## Data sufficiency

Directions ( 1 - 15 ) : Each of the questions below consists of a question and two statements numbered $I$ and II are given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both statements and

Give answer A) If 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.

Give answer 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.

Give answer C) If the data in statement I alone or in statement II alone are sufficient to answer the question.

Give answer D) If the data in both the statements I and II are not sufficient to answer the question.

Give answer E) if the data in both the statements I and II together are necessary to answer the question.

1) Who among $P, Q, R, S, T, V$ and $W$ is the shortest?
I. S is taller than T, P and W and is not the tallest.
II. T is shorter than Q but is not the shortest.

## Answer: D.

Explanation : From statement I $\rightarrow$ S $>\mathrm{T}, \mathrm{P}$ and W. S is not the tallest. So, Q or R or V is the tallest.

And the shortest may be T or P or W .
From statement II $\rightarrow \mathrm{T}<\mathrm{Q}$, but not the shortest. So, the shortest may be P or W or S or R or V.

From both the statements $\rightarrow>$ The shortest may be T or P or W. So, we can not decide who is the shortest.
2) What is Mrudula's rank from top in a class of twenty students?
I. Radhika is fifth from the top and two ranks above Mrudula.
II. Amol is tenth from the bottom and three ranks below Mrudula.

## Answer: C.

Explanation : From statement I $->$ Mrudula's rank from the top $=7^{\text {th }}(5+2)$. So, the given data is sufficient to answer the question.

From statement II $\rightarrow$ Mrudula's rank from the top = Amol's rank from the top ( $11^{\text {th }}$ ) -
$3=8^{\text {th }}$ (Amol's rank from the bottom $\longrightarrow>10^{\text {th }}$ , and 10 students
the top.) Second are there above Amol. So, his rank is $11^{\text {th }}$ from statement alone is also sufficient to answer the question.
3) What is T's position with respect of $W$ when $T, W, R, J$ and $M$ are sitting around a circle facing the centre?
I. R is second to the left of M and second to the right of W .
II. J is not an immediate neighbour of M .

## Answer: E.

Explanation: From statement I $\rightarrow$


From statement I \& II $->$


Hence, from both the statements we can say $\mathbf{T}$ is second to the left or third to the right of $W$.
4) Who among $P, Q, R, S$ and $T$ is the shortest?
I. R , though not the shortest, is shorter than only Q .
II. S , though not as tall as P , is not the shortest.

## Answer: E.

Explanation: From statement $\mathrm{I} \rightarrow \mathrm{Q}>\mathrm{R}>{ }_{-}>_{-}>_{\text {_ }}$. ( R is shorter than only Q means only Q is taller R and $\mathrm{P}, \mathrm{S} \& \mathrm{~T}$ are shorter than R .)

From statement II $->$ P $>\mathrm{S}>_{-}>_{-}>_{-}$or _ $>\mathrm{P}>\mathrm{S}>_{-}>_{-}$or $>_{-}>\mathrm{P}>\mathrm{S}>{ }_{\text {. }}$.

From both the statements I \& II $\rightarrow \mathbf{Q}>\mathbf{R}>\mathbf{P}>\mathbf{S}>\ldots . \rightarrow \mathbf{Q}>$ $\mathbf{R}>\mathbf{P}>\mathbf{S}>\mathbf{T}$.
$\mathrm{So}, \mathrm{T}$ is the shortest.
5) Who among $M, N, O, P$ and $Q$ is the youngest?
I. N , the second youngest, is younger than $\mathrm{Q}, \mathrm{O}$ and M .
II. O, the second oldest, is older than N .

## Answer: A.

Explanation : From statement I $\rightarrow$ Q, O and M are older than N and N is the second youngest. So, the other person $\mathbf{P}$ is the youngest. The order may be Q $>\mathrm{O}>\mathrm{M}>\mathrm{N}>\mathrm{P}$.
 the youngest.
6) What does 'pe' mean in a code language?
I. 'Na si la lo' means 'you may go now' and 'ne si na pe' means 'he may go there' in that code language.
II. 'Ki se pe bo' means 'come there and see' and 'se ni bo ki' means 'come here and see' in that code language.

## Answer: B.

Explanation: From statement I na si la lo $\rightarrow$ you may go now ne si na pe $\rightarrow$ he may go there na si = may go ne $\mathrm{pe}=$ he there. So, $\mathbf{p e}=$ he or there.
From statement II
Ki se pe bo $\rightarrow$ come there and see
se ni bo ki $\rightarrow$ come here and see ki se bo = come and see So, pe = there.

## 7) How many siblings does Rukmini have?

I. Rukmini has only one brother.
II. Rukmini is the only daughter of her parents.

## Answer: C.

Explanation : "Rukmini has only one brother" means Rukmini has only one sibling. So, we can answer the question by using statement I.
"Rukmini is the only daughter of her parents" means Rukmini has no sibling. So, we can answer the question by using statement II also.
8) $B$ is brother of $A$. How is A related to $M$ ?
I. M has two sons and one daughter.
II. M has three children, out of which one is B.

## Answer: D.

Explanation : From both I and II , M is a parent, he or she has 3 children, among them B is a brother of A. Here, gender of A is not given. So, A is either son or daughter to M. Both data are not sufficient to answer the question.
9) What does 'ta' mean in a code language?
I. 'pa ta ja' means 'over and above' in that code language.
II. 'ho ka pa' means 'come over here' in that code language.

## Answer: D.

Explanation : From explanation I and II $\rightarrow \quad$ pa ta ja $\rightarrow$ over and above

$$
\text { ho ka pa } \rightarrow \text { come over here }
$$

'pa' means 'over' and ta means 'and' or 'above'. So, we can not answer the question by using both statements.
10) Pole $X$ is in which direction with respect to pole $Y$ ?
I. Pole H is to the north-east of pole X and to the north of pole Y .
II. Pole R is to the east of pole X and to the north of pole Y .

Answer: B. Explanation :


Statement I —>

( $X$ is west of $Y$ )

( $X$ is north-west of $Y$ )

( $X$ is south-west of $Y$ )

So, We can not decide the direction of X with respect of Y .
Statement II $\rightarrow$

[ $\mathbf{X}$ is north-west of Y )
So, we can decide the direction of X with respect of Y by using the statement II.

