Reasoning

Data Sufficiency

Level-3

Q1 Each of the questions below consists of a question and some statements numbered given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the statements and answer the following questions.

Eight persons i.e. A, B, C, D, E, F, G and H were born either on 15th or 20th on four different months i.e. January, February, March and April. (not necessarily in the same order). Who among the following was born on 20th February?

I. Four persons were born between A and H. C was born in one of the months which has 31 days and was also born before H. E was born just before H.

II. There are three persons born between B and F, both of them were born on the 20th date of the month. B was born just before A and just after G. B was born in January.

III. There are two persons born between A and G. C was not born on the 15th date of the month. G was not born just before E.

(A) If the data in statement I alone or in statement II alone or statement III alone is sufficient to answer the question.

(B) If the data in statement I and II together are sufficient to answer the question, while the data in statement III are not sufficient to answer the question.

(C) If the data in statement I and III together are sufficient to answer the question, while the data in statement II is not sufficient to answer the question.

(D) If the data in statement II and III together are sufficient to answer the question, while the data in statement I is not sufficient to answer the question.

(E) If the data in all the statements I, II and III together are necessary to answer the question.

Q2 Each of the questions below consists of a question and some statements numbered given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the statements and answer the following questions.

Eight persons sit around a square table (not necessarily in the same order). Persons who sit in the middle of the side face towards the centre and persons who sit at corners face outside. Who sits 2nd to the left of L?

I. J sits 2nd to the right of K. I sits immediate left of L. E and F are not immediate neighbours.

II. G and J, immediate neighbours of L. E, sit at one of the corners. I sits immediately right of E.

III. E sits in the middle of the side. G is the immediate neighbour of both H and L. J sits opposite to I who is not an immediate neighbour of F.

(A) If the data in statement I alone or in statement II alone or statement III alone is sufficient to answer the question.

(B) If the data in statement I and II together are sufficient to answer the question, while the data in statement III are not sufficient to answer the question.
(C) If the data in statement I and III together are sufficient to answer the question, while the data in statement II is not sufficient to answer the question.
(D) If the data in statement II and III together are sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
(E) If the data in all the statements I, II and III together are necessary to answer the question.

Q3 Each of the questions below consists of a question and some statements numbered given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the statements and answer the following questions.

Seven persons i.e. I, J, K, L, M, N and O are sitting in a row facing North. How many persons sit between I and M?
Statement I: I sits 3rd to the right of J. Three persons sit between K and L.
Statement II: M sits 2nd to the left of N. More than three persons sit between I and O.
Statement III: J is an immediate neighbor of L. O doesn't sit at extreme end.
(A) If the data in statement I alone or in statement II alone or in statement III alone is sufficient to answer the question.
(B) If the data in statement I and II together are sufficient to answer the question, while the data in statement III are not sufficient to answer the question.
(C) If the data in statement I and III together are sufficient to answer the question, while the data in statement II is not sufficient to answer the question.
(D) If the data in statement II and III together are sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
(E) If the data in all the statement I, II and III together are necessary to answer the question.

Q4 Each of the questions below consists of a question and some statements numbered given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the statements and answer the following questions.

Seven persons i.e. T, U, V, W, X, Y and Z of different ages are living together. How many persons are older than V?
Statement I: T is younger than U and older than V. Only two persons are older than W.
Statement II: X is older than Y only. The age of three persons is between Z and U.
Statement III: There are as many persons are older than V as younger than Z. X is younger than W.
(A) If the data in statement I alone or in the statement II alone or in the statement III alone is sufficient to answer the question.
(B) If the data in statement I and II together are sufficient to answer the question, while the data in statement III are not sufficient to answer the question.
(C) If the data in statement I and III together are sufficient to answer the question, while the

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

(D) If the data in statement II and III together are sufficient to answer the question, while the data in statement I is not sufficient to answer the question.

(E) If the data in all the statement I, II and III together are necessary to answer the question.

Q5 Directions: The following question consists of three statements numbered I, II and III. Decide if the data given in the statements are sufficient to answer the question. Read the statements carefully and give the answer.

Six persons M, N, O, P, Q and R whose heights are different . How many persons are taller than Q?

I.Q is taller than O, who is taller than at least one person.

II.Two persons are taller than N. Q is shorter than N.

III.At least two persons are shorter than R, who is shorter than M.

(A) Either I and III or III and II

(B) All are necessary to answer

(C) Only statement I and II is sufficient

(D) Only statement II and III

(E) Question cannot be answered even with the information in all the statements

Q6 Directions: The following question consists of three statements numbered I, II and III. Decide if the data given in the statements are sufficient to answer the question. Read the statements carefully and give the answer

Six Persons are sitting in a row that all are facing north. Who is on the extreme left end ?

I.There are more than one person between D and L.

II.B is sitting to the right of A. L is sitting to the immediate right of C and both are not on the extreme end.

III.A is sitting to the immediate right of E. L is sitting second to the left of G.

(A) Only statement II and I

(B) Only statement I

(C) Only statement II and III is sufficient

(D) All are true

(E) Question cannot be answered even with the information in all the statements

Q7 Directions: The question given below consists of 3 statements numbered (1), (2) and (3) given below it. You have to decide whether data provided in the statements are sufficient to answer the questions.

Six persons - J, K, L, M, N and O are sitting in a circular table facing the center and each belongs to different State E, F, G, H, I and A then, **who sits immediate right of the one who belongs to G?**

I. L, belongs to F and sits second to the right of one belongs to I, who is facing J. N sits third to the left of M, who is an immediate neighbor of one who belongs to A and O sits second to the right of M who belongs to H.

II. K sits second to the left of one who belongs to E, who sits second to the left of J. One who belongs to F is facing K, who is an immediate neighbor of one who belongs to H.

III. O belongs to I and sits second to the right of M, who sits third to the left of N. One who belongs to A sits immediate right of M.

(A) Both statements I and II together are sufficient.

(B) Both statements II and III together are sufficient.

(C) Both statements I and III together are sufficient.

(D) All statements I, II and III together are necessary.
(E) All statements I, II and III together are not sufficient.

Q8 The question given below consists of three statements numbered I, II and III given below it. You have to decide which of the statements are redundant to answer the question. Read all the statements and give answer.

In a certain code language "river are diversity drivers" is coded as "re, dy, tr, rs".
I. In the same code language "are erosion caused often" is coded as 'dy, mn, tu, kr"
II.In the same code language "drivers of good society always" is coded as "rs, fu, do, fr, tu"
III.In the same code language "river caused density increasing always" is coded as "re, de, si, fd, tu"

Which of the following statement is redundant to find the code for "river"?
(A) Only Statement I is redundant
(B) Only Statement II is redundant
(C) Only Statement III is redundant
(D) Only Statement I and II are redundant
(E) Only Statement I and III are redundant

Q9 The question given below is followed by three statements. You have to decide whether the data provided in the statements are sufficient to answer the question.

Seven people - J, K, L, M, N, O, and P are living in a seven-story building in which the topmost floor is numbered seven and the bottommost floor is numbered one. No one lives between J and N. How many people live above N?

Statement I: Three people live between L and P. J lives immediately below P. Two people live between M and N.
Statement II: The number of people who live above J was the same as the number of people who live below O. K lives above O.
Statement III: Three people live between K and O. The number of people who live between J and K was the same as the number of people who live between M and O.
(A) If the data in statement, I alone is sufficient to answer the question
(B) If the data in statement, I and statement II together are sufficient to answer the question
(C) If the data in statement II and either statement, I or statement III together are sufficient to answer the question
(D) Other than the given options
(E) If the data in statement, I and statement III together are sufficient to answer the question

Q10 Each of the questions below consists of a question and two statements numbered I, II and III are given below it. You have to decide whether the data provided in the statements are sufficient to answer the question:

Eight persons, C, E, M, K, J, H, X, V lives on eight storey building on different floors, but not necessarily in the same order. How many persons live above M?
I. C lives on an even numbered floor. 3 persons live between H and J. K lives immediately below J. H lives immediately above C.
II. At least two persons live between K and E. M lives immediately above X. Two persons live between X and V.
III. M lives above K. V who neither lives on 2nd floor nor on 3rd floor lives below M.

(A) Only statement I and III is sufficient.
(B) None of the statement is sufficient
(C) If data in statement I and II is sufficient.
(D) Only statement II is sufficient.
(E) Only statement II and III is sufficient

Q11 Each of the questions below consists of a question and two statements numbered I, II and III are given below it. You have to decide whether the data provided in the statements are sufficient to answer the question:

Seven persons P, Q, R, S, T, U and V have been felicitated according to their ranks. Who among the following get the rank least?
I. Only one person get the less rank than Q who get just one rank less than U.
II. Only three persons got the more rank from either S or T. V rank is more than the R's and P's rank. Number of persons score more than V is same as the number of persons score less than U.
III. V's rank is more than S's rank. T's rank is just more than U's rank. S's rank is not more than R's and P's rank. S's rank is not least.
(A) None of the statement is sufficient
(B) If data in statement I and II is sufficient.
(C) All three statements is not sufficient to answer the question.
(D) Only statement II is sufficient.
(E) Only statement I and III is sufficient.

Q12 Each of the questions below consists of a question and two statements numbered I, II and III are given below it. You have to decide whether the data provided in the statements are sufficient to answer the question:

Six persons M, N, O, P, Q and S were born in different years - 2002, 2004, 2006, 2009, 2012 and 2014 not necessarily in the same order. All were born on 4th march and their age has to be calculated on the base year 2022.
How many persons were born after O?
I. Number of persons born before Q is equal to the number of persons after M. P is neither just younger not just older than Q. P is younger than Q but older than M.
II. Two persons were born between M and Q. Only one person born after M. O is younger than Q but older than P.
III. P's age is an odd number. Q is neither just older nor just younger to P. O is older than P.
(A) Only statement I and III is sufficient.
(B) Only statement II is sufficient.
(C) None of these
(D) If data in statement I and II is sufficient
(E) Any of the two statements

Answer Key

Q1	(B)
Q2	(C)
Q3	(B)
Q4	(B)
Q5	(C)
Q6	(C)
Q7	(B)
Q8	(D)
Q9	(D)
Q10	(C)
Q11	(C)
Q12	(E)

Hints & Solutions

Q1 Text Solution:

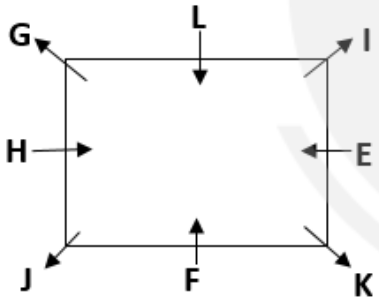
By combining I and II, we get- D born on 20th February.

Months	Dates	Persons
January	15	G
January	20	B
February	15	A
February	20	D
March	15	C
March	20	F
April	15	E
April	20	H

Q2 Text Solution:

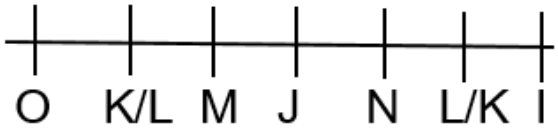
The data in statements I and III together are sufficient to answer the question, while the data in statement II is not sufficient to answer the question.

By combining both I and III we get - E sits second to the left of L.



Q3 Text Solution:

If the data in statements I and II together are sufficient to answer the question, while the data in statement III are not sufficient to answer the question.



Q4 Text Solution:

The data in statements I and II together are sufficient to answer the question, while the data in statement III are not sufficient to answer the question.

U > T > W > V > Z > X > Y

Q5 Text Solution:

We have, FRom statement I and II

Q is taller than O, who is taller than at least one person.

Two persons are taller than N. Q is shorter than N.

> > N > Q > O >

Thus, FRom statement I and II we get, the number of persons taller than Q are three.

Hence, we need not to check the statement III alone.

Only statement I and statement II is sufficient.

Q6 Text Solution:

We have, statement I and II

There are more than one person between D and L

B is sitting to the right of A. L is sitting to the immediate right of C and both are not on the extreme end.

Thus, from the above two statements we cannot conclude, as the data is redundant.

Now, from statement II and III,

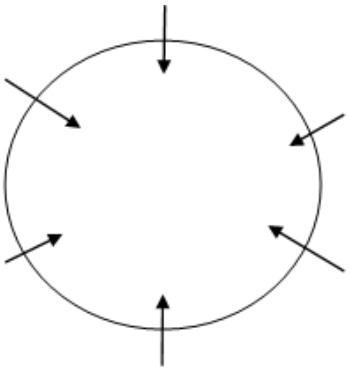
B is sitting to the right of A. L is sitting to the immediate right of C and both are not on the extreme end.

A is sitting to the immediate right of E. L is sitting second to the left of G.

Hence, Only statement II and III is sufficient as we get the person sitting on the extreme Left end **i.e. E.**

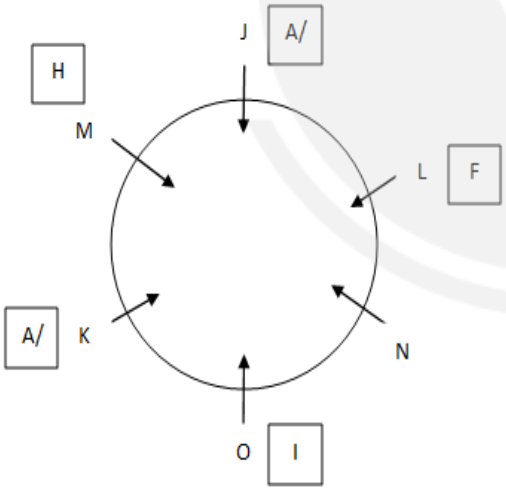
Q7 Text Solution:

Six persons - J, K, L, M, N and O are sitting in a circular table facing the center and each belongs to different State E, F, G, H, I and A. So, we can draw a structure as,



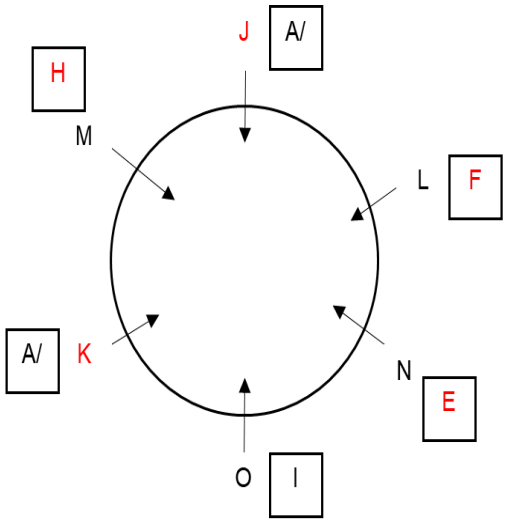
By using I and II together, we get, (option 1)

I. L, belongs to F and sits second to the right of one belongs to I, who is facing J. N sits third to the left of M, who is an immediate neighbor of one who belongs to A and O sits second to the right of M who belongs to H. So, we get,



Now, merging II in I we get,

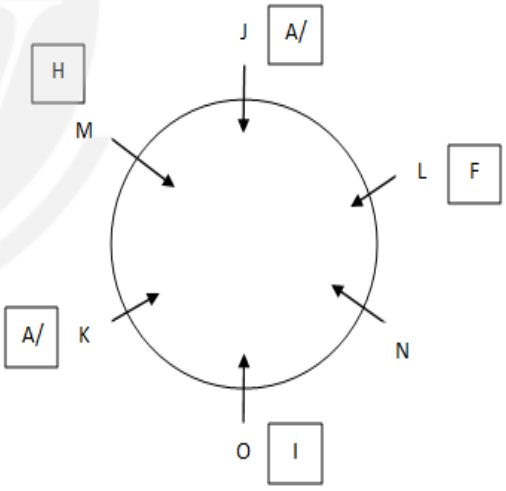
K sits second to the left of one who belongs to E, who sits second to the left of J. One who belongs to F is facing K, who is an immediate neighbor of one who belongs to H. So, we get,



By using I and II together, we cannot answer the question because we don't know who belongs to G.

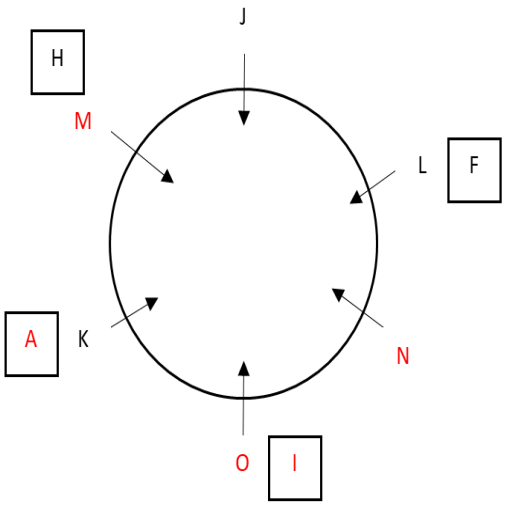
Now, by using I and III, we get, (option 3)

I.



Now, merging III in I, we get,

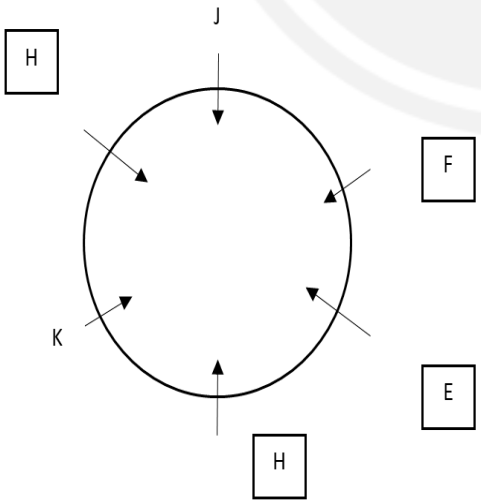
O belongs to I and sits second to the right of M, who sits third to the left of N. One who belongs to A sits immediate right of M. So, we get,



By using I and III together, we cannot answer the question because we don't know who belongs to G.

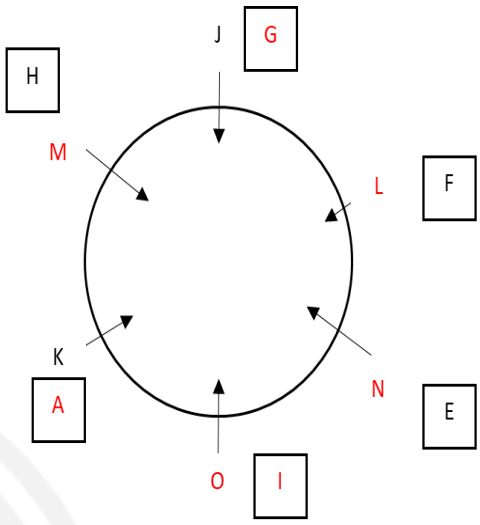
Now, by using II and III together, we get, (option 2)

II. K sits second to the left of one who belongs to E, who sits second to the left of J. One who belongs to F is facing K, who is an immediate neighbor of one who belongs to H.



Now, merging III in II, we get,

O belongs to I and sits second to the right of M, who sits third to the left of N. One who belongs to A sits immediate right of M. So, we get,



So, by using II and III together, we can answer the question.

M sits immediate right of the one who belongs to G.

Q8 Text Solution:

From statement I alone, we get:

The code for 'river' is 're' or 'tr' or 'rs'.

From statement II alone, we get:

The code for 'river' is 're' or 'dy' or 'tr'.

From statement III alone we get:

The code for 'river' is 're'.

Only Statement I and II are redundant.

Q9 Text Solution:

No given option is sufficient to answer.

Q10 Text Solution:

Statement I and II are sufficient to answer.

Floors	Persons
8	E
7	H

6	C
5	M
4	X
3	J
2	K
1	V

Q11 Text Solution:

We have, From statement I and statement II

Only one person get the Less rank than Q who get just one rank less than U.

> > > S/T > > Q >

Only three persons got the more rank from either S or T. V rank is more than the R's and P's rank.

Number of persons score more than V is same as the number of persons score less than U.

V > R > P

So, clearly we could not determine the first person as the data is insufficient.

Now, after combining Statement II and statement III, we get

Only three persons got the more rank from either S or T. V rank is more than the R's and P's rank.

Number of persons score more than V is same as the number of persons score less than U.

V's rank is more than S's rank. T's rank is just more than U's rank. S's rank is not more than R's and P's rank. S's rank is not least.

V > R/P > P/R > S > Q > T > U

Thus, we get the person whose rank is least from the above two statements.

Hence, All the three statements is not sufficient.

Q12 Text Solution:

From statements I and II: We get three persons were born after O.

Years	**Age (2022)**	**Persons**
2002	20	
2004	18	Q
2006	16	O
2009	13	P
2012	10	M
2014	8	

From statements II and III: We get three persons were born after O.

Years	**Age (2022)**	**Persons**
2002	20	
2004	18	Q
2006	16	P
2009	13	O
2012	10	M
2014	8	