

DATA SUFFICIENCY

Introduction:

This topic covers most of the topics of reasoning i.e. alphabetical series, coding and decoding, blood relation, direction, ranking etc.

In data sufficiency we don't have to find the answer rather we have to analyze the given data and decide whether the given data is sufficient to find an answer or not.

There are two types of questions:

1. Two statement type
2. Three statement type

Type I: Based on two statements

In each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer-

- (1) If statement I alone is sufficient but statement II alone is not sufficient.

- (2) If statement II alone is sufficient but statement I alone is not sufficient.
- (3) If each statement alone (either I or II) is sufficient.
- (4) If statement I and II together are not sufficient.
- (5) If both statement I and II together are sufficient, but neither statement alone is sufficient.

EXAMPLE 1:

Who scored highest among P, Q, R, S and T?

- (I) Q scored more than S, but not as much as R.
- (II) T scored more than R, but not more than P.

Answer: (5)

Explanation:

According to question-

(I) $R > Q > S$, (II) $P > T > R$

So, $P > T > R > Q > S$

P scored the highest.

So, both statements are needed to arrive at answer.

EXAMPLE 2:

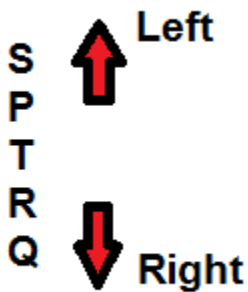
Five friends P, Q, R, S and T are standing in a row facing east. Who is standing at extreme left end?

- (I) R is between T and Q
- (II) Only P is between S and T. R is immediately right of T.

Answer: (5)

Explanation:

According to question:



S is extreme left end.

So, both statements are needed to arrive at answer.

EXAMPLE 3:

Mahima's flat is on which floor of the five floor apartment?

- (I) Her flat is exactly above Gita's flat whose flat is exactly above Nitin's first floor.
- (II) Jayash's flat which is adjacent to Mahima's flat which is exactly above Ahmed's flat who is on second floor.

Answer: (3)

Explanation:

(I) Mahima 3 floor, Gita 2 floor, Nitin - 1 floor

(II) Jayesh 4 floor, Mahima 3 floor, Ahmed 2 floor

So, any one statement is sufficient to give answer.

EXAMPLE 4:

Which code word stands for 'good' in the coded sentence 'sin co bye' which means 'He is good'?

(I) In the same code language, 'co mot det' means 'They are good'.

(II) In the same code language, 'sin mic bye' means 'He is honest'.

Answer: (3)

Explanation:

In the given statement and I, the common word is 'good' and the common code word is 'co'. So, 'co' is the code for 'good'.

In the given statement and II, the common words are 'He' and 'is' and the common code words are 'sin' and 'bye'. So 'sin' and 'bye' are the codes for 'He' and 'is'.

Thus, in the given statement, 'co' is the code for 'good'.

Type II: Based on three statements

In each of the following problems, there is one question and three statements I, II and III given below the question. You have to decide whether the data given in the statements is sufficient to answer the question. Read all the statements carefully and find which of the statements is/are sufficient to answer the given question. Choose the correct alternative in each question.

Example 1:

What is Suman's rank from the top in a class of forty students?

- I. Suman is 3 ranks below Deepak from the top.
 - II. Deepak's rank from the bottom is 23.
 - III. Suman is 3 ranks above Deepak from the bottom.
- (1) Any two of the three
 - (2) Only I and II
 - (3) Only II and III
 - (4) All I, II and III
 - (5) Only II and either I or III

Answer: (5)

Explanation:

From II, we conclude that in a class of 40, Deepak ranks 23rd from the bottom i.e. 18th from the top.

From I and II, we find that Suman is 3 ranks below 18th rank from the top i.e. she ranks 21st from the top.

From II and III, we find that Suman is 3 ranks above 23rd rank from the bottom

i.e. she ranks 20th from the bottom or 21st from the top.

Example 2:

Five persons - A, B, C, D and E are sitting in a row. Who is sitting in the middle?

I. B is between E and C.

II. B is to the right of E.

III. D is between A and E.

(1) Only I and II

(2) Only II and III

(3) Only I and III

(4) All I, II and III

(5) None of these

Answer: (4)

Explanation:

From I, the order is: E, B, C or C, B, E

From II, the order is: E, B

From III, the order is: A, D, E

Combining the above three, we get the order as: A, D, E, B, C

Clearly, E is sitting in the middle.

Example 3:

How is the girl in the photograph related to Kunal?

I. Pointing to the photograph, Kunal said, "She is the mother of my father's only granddaughter".

II. Kunal has no siblings.

III. Pointing to the photograph, Kunal said, "She is the only daughter-in-law of my mother."

- (1) Any two of the three
- (2) Only I and II
- (3) Only II and III
- (4) Either only III or only I and II
- (5) None of these

Answer: (4)

Explanation:

From I, we conclude that the girl is either Kunal's or his brother's wife. But, according to II, Kunal has no siblings.

So, from both I and II, we conclude that the girl is Kunal's wife.

From III, we find that the girl is the only daughter-in-law of Kunal's mother. But, according to II, Kunal has no siblings. So, from both III and II, we conclude that the girl is Kunal's wife.