is sufficient to answer the question.

Checking Statement II:

Statement II: Suresh and Swami are in odd numbered positions when counted from left and there are 28 boys in the row.

Reference:

Suresh and Swami are in odd numbered positions when counted from left and there are 28 boys in the row.

Inference:

Here, we have no information about the position of Suresh and Swami from any of the ends so we cannot find the answer.

Clearly, Statement II alone is not sufficient to answer the question.

3. D

Solution: Statement 1: The production of Company B is more than that of Company A but not more than that of company E.

Inference: E > B > A

Statements 2: Production of Company C is more than the production Company B but not as much as that of company D.

Inference: D > C > B

Statement III: Production of E is not as much as the production of company D.

Inference: D > E

Taking statements I and II together, we get that there are three possibilities, as show below:

Possibility 1: E > D > C > B > A;

Possibility 2: D > C > E > B > A;

Possibility 3: D > E > C > B > A

Taking all three statements we get that there are two possibilities, as show below

Possibility 1: D > C > E > B > A

Possibility 2: D > E > C > B > A

Here we get that D’s production is highest.

4. D

Solution: From statement I alone:

We have no information about Nandani's rank. Therefore, Rohit's rank cannot be determined.

Thus, the question cannot be answered using Statement I alone.

From statement II alone:

Archana's rank and Nandani's rank is not given. Therefore, Rohit's rank cannot be determined.

Thus, the question cannot be answered using statement II alone.

From statements I and II together:

Ranks are not known for any of them. Thus, Rohit's rank cannot be found.

Thus, the question cannot be answered using both statements I and II together.

5. B

Solution:

From the statement I:

Here, as Pratibha correctly remembers that her birthday is in the first half of the year, so his birthday is in January or February or March, April or May or June.

Hence, statement I in not sufficient to answer the question.

From the statement II:

Here, as Pratibha's mother correctly remembers that his birthday is after 31st March but before 1st May, so we can say that Pratibha's birthday is in April.

Hence, statement II is sufficient to answer the question.

6. B

Solution:

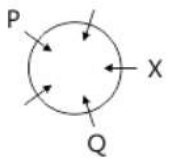
From Statement I:

Reference:

P sits third to right of Q. X sits third to right of P.

Inference:

Using the given information we can create a following circular arrangement.



Here, in the above circular arrangement either Y or Z can sit on the immediate left of Q.

Hence, data in statement I alone is not sufficient.

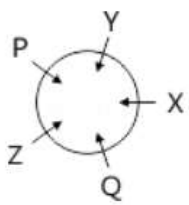
From Statement II:

Reference:

Q sits immediate left of X who sits second to left of P. Y does not sit adjacent to Q.

Inference:

Using the given information we can create a following circular arrangement



Here, in the above circular arrangement it is clear that Z sits on the immediate left of Q.

7. C

Solution:

We have,

Who is oldest among P, K, J, R, S and T?

Statement I: R is older than P and J. R is younger than K. S is older than only T.

Statement II: S is older than J but younger than P. T is older than only R. P is not the oldest.

Checking statement I alone:

Statement I: R is older than P and J. R is younger than K. S is older than only T.

Reference:

R is older than P and J. R is younger than K. S is older than only T.

Inference:

In this statement:

K > R > P, J and S is older than only T.

Order of age:

K > R > P/J > S > T

Here, we can say that K is oldest among all.

Clearly, data in statement I alone are sufficient to reach the answer.

Checking statement II alone:

Statement II: S is older than J but younger than P. T is older than only R. P is not the oldest.

Reference 1:

T is older than only R.

Inference 1:

After using the above references, we have:

Order of age:

__ > __ > __ > __ > T > R

Reference 2:

S is older than J but younger than P.

P is not the oldest.

Inference 2:

After using the above references, we have:

Order of age:

K > P > S > J > T > R

Here, we can say that K is the oldest.

Clearly, data in statement II alone are sufficient to reach the answer.

Hence, data in either statement I or statement II alone is sufficient to answer the question.

8. C

Solution:

Checking Statement I:

Statement I: In the same code language 'party was great' is coded as 'ar jv cu' and 'that was great' is coded as 'dt jv cu'.

Reference:

party was great → ar jv cu

that was great → dt jv cu

Inference:

After using the above references, we have:

Order of Earnings:

Party → ar

Here, we can say that the code of 'Party' is 'ar'.

Clearly, Statement I alone is sufficient to answer the question.

Checking Statement II:

Statement II: In the same code language 'how was the party' is coded as 'ft pd ar lv' and 'when did party start' is coded as 'kl aj rc ar'.

Reference:

how was the party → ft pd ar lv

when did party started → kl aj rc ar

Inference:

After using the above references, we have:

Party → ar

Here, we can say that the code of 'Party' is 'ar'.

Clearly, Statement II alone is sufficient to answer the question.

Here, the data in either Statement I or II alone is sufficient to answer the question.

9. C

Solution:

Checking statements I and II together:

I. Reema lives on fifth floor and Bhanu doesn't live on top floor. There is a gap of two floors between Reema and Avni, who lives immediately below Naina.

II. Naina lives on third floor and Zeba lives on top floor. There is a gap of two floors between Reema and Avni. Avni lives immediately above Manav. Reema lives on odd numbered floor.

Reference:

Reema lives on fifth floor and Bhanu doesn't live on top floor.

Naina lives on third floor and Zeba lives on top floor.

There is a gap of two floors between Reema and Avni.

Avni lives immediately above Manav.

Inference:

Using the above references, we have:

At this point, we have used most of the hints and from the remaining hints we cannot get any valuable information so we cannot fix the position of Bhanu and Rony.

Clearly, data in statements I and II together are not sufficient to answer the question.

Floor	Person
7	Zeba
6	
5	Reema
4	
3	Naina
2	Avni
1	Manav

Checking statements II and III together:

II. Naina lives on third floor and Zeba lives on top floor. There is a gap of two floors between Reema and Avni. Avni lives immediately above Manav. Reema lives on odd numbered floor.

III. Bhanu, who lives on fourth floor, lives exactly between Manav and Zeba. Zeba lives on top floor.

Reference:

Naina lives on third floor and Zeba lives on top floor.

Bhanu, who lives on fourth floor, lives exactly between Manav and Zeba.

Avni lives immediately above Manav.

There is a gap of two floors between Reema and Avni.

Inference:

Using the above references, we have:

Floor	Person
7	Zeba
6	
5	Reema
4	Bhanu
3	Naina
2	Avni
1	Manav

Here, we can easily fix the position of Rony on the sixth floor.

Clearly, data in statements II and III together are sufficient to answer the question.

Checking statements I and III together:

I. Reema lives on fifth floor and Bhanu doesn't live on top floor. There is a gap of two floors between Reema and Avni, who lives immediately below Naina.

III. Bhanu, who lives on fourth floor, lives exactly between Manav and Zeba. Zeba lives on top floor.

Reference:

Zeba lives on top floor.

Reema lives on fifth floor.

Bhanu, who lives on fourth floor, lives exactly between Manav and Zeba.

There is a gap of two floors between Reema and Avni, who lives immediately below Naina.

Inference:

Using the above references, we have:

Floor	Person
7	Zeba
6	
5	Reema
4	Bhanu
3	Naina
2	Avni
1	Manav

Here, we can easily fix the position of Rony on the sixth floor.

Clearly, data in statements I and III together are sufficient to answer the question.

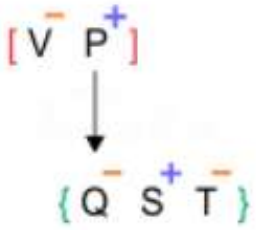
Here, data in either statement I and III or II and III together are sufficient to answer the question.

10. A

Solution:

Statement I:

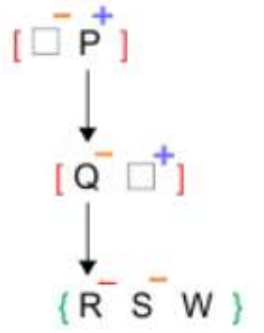
Brief: P is the father of Q. Q is the sister of S. S is the brother of T. T is daughter of V.



Note: No information regarding U. So Not sufficient to answer.

Statement II:

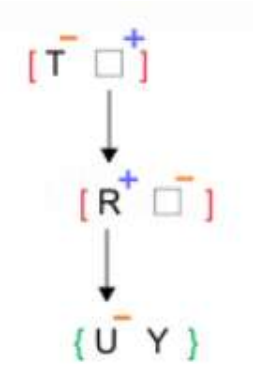
Brief: P is the father of Q. Q is mother of R. R is sister of 5. S is the sister of W.



Nota: No information reganding U. So Not sufficient to answer

Statement III:

Brief: T is the mother of R. R is the father of U. U is the sister of Y.

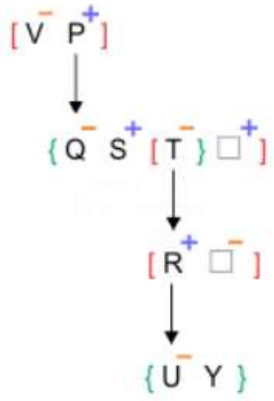


Note: No information regarding Q. So Not sufficient

Statement I and Statement III

Note: Statements II and ill can't be combined as in statement II It is a female where in statement III R is a male.

Combining 1 & 3,



11. D

Solution:

<table>
<tr><th>Statement I :</th><th>Statement II :</th></tr>
<tr><td>From statements,
Arrangement: Descending order from left to right

Veta = Viji,

Case: 1
Veta = Viji | Veer | Viki | Vinu

Case: 2
Vinu | Viki | Veer | Veta = Viji

not sufficient to answer the question</td><td>From statements,
Arrangement: Descending order from left to right

Veta = Viji,

Case: 1
Veta = Viji | Veer | Viki | Vinu

Case: 2
Vinu | Viki | Veer | Veta = Viji

not sufficient to answer the question</td></tr>
<tr><td colspan="2">Statement I and Statement II By, combining two statements,
Note: Both statements same information is given in different manner

Case: 1
Vinu | Viki | Veer | Veta = Viji

Case: 2
Veta = Viji | Veer | Viki | Vinu

not sufficient to answer the question</td></tr>
<tr><td colspan="2">The data given in both statements I and II together are not sufficient to answer the question</td></tr>
</table>

12. A

Solution:

Checking Statement I:

Statement I: Point X is 7 m north of point J. Point C is 10 m east of point E. Point O is 4 m west of point Y. Point E is 12 m north of point M. Point Y is 15 m south of point C. Point J is 9 m west of point M.

Reference:

Point X is 7 m north of point J.

Point J is 9 m west of point M.

Point E is 12 m north of point M.

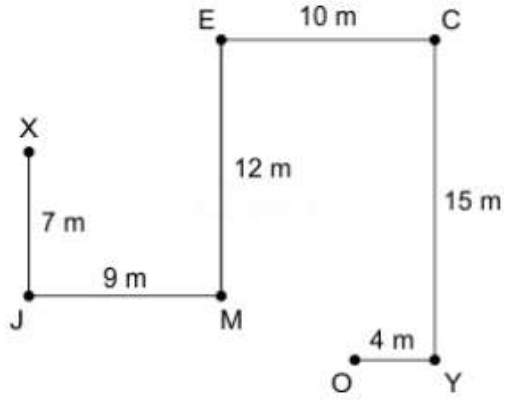
Point C is 10 m east of point E.

Point Y is 15 m south of point C.

Point O is 4 m west of point Y.

Inference:

After using the above references, we can draw a following figure:



Here, we can easily find the distance between X and Y (we don't need to find the exact distance).

Clearly, Statement I alone is sufficient to answer the question.

Checking Statement II:

Statement II: Point X is 12 m west of point J. Point E is 11 m north of point C. Point O is 5 m north of point Y. Point M is 14 m north of point J and is also 8 m west of point E.

Reference:

Point X is 12 m west of point J.

Point E is 11 m north of point C.

Point O is 5 m north of point Y.

Point M is 14 m north of point J and is also 8 m west of point E.

Inference:

Here, we have no relation between point X and point Y. so, we cannot find the distance between points X and Y.

Clearly, Statement II alone is also not sufficient to answer the question.

Here, the data in Statement I alone is sufficient to answer the question.

13. C

Solution:

We have,

Five persons – Anshu, Vinod, Nari, Javed and Aslam are sitting in a line facing north then who among these persons sit third from the left end of the line?

Statement I: Anshu sits second to the left of Vinod. Vinod sits second to the left of Nari.

Statement II: Vinod is an immediate neighbour of both Aslam and Javed. Neither Aslam nor Javed sits at the extreme end of the line.

Checking Statement I:

Statement I: Anshu sits second to the left of Vinod. Vinod sits second to the left of Nari.

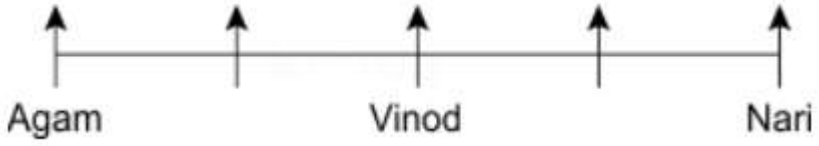
Reference:

Anshu sits second to the left of Vinod.

Vinod sits second to the left of Nari.

Inference:

After using the above references, we have:



Here, we can say that Vinod sit third from the left end of the line.

Clearly, Statement I alone is sufficient to answer the question.

Checking Statement II:

Statement II: Vinod is an immediate neighbour of both Aslam and Javed. Neither Aslam nor Javed sits at the extreme end of the line.

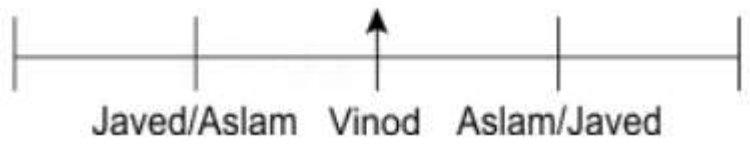
Reference:

Vinod is an immediate neighbour of both Aslam and Javed.

Neither Aslam nor Javed sits at the extreme end of the line.

Inference:

After using the above references, we have:



Here, we can say that Vinod sit third from the left end of the line.

Clearly, Statement II alone is not sufficient to answer the question.

Here, the data in either Statement I or II alone is sufficient to answer the question.

14. A

Solution:

Checking statement I:

As per the given hints, following positions can be drawn.

sweet candy can be coded as mi ni.

Hence data in statement I alone is sufficient to answer the question.

Checking statement II:

Following position can be drawn with the hints given in statement II.

Neither the code for candy nor for sweet can be determined using statement II.

Hence data in statement II alone is not sufficient to answer the question.

15. E

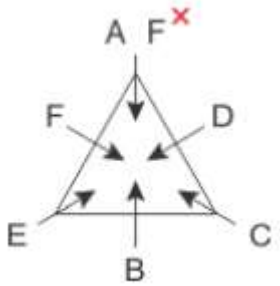
Solution:

Checking statement I and II:

Statement I: C sits immediate left of D, who is second to the right of B. F is neither an immediate neighbor of D nor C.

Statement II: C is second to the right of E, who is not seated next to A. B and C are adjacent to each other.

Following image can be made using the given hints.



Thus F is second to the left of B or fourth to the right of B.

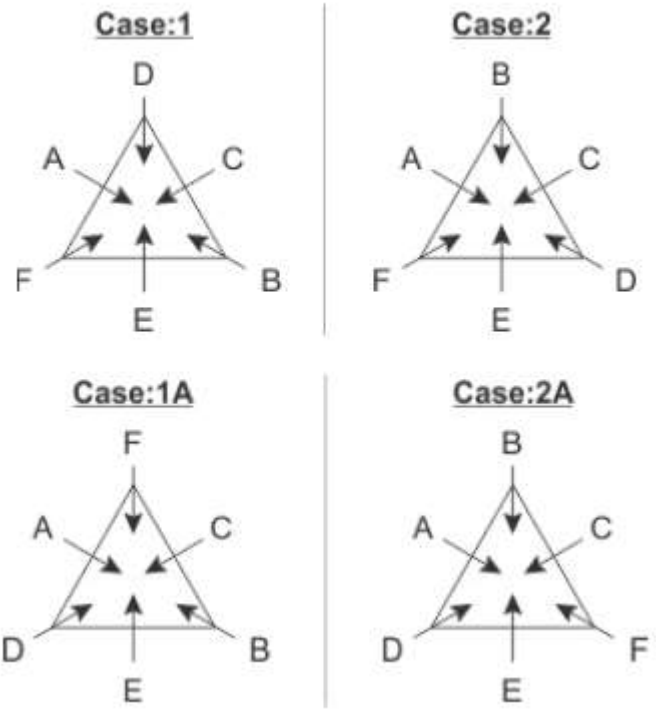
Hence data in statement I and II is sufficient.

Checking statement II and III:

Statement II: C is second to the right of E, who is not seated next to A. B and C are adjacent to each other.

Statement III: A is second to the left of E. Number of persons between A and C is equal to the number of persons between B and D.

Following four cases arise from the given hints.



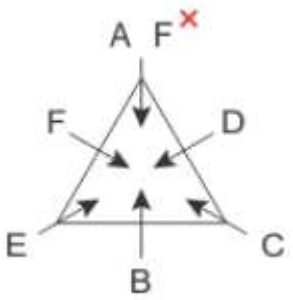
We cannot come at a single conclusion from the above cases.

Hence data in statement II and III is not sufficient.

Checking statements I and III:

Statement I: C sits immediate left of D, who is second to the right of B. F is neither an immediate neighbor of D nor C.

Statement III: A is second to the left of E. Number of persons between A and C is equal to the number of persons between B and D.



Clearly, F is second to the left of B or fourth to the right of B.

Hence data in both statements I and III together is sufficient to answer the question.

Therefore data in statement I and either statement II or III is sufficient to answer the question.

16. E

Solution:

Checking statement I:

Days	Players
Monday	Rohit
Tuesday	Shikhar
Wednesday	Virat/
Thursday	Virat/Dhoni
Friday	Dhoni/
Saturday	

But we can't determine one single day when Dhoni practises.

Hence data in statement I alone is not sufficient to answer the question.

Checking statement II:

Days	Players
Monday	Rohit
Tuesday	
Wednesday	Virat
Thursday	Dhoni
Friday	Rahul/Dhoni
Saturday	Rahul

But we can't determine one single day when Dhoni practices.

Hence data in statement II alone is sufficient to answer the question.

Checking statements I and II:

Days	Players
Monday	Rohit
Tuesday	Shikhar
Wednesday	Virat
Thursday	Dhoni
Friday	Rahul
Saturday	Not known

Though we are not yet sure who practises on Saturday, we got to know that Dhoni practices on Thursday.

Hence the data in statement I and statement II together are sufficient to answer the question.

17. B

Solution:

Checking statement I:

As per the hints given in statement I, following arrangements can be prepared.

Case-1: When A is at odd numbered position i.e. third position

F	R	A			E		

Case-2: When E is at odd numbered position i.e. third

F		E			A	R	

Case-3: When A is at odd numbered position i.e. fifth

F	E			A	R		

Case-3A: When A is at odd numbered position i.e. fifth

F			R	A			E

Case-4: When E is at odd numbered position i.e. seventh

F		R	A			E	

But we cannot determine the fifth letter of the word as we are getting several different observations.

Hence data in statement I alone is not sufficient.

Checking statement II:

We can have following two cases.

T				M	A	N	F

F		A		M		N	T

In both the cases, M is clearly the fifth word.

Thus statement II is sufficient to answer the question.

18. A

Solution:

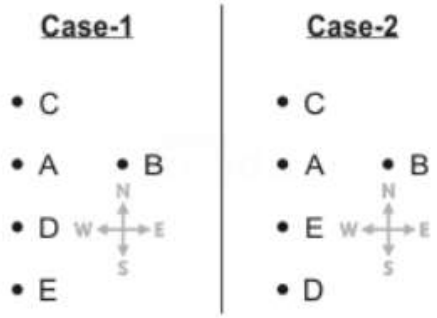
Find Point D is in which direction from Point A?

Statement I: Point A is in the west of Point B, which is to the north-east of Point D. Point C is in the north of Point D and Point A. Point A is in the middle of Point E and Point C.

Statement II: Point B is to the north of Point F, which is to the east of Point E. Point D is to the west of Point B. Point A is to the north of Point E.

Checking statement I:

From statement I following two cases can be prepared.

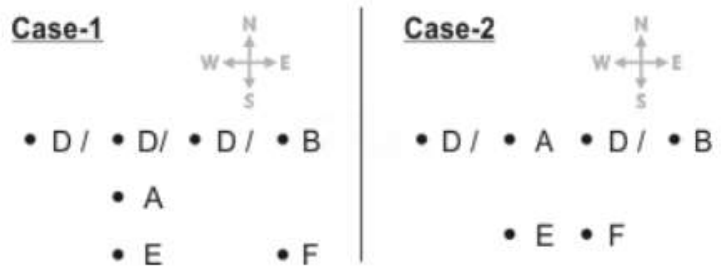


In both the cases point D is in south of Point A.

Hence data in statement I is sufficient to answer the question.

Checking statement II:

From statement II following cases can be prepared.



Here we cannot determine the direction of Point D with respect to Point A, as multiple possibilities arise here.

Hence data in statement II is not sufficient to answer the question.

19. E

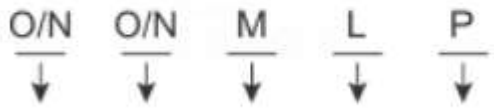
Solution:

Checking statement I:

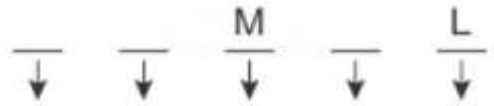
The hints given in statement I can be used as per the following five cases.

Case I

Case II

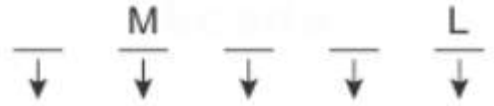


Case III



Case IV

Case V

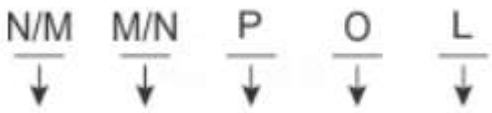


Still we cannot find the person at extreme right end of the row.

Hence data in statement I alone is not sufficient.

Checking statement II

With the hints mentioned in statement II following image can be drawn.



Either M or N could be at the extreme right end.

Hence data in statement II alone is also not sufficient.

Checking both statements I and II:

With the hint that M can't be at any of the extreme ends it is clear that N is at extreme right end.

Hence data in both statements I and II is necessary to answer the question.

20. D

Solution:

Checking statement I:

As per the given hints, following arrangement can be prepared.

Days	Subjects
Monday	
Tuesday	
Wednesday	
Thursday	Science
Friday	Hindi
Saturday	
Sunday	

Thus, the Holiday cannot be determined.

Hence data in statement I is not sufficient to answer the question.

Checking statement II:

As per the given hints no information about Holiday is given.

Hence data in statement II is not sufficient to answer the question.

Checking both statements I and II:

Days	Subjects
Monday	Computer
Tuesday	**Holiday**
Wednesday	
Thursday	Science
Friday	Hindi
Saturday	
Sunday	Maths

Thus Tuesday is Holiday.

Hence data in both the statements is necessary to answer the question.