## Adda247

## IBPS SO Previous Year Question Paper 2017

## Logical Reasoning

Directions (1-5): Read the following information carefully and answer the questions given below it.
Seven persons A, U, S, T, J, Z and M live on four different floors. The lowermost floor is floor number 1 and the topmost floor is floor number 4. Two persons live on each floor while only one person lives on any of the floors. They go to movies in different months viz. January, February, March and April. They go to movies either on 13th of the month or on 27th of the month. Two persons go on each month while only one person go in any of the months.

A lives neither of floor 1 nor on floor 4. M goes to a movie in a month which has the least number of days but not on 27 th. U does not go to the movie on 13th of any month. Only one person lives on floor 3 and he goes to movies in February. J and $Z$ go to movie on 13th of any month. U does not live above M. Only one person go to the movie in February. S and T go to movies in different months. S does not live with $U$ or $T$. T goes in March along with A. J goes after $Z$. J and $Z$ can't be on the first floor. $S$ does not go to movie on 27th of any month. T goes on the 13th of the month.

Q 1. Who goes to movies in April?

1. $Z$ and $J$
2. $S$ and $U$
3. T and A
4. $M$ and $S$
5. T and M

Answer: 1

## Solution 1:

From the above details we get the following final table,

| Floor | 13th | 27th |
| :--- | :--- | :--- |
| 1 | Z - April | J- April |
| 2 | M- February | -- |
| 3 | S - January | A - March |


| 4 | T - March | U - January |
| :--- | :--- | :--- |

Hence we can say that $Z$ and $J$ goes to movies in April.

Q 2. Find the odd man out?

1. $Z$
2. J
3. $M$
4. A
5. T

Answer: 3

## Solution 2:

From the final table, we can find that M is the odd man out as he is the only person living in a floor, and the only person to watch a movie in a particular month.

Q 3. When does $S$ go to the movie?

1. 27th January
2. 13th April
3. 13th March
4. 27th April
5. 13th January

Answer: 5

Solution 3:
From the above table, we can see that S goes to watch movie on 13th January.
Q 4. How many persons go to movie between $J$ and $U$ ?

1. One
2. Three
3. More than three
4. Two
5. None

Answer: 3

## Solution 4:

From the final table, we can see that 4 people go to watch the movie $J$ and $U$; $M$ in February, $A$ and $T$ in the month of March, $Z$ on 13th April.

Q 5. Who goes fourth to watch the movie?

1. $M$
2. A
3. T
4. U
5. S

Answer: 3

## Solution 5:

T is the fourth person to watch the movie on 13th March.
Directions (6-10): Study the following information given carefully and answer the questions given below.

Eight persons P, Q, R, S, T, U, V \& W belongs to six different states viz. Rajasthan, Delhi, Goa, Bihar, Punjab and Haryana and all of them sit on a circular table. Out of the eight persons, three of them are facing towards the centre. Two of the persons belongs to Rajasthan state and another two persons belong to Bihar state.

Both of the persons who belong to Bihar state is an immediate neighbour of S. W, a person from Bihar is an immediate neighbour of the person from Punjab. The person from Punjab is sitting 2nd left of $P$. There are three persons between $P$ \& S. The person from Goa is an immediate neighbour of the person from Delhi and another person from Q from Rajasthan. T, another person from Bihar is an immediate neighbour of Q . P is facing towards the centre. Another person S from Haryana is also facing the centre. $V$ is an immediate neighbour of $U$ and the person from Delhi. Both of the immediate neighbours of $V$ are facing towards the centre.

Q 6. Which of the following persons belong to Goa?

1. U
2. $P$
3. $R$
4. V
5. None of these

Answer: 3

## Solution 6:



From the above final figure, we can say that $R$ belongs to Goa.

Q 7. Which of the following person belong to Rajasthan?


1. $V, Q$
2. $R, Q$
3. $P, Q$
4. $U, Q$
5. None of these

Answer: 1

## Solution 7:

From the above figure we can say that V and Q belong to Rajasthan.

Q 8. Who is sitting 3rd left of V ?

1. $R$
2. $P$
3. S
4. Q
5. None of these

Answer: 4

## Solution 8:

From the above figure, we can say that $Q$ is third to the left of $V$ as $V$ is facing outwards.

Q 9. Which state's person is sitting 3rd to the right of the person from Punjab?

1. Delhi
2. Rajasthan
3. Bihar
4. Goa
5. None of these

Answer: 4
Solution 9:
Person from Punjab is facing towards the centre, hence the person 3rd to the right is R from Goa.

Q 10. Which of the following persons belong to Delhi and Punjab respectively?

1. $P, U$
2. $R, U$
3. U, V
4. $P, V$
5. None of these

Answer: 1

## Solution 10:

From the above figure we can conclude that $P$ and $U$ belongs to Delhi and Punjab respectively.

Directions (11-15): Study the following information and answer the questions based on it.
Eight persons A, B, C, D, E, F, G, and H are staying in a eight-storey building. Lowermost floor is numbered 1 and the topmost floor is numbered 8 . They like different colours i.e. red, pink, silver, blue, black, brown, white and yellow, not necessarily in the same order. C likes yellow and is staying in an odd-numbered floor. Three persons are staying between C and B . B lives above C . The number of floors between $B$ and $A$ is same as $C$ and $D$. A lives above $D$ but below $B$. Two floors are between $B$ and $E$ who likes Brown. E doesn't stay on the top floor. $G$ likes white and lives below $E$. Two floors are between $G$ and the one who likes Pink. One floor is between $F$ and $H$ who likes Red. At least one person is staying between $F$ and $A$. The one who likes Blue, is staying just above the who likes Black colour. C doesn't like Silver.

Q 11. Which of the following doesn't belong to the group?

1. $F$
2. H
3. E
4. $G$
5. D

Answer: 5

## Solution 11:

| 8th Floor | F | Blue |
| :--- | :--- | :--- |
| 7th Floor | B | Black |
| 6th Floor | H | Red |
| 5ht Floor | A | Pink |
| 4th Floor | E | Brown |
| 3rd Floor | C | Yellow |
| 2nd Floor | G | White |
| 1st Floor | D | Silver |

This can be easily solved if we pay attention to a couple of important sentences, which will help in deducing the rest of the paragraph very easily.

Statement - C stays in an odd-numbered floor implies the probable floors C could stay are 1,3,5,7. Rest of the floors are eliminated.

Statement - 3 floors are between $B$ and $C$, this gives rise to 2 cases - $B$ is above $C$ or $C$ is above $B$. Statement, says $B$ is above $C$ which easily eliminates one of the above cases.

From the above, we can find the probable floors of both B and C. C cannot be in 7th floor since it won't satisfy the criteria of 3 floors in between B and C , as there are only 8 floors. If C is on the 5th floor then $B$ will be in 9th which is not possible. Hence the possibility of $C$ in 5 th and 7th is eliminated. Now comes to other 2 floors, if $C$ is on the 1 st floor, then $B$ is on the 5th floor; and if $C$ is on the 3rd floor then $B$ is on the 7th floor. Hence we have zeroed the floors of $C$ and $B$ to just 2 possibilities $C-1$ st floor and $B$ 5th floor; 2nd possibility - C - 3rd floor and B-7th floor.

Statement $A$ is below $B$ and above $D$; number of floors in between $A$ and $B$ is the same as between $C$ and $D$. The above statements will help us in deciding the floors of multiple people; case 1 where $C$ is on 1st floor is eliminated because we won't be able to satisfy the above statements concerning floors of $A$ and $D$ and the uniform number of floors between $B$ and $C$; between $A$ and $B$; and between $C$ and $D$. Hence the above conditions will be satisfied if $C$ is on 3 rd floor. Then $D$ will be on 1 st floor; $B$ will on 7 th floor and $A$ will be on 5th floor; these satisfy the condition of 1 floor between $C$ and $D, 1$ floor between $A$ and $B$; and finally 3 floors between $B$ and $C$. Once the flooring of $B, C, A, D$ is attained rest of the statements will help in solving the colours and floors of respective people.

From the above explanation provided one can see that D lives on odd-numbered floor and rest of them live on an even-numbered floor.

Q 12. Which of the following combination is correct?

1. B-Blue
2. F-Black
3. C-Yellow
4. D-Yellow
5. A - Black

Answer: 3


## Solution 12:

The answer to this question is directly given in the statement, no need to solve anything to answer this question.

Q 13. How many persons are staying between $D$ and $A$ ?

1. More than 4
2. 1
3. 2
4. 3
5. 4

Answer: 4

## Solution 13:

3 persons are staying between $D$ and $A$ - they are $E, C, G$.

Q 14. Who among the following likes Silver?

1. D
2. $B$
3. $F$
4. A
5. $G$

Answer: 1

## Solution 14:

From the table, we can see that D likes Silver.

Q 15. Which of the following statement is true?

1. F lives on the bottom floor
2. H lives just below $A$
3. The one who lives on 1st floor likes Yellow
4. One person is staying between $A$ and $C$
5. B lives below $D$

Answer: 4

## Solution 15:

From the final table, A is on 5th floor, and C is on 3rd floor. E is on 4th floor.

Directions (16-19): In the following questions assuming the given statements to be true, find which of the following conclusions is/are definitely true and then give your answers accordingly.

Q 16. $P>Q \leq R>Z ; Y>X>P \geq U ; Q \geq S<T$

## Conclusions:

I. $P>S$
II. $\mathrm{Z}<\mathrm{T}$

1. None is true
2. Only I is true
3. Only II is true.
4. Either I or II is true
5. Both I and II are true.

Answer: 2

## Solution 16:

$P>Q$ and $Q \geq S$
When $\mathrm{Q}>\mathrm{S}$ and $\mathrm{P}>\mathrm{Q}$ it implies $\mathrm{P}>\mathrm{S}$.
When $\mathrm{Q}=\mathrm{S}$ and $\mathrm{P}>\mathrm{Q}$ it implies $\mathrm{P}>\mathrm{Q}$
Hence conclusion I is true.
From the above statements, we can conclude Conclusion II is false.

Q 17. $\mathrm{Y} \leq \mathrm{K}<\mathrm{D}=\mathrm{S} ; \mathrm{D}<\mathrm{B}<\mathrm{O} ; \mathrm{A} \geq \mathrm{D}<\mathrm{Z}$

## Conclusions:

I. $\mathrm{A}>\mathrm{B}$
II. $\mathrm{Y}<\mathrm{Z}$

Answer: 3

## Solution 17:

From the statements,
$\mathrm{A} \geq \mathrm{D}$ and $\mathrm{D}<\mathrm{B}$
When $\mathrm{A}=\mathrm{D}$ and $\mathrm{D}<\mathrm{B}$ implies $\mathrm{A}<\mathrm{B}$
When $\mathrm{A}>\mathrm{D}$ and $\mathrm{D}<\mathrm{B}$ implies below 3 cases
$A>B$

A $<$ B
$A=B$
Hence we can't conclude A > B
From the statements,
$\mathrm{Y} \leq \mathrm{K}<\mathrm{D}$ and $\mathrm{D}<\mathrm{Z}$

When $\mathrm{Y}<\mathrm{K}$ and $\mathrm{K}<\mathrm{D}$ it implies $\mathrm{Y}<\mathrm{D}$, as $\mathrm{D}<\mathrm{Z}$ it implies $\mathrm{Y}<\mathrm{Z}$
When $\mathrm{Y}=\mathrm{K}$ and $\mathrm{K}<\mathrm{D}$ it implies $\mathrm{Y}<\mathrm{D}$, as $\mathrm{D}<\mathrm{Z}$ it implies $\mathrm{Y}<\mathrm{Z}$.
Hence we can conclude $\mathrm{Y}<\mathrm{Z}$
Hence conclusion II is true.
Q 18. Statements:
A > C; G > E; G $\leq \mathrm{C} ; \mathrm{R} \leq \mathrm{I} ; \mathrm{K} \leq \mathrm{I}$
Conclusions:
I. $\mathrm{A}>\mathrm{G}$
II. $\mathrm{C}>\mathrm{E}$

Answer: 5

## Solution 18:

From the statements,
$A>C ; G \leq C$
When $G=C$ and $A>C$ it implies $A>G$
When $\mathrm{G}<\mathrm{C}$ and $\mathrm{A}>\mathrm{C}$ it implies $\mathrm{A}>\mathrm{G}$
Hence we can say Conclusion I is true.
From the statements,

$G>E ; G \leq C$
We can rewrite it as $C \geq G>E$
When $\mathrm{C}>\mathrm{G}$ and $\mathrm{G}>\mathrm{E}$ it implies $\mathrm{C}>\mathrm{E}$
When $\mathrm{C}=\mathrm{G}$ and $\mathrm{G}>\mathrm{E}$ it implies $\mathrm{C}>\mathrm{E}$
Hence we can say conclusion II is also true.

Q 19. Statement:
$\mathrm{Z} \leq \mathrm{K}<\mathrm{D}=\mathrm{S} ; \mathrm{D}<\mathrm{A}<\mathrm{O} ; \mathrm{G} \geq \mathrm{D}<\mathrm{R}$

Conclusions:
I. $G>A$
II. $\mathrm{Z}<\mathrm{R}$

Answer: 3

## Solution 19:

$\mathrm{G} \geq \mathrm{D}$ and $\mathrm{D}<\mathrm{A}$
When, $G>D$ and $D<A$ it gives rise to 3 cases, $G>A, G<A$ and $G=A$.
Hence Conclusion I is not true.
$\mathrm{Z} \leq \mathrm{K}<\mathrm{D}$ and $\mathrm{D}<\mathrm{R}$
When $\mathrm{Z}<\mathrm{K}<\mathrm{D}$ it implies $\mathrm{Z}<\mathrm{D}$ and if $\mathrm{D}<\mathrm{R}$ then $\mathrm{Z}<\mathrm{R}$
When $Z=K<D$ it implies $Z<D$ and if $D<R$ then $Z<R$
Hence we can say conclusion II is true.

Q 20. Statements:
$C \leq R \leq N=M \geq F ; Q \geq M<O ; D \geq L ; C \geq D \leq S \geq Z$
Conclusion:
I. $R \leq F$
II. $\mathrm{C}<\mathrm{Q}$

Answer: 1

## Solution 20:

$R \leq M \geq F$
When $R<M$, and $M>F$
$R$ could be $R=F, R<F$ and $R>F$
Hence we can't conclude that $R \leq F$
$Q \geq M, C \leq R \leq M$
Hen $Q>M$, and $C \leq R \leq M$
$\mathrm{C}<\mathrm{R}<\mathrm{M}<\mathrm{Q}$ implies $\mathrm{C}<\mathrm{Q}$
$\mathrm{C}=\mathrm{R}<\mathrm{M}<\mathrm{Q}$ implies $\mathrm{C}<\mathrm{Q}$
$\mathrm{C}=\mathrm{R}=\mathrm{M}<\mathrm{Q}$ implies $\mathrm{C}<\mathrm{Q}$

When $Q=M$ and $C \leq R \leq M$

$$
\begin{aligned}
& \mathrm{C}<\mathrm{R}<\mathrm{M}=\mathrm{Q} \text { implies } \mathrm{C}<\mathrm{Q} \\
& \mathrm{C}=\mathrm{R}<\mathrm{M}=\mathrm{Q} \text { implies } \mathrm{C}<\mathrm{Q}
\end{aligned}
$$

3rd possibility $\quad C=R=M=Q$
Hence we can't conclude $\mathrm{C}<\mathrm{Q}$

Directions (21-28): In each questions statement are given followed by two conclusions, read all the conclusions and decide which of the given conclusion follow the given statements.
I. Only I follow
II. Only II follows
III. Either I or II follows
IV. Neither I nor II follow
V. Both I and II follow.

## Q 21. Statements:



No chair is table.
All chair is bench.
Some chair is box.

## Conclusions:

I. No table is box
II.Some bench are box.

Answer: 2

## Solution 21:



From the above diagram we can conclude that Only Conclusion II is true.

## Q 22. Statements:

Some rings are bracelets.
All bracelets are earrings.
All earrings are necklaces.
Conclusions:
I. All those bracelets which are earrings can never be a ring is a possibility.
II. There is a possibility that all rings are necklaces.

Answer: 2

## Solution 22:



From the above 2 figures we can conclude that Only II is correct.

## Q 23. Statements

Some pages are papers
No page is a book
All books are pencils

## Conclusions:

I. All books can never be papers
II. All pencils are papers is a possibility

Answer: 2
Solution 23:



From the above 2 figures one can conclude that only option II is correct.

## Q 24. Statements

All papers are books
All pencils are pens
No paper is pencil
No stationary is book
Conclusions:
I. Some papers are stationary is a possibility.
II.Some pens are books as well as papers.


Answer: 4

## Solution 24:



From the above figure we can conclude that neither of the two conclusions are true.
Q 25. Statements:
Some roads are not good.
Some railways are good.


All airways are good.
Some roads are bad.

## Conclusions:

I. At least some bad are good.
II.No bad is good.

Answer: 4

## Solution 25:



From the above 2 conclusions we can conclude neither of them follows.

Q 26. Direction: In questions below is given a statement followed by assumptions. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.

Statement: The mind is the source of all human actions, yet the body is given more importance.

## Assumptions:

I.The mind is not given proper importance.
II.The body is getting undeserved importance.
III.Every action starts from the brain.

1. Only I
2. Only II
3. Only II and III
4. Only III
5. All of them

Answer: 1

## Solution 26:

Assumption 3 is ruled out as there is difference between brain and mind; the main subject is the importance of mind and its importance.

Q 27. Direction: The question below, there is a statement followed by 2 conclusions numbered I and II. You have to assume everything in the statement to be true. Then consider the 2 conclusion together and decide which of them follows beyond a reasonable doubt from the information given in the statement.

Statement: High pressure boilers are hazardous pieces of equipment, which are strictly regulated with special laws.

## Conclusions:

I. If not regulated, high pressure boilers will be easily available in the market.
II.High pressure boilers are rare.

1. Only Conclusion I follows
2. Only Conclusion II follows
3. Both Conclusion I and II follows
4. Neither Conclusion I nor II follows
5. Either Conclusion I or II follows

Answer: 4

## Solution 27:

Neither Conclusion I nor II follows.


Q 28. In the question given below a statement is given followed by three courses of action. A course of action is taken for improvement, follow up, etc. Read the statement carefully and give your answer accordingly.

Statement: The appearance of China made globes that show Jammu and Kashmir not a part of India has alarmed the Indian diaspora in Canada.

## Courses of Action:

I.The Indian diaspora should lodge a complaint against manufacturers for giving out inaccurate information.
II.The Chinese Government should issue an official apology to the Indians.
III.The Canadian people should altogether stop buying Chinese made products.

1. Only course of action I follows.
2. Only course of action II follows.
3. Both I and II follow
4. Both II and III follow
5. None of them follow.

Answer: 1

## Solution 28:

The Chinese Government and Candian people are not the stakeholders in the issue. Hence only 1st Course of action is to be followed.

Q 29. A statement is given followed by 3 inferences numbered I, II and III. Consider the statement to be true even if it is at variance with commonly known facts. You have to decide which of the inferences, if any, follow from the given statement.

Statement: Japan will open up its doors to about 2 lakh IT professionals from India, and issue green cards to settle down in Japan and support the country's rapidly expanding IT infrastructure, said Shigeki Maeda, Executive Vice President at Japan External Trade Organisation (JETRO), a government body.

## Inferences:

I. There is a dearth of IT professionals in Japan.
II. IT professionals from India are way more talented and hardworking than professionals from other countries.
III. Japan's IT industry is growing by leaps and bounds every year.

1. Both I and II follows
2. Both I and III follows
3. Both II and III follows
4. Only III follows
5. All of them follow

Answer: 2

## Solution 29:

Inference 3 is obvious as per the sentence. And to meet the demands there is a supply gap of professionals hence inference 1 also follows, but no where in the sentence do they compare the capabilities and hard work of Indians with professionals from other countries.

Q 30. The Government is set to launch the most ambitious bets to ward off cybercrime in its Rs 1000 crore National Cyber Coordination Centre project slated to begin operations by the end of this month. According to government officials, the Centre is meant to monitor the Cyber Traffic in the country and prevent possible large scale cyber attack by analyzing the traffic. It will begin with tracking the networks of a handful of Internet Service Providers (ISPs) and data centres.

## Which of the following statements strongly supports the argument?

1. The government seems to be fast tracking its efforts to strengthen cyber security especially after the unprecedented rise in the digital transactions in the country since demonetization.
2. In the wake of large scale cyber attacks in the country recently, the Government has taken several measures to contain the spread of cyber crime.
3. The centre will monitor the flow of traffic and analyze the upcoming attacks and take action in real time.
4. None of these
5. Either option 1 or 2

Answer: 2

## Solution 30:

All the statements strongly supports the arguments. Nevertheless 2nd option is the strongest.
Q 31. Study the following information and answer the given question.
$P=Q$ means $Q$ is the father of $P$.
P * $Q$ means $P$ is the sister of $Q$
$P$ ? Q means $Q$ is the mother of $P$
P \$ Q means $P$ is the brother of $Q$
$P @ Q$ means $Q$ is the son $P$
$P$ \# $Q$ means $P$ is the daughter of $Q$
Which of the following is incorrect?

1. $R$ \# $S$ ? $T$ means $R$ is granddaughter of $T$
2. $P=Q$ ? $R$ means $R$ is grandmother of $P$
3. $L \$ M^{*} O$ means $L$ is the brother of $O$.
4. $M$ * $O @ P=Q$ means $Q$ and $O$ are husband and wife
5. All are correct.

Answer: 5

## Solution 31:

$R$ \# $S$ means $R$ is the daughter of $S$ and $S$ ? $T$ means $T$ is the mother of $S$, hence $R$ is the granddaughter of T .
$P=Q$ means $Q$ is the father of $P$ and $Q$ ? $R$ means $R$ is the mother of $Q$, hence $Q$ is the grandmother of $P$.
$L \$ M$ means $L$ is the brother of $M$ and $M$ * $O$ means $M$ is the sister of $O$. Hence $L$ is the brother of $O$.
$M^{*} O$ means $M$ is the sister of $O$, and $O$ @ means $P$ is the son of $O, P=Q$ means $Q$ is the father of $P$. It means $Q$ and $O$ is the father and mother of $P$ respectively so they are husband and wife.

From the above explanations we can see that all options are correct.
Q 32. In a certain code language, ' Siberia is a cold place' is written as 'a cold is place Siberia' in the same code, ' water freezes to ice here' is coded as 'freezes here ice to water.' How will 'covers ten percent of earth' be written in the same code?

1. Covers earth percent ten of
2. Earth of covers percent ten
3. Covers earth percent of ten
4. Covers earth of percent ten
5. Covers earth ten of percent.

## Answer: 4

## Solution 32:

From the given code we can notice that given sentences has been rephrased in alphabetical order.
Covers ten percent of earth, the alphabetical order will be c-covers, e-earth, o-of, p-percent, t-ten.
Hence the answer is covers earth of percent ten.

Q 33. In a certain code language 'it is dark outside' is written as 'ha no ti ju', 'is it still raining' is written as 'pa ha da no', 'go and play outside' is written as 'su ju ye la'. How is 'dark' written in that code language?

1. Ha
2. Ti
3. Su
4. Ye
5. No

Answer: 2

## Solution 33:

When we consider 'it is dark outside' is written as 'ha no ti ju' and 'go and play outside' is written as 'su ju ye la'; we can find that the common word in the 2 sentences is outside and the common code is ju. Hence outside is written as ju.

When we consider 'it is dark outside' is written as 'ha no ti ju' and 'is it still raining' is written as 'pa ha da no' the common words are 'it' and 'is'; and the common codes are 'pa' and 'ho'. Hence in the sentence 'it is dark outside' the only remaining word is 'dark' and in the code for the same sentence 'ha no ti ju' only 'ti' is remaining to be decoded.

Hence we can conclude that 'dark' is coded as 'ti'

Q 34. Direction: In each of the following questions, a question is followed by information given in 3 statements. You have to decide the information given in which of the statements is necessary and sufficient to answer the questions.
$A, B, C, D$, and $E$ are sitting in a circle. Are all of them facing the centre?
I. A is sitting second to the right of $D ; C$ is facing the centre and is not an immediate neighbour of $D$.
II. $B$, who is sitting between $C$ and $D$, is second to the right of $E$, who is not an immediate neighbour of C. B and $A$ are facing each other
III. . is sitting on the immediate left of $B$, who is sitting on the immediate left of $A$. $E$ is the immediate right of $D$.

1. Only I and II
2. Only I and III
3. Either I, II or III
4. Any two of the three
5. None of these

Answer: 4

## Solution 34:

From Statement I and II we can conclude that not all of them are facing the centre. Even from Statement I and III we can conclude that not all of them are facing the centre. Hence Any two of three option is the right answer.

Q 35. Directions: Each of the questions below consists of a question and three statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all three statements and give the answer.

There are six letters E, I, P, G, N and O is PIGEON the word formed after performing the following operations using these six letters only?
I. O is placed fourth to the right of P . G is not placed immediately next to either P or O .
II.N is placed immediately next (either left or right) to O. E is placed immediately next to (either left or right) to $G$.
III.Both I and E are placed immediately next to $G$. The word does not begin with N. P is not placed immediately next to E .

1. If the data in Statement I and II are sufficient to answer the question, while the data in statement III alone are not sufficient to answer the question.
2. If the data in Statement I and III are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question.
3. If the data in Statement II and III are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.
4. If the data either Statement I alone or Statement II alone or Statement III alone are sufficient to answer the question.
5. If the data in Statements I, II and III together are necessary to answer the question.

Answer: 1

## Solution 35:

From the above statements we can conclude that Statement I and II are sufficient to answer the question, whereas Statement III alone is not sufficient to answer the question.

Q 36. In each of the following question, a question is followed by information given in three statements. You have to study the question along with the statements and decide the information given in which statement(s) is necessary and sufficient to answer the question.

In a family of seven members how is P related to Q ?
I. $M$ and $N$ are children of $O$, who is the wife of $P$.
II. $A$, the cousin of $B$, is the niece of $M$
III. Q is the only brother-in-law of B .

1. Only I
2. Only I and II
3. Only II and III
4. All of them
5. None of these

Answer: 4

## Solution 36:

From the above statements we can conclude that all statements are needed to establish relation between $P$ and $Q$.

Q 37. Direction: The question below consists of a question and three statements numbered I, II and III given. You have to decide the data provided in which of the statements are sufficient to answer the question. Choose your answer from the options based on this.

How is M related to R ?
I. T the only son of M has two sisters.
II. M's son is the brother of the only sister of R.
III.R and $T$ are children of $M$.

1. Only I and III
2. Only II
3. Either I or II
4. Only II and III
5. None of these

Answer: 5

## Solution 37:

From the above statements we can't find the gender of M , hence option 5 is the answer.

Directions (38-39): Study the following information and answer the questions.
Point $A$ is 8 m to the west of Point $B$. Point $C$ is 4 m to the South of Point B. Point $D$ is 4 m to the South of Point B. Point $D$ is 4 m to the East of Point $C$. Point $F$ is 6 m to the North of Point $D$. Point $E$ is 8 m to the west of Point F. Point $G$ is 2 m to the South of Point E .

Q 38. How far and in which direction is Point $G$ from Point $A$ ?

1. 4 m to the East
2. 8 m to the West
3. 4 m to the West
4. 8 m to the East
5. $6 m$ to the South.

Answer: 1


## Solution 38:



From the above figure we can conclude that option 1 is the answer.

Q 39. If point $G$ is $4 m$ to the North of Point $H$, then what is the difference between $H$ and $D$ ?

1. 11 m
2. 8 m
3. 6 m
4. 4 m
5. None of these

Answer: 2
Solution 39:


From the above figure we can conclude that the distance is 8 m

Directions (40-43): Read the following information carefully and answer the questions that follow.
P, Q, R, S, T, V, and W are seven different boxes of different colours i.e. black, silver, red, pink, yellow, white and green but not necessarily in the same order. Box $S$ is immediately above yellow colour box. More than 3 boxes are there between pink and silver colour box. There are 2 boxes between box $Q$ and box T . There is only one box between box T and box W . There are 3 boxes between box W and box P , which is of black colour. There are only 2 boxes between box P and box R , which is of white colour. The silver colour box is immediately above the box $W$. More than 3 boxes are there between yellow and pink colour box. T is of red colour box.

Q 40. How many boxes are there between green colour box and silver colour box?

1. 1
2. 2
3. 3
4. 4
5. None

Answer: 3

## Solution 40:

From the above given details we can get the final table given below

| Colour | Box |
| :--- | :--- |
| Silver | S |
| Yellow | W |
| White | R |
| Red | T |
| Green | V |
| Black | P |
| Pink | Q |

From the above table we can see that only 3 boxes are between Silver and Green, they are yellow, white, red coloured boxes.

Q 41. Box $Q$ is of which colour?

1. Silver
2. Green
3. Yellow
4. Black
5. Pink

Answer: 5

## Solution 41:

From the above table we can find that $Q$ is of Pink colour.

Q 42. Which box is placed immediately above red colour box?

1. $P$
2. $S$
3. $R$
4. T
5. W

Answer: 3

## Solution 42:

From the above table we can find that box $R$ is immediately above red coloured box $T$.

Q 43. How many boxes are there between box $W$ and box $Q$ ?

1. None
2. One
3. Two
4. Three
5. Four

Answer: 5

## Solution 43:

There are four boxes between box W and box Q. White, Red, Green, Black boxes are between the above 2 boxes.

Direction: Read the following information and carefully and answer the questions that follow.
Seven persons Tina, Vini, Yasir, Rishi, Sanya, Pankaj and Urmila live on separate floors of a 7 - floor building. Ground floor is number one; second floor is number two and so on. Each of them goes to city viz. Paris, Istanbul, Shanghai, Durban, London, Madrid, and Dubai but not necessarily in the same order.

Only three people live above the floor in which Sanya lives. Only one person lives between Sanya and the one who goes to Paris. Vini lives just below the person who goes to Madrid. Only three people live between the one who goes to Paris and London. The person who goes to Mardrid lives on an even numbered floor. Urmila lives just above Rishi. Urmila does not go to London. Only two persons live between Pankaj and the one who goes to Durban. Pankaj lives above the person who goes to Durban. Yasir does not go to Istanbul. Tina does not live just above or just below Sanya. The one who goes to Shanghai does not live just above or just below Pankaj.

Q 44. Who among the following lives on floor number 7?

1. Tina
2. Yasir
3. Pankaj
4. Urmila
5. Vini

Answer: 1

## Solution 44:

From the above table, we can get the following conclusion.

| Floor No | Person | City |
| :--- | :--- | :--- |
| 7 | Tina | Istanbul |
| 6 | Pankaj | London |
| 5 | Yasir | Dubai |
| 4 | Sanya | Madrid |
| 3 | Vini | Durban |
| 2 | Urmila | Paris |
| 1 | Rishi | Shanghai |

Hence Tina lives on 7th floor.

Direction (45-49): Study the information given below and answer the questions based on it.
8 friends A, I, C, D, E, F, G and H are sitting in a straight line facing North and South direction. Among them four are facing South, while four are facing North. They play different games: Swimming, Cricket, Kabaddi, Hockey, Tennis, Volleyball, Basketball and Chess. The following information is given about them.
A. I who plays chess sits exactly between D and the person who plays Kabaddi.
B. The person who plays Tennis faces North and is to the immediate right of the person who plays Swimming.
C. $\quad$ C and $D$ are not the immediate neighbours of $G$. They do not sit at the extreme ends of the row.
D. The person who plays Hockey sits at one of the ends and is second to the right of $G$ who faces

South. A does not like to play Cricket.
E. The person who plays cricket is third to the left of the person who plays Volleyball.
F. Also, C does not play Kabaddi. E faces South.
G. $\quad \mathrm{H}$ is second to the right of the person who plays basketball.
H. A is to the immediate right of the person who faces North.
I. Exactly one person sits between D and C. C faces South.

Q 45. The person to the immediate left of $C$ plays which of the following games?

1. Swimming
2. Cricket
3. Tennis
4. Basketball
5. Kabaddi

Answer: 4

## Solution 45:

From the above details we can come to the final arrangement.
1 stands for left extreme position of the straight line and 8 stands to the right extreme of the straight line.

| 1 | F | Hockey | Facing North |
| :--- | :--- | :--- | :--- |
| 2 | A | Volleyball | Facing South |
| 3 | G | Kabaddi | Facing South |


| 4 | I | Chess | Facing North |
| :--- | :--- | :--- | :--- |
| 5 | D | Cricket | Facing North |
| 6 | H | Tennis | Facing North |
| 7 | C | Swimming | Facing South |
| 8 | E | Basketball | Facing South |

As C is facing South in a straight line, the person to his immediate left is $E$, the one who plays Basketball.

Q 46. Who sits exactly between I and the person who plays Volleyball?

1. $G$
2. D
3. H
4. $F$
5. None of these

Answer: 1

## Solution 46:

From the table we can see that G sits between I and the person who plays Volleyball.

Q 47. Who sits exactly between I and the person who plays Volleyball?

1. $G$
2. D
3. H
4. F
5. None of these

Answer: 1

## Solution 47:

From the table we can see that G sits between I and the person who plays Volleyball.

Q 48. Which of the following statements is true?

1. The person second to the left of $D$ faces North.
2. Exactly one person sits between I and C.
3. The person to the immediate right of A plays Hockey
4. F faces South.
5. None of these

Answer: 3

## Solution 48:

From the above table we can see that F plays Hockey.

Q 49. Four of the five are alike and hence form a group. Which of the following five does not belong to the group?

1. FA
2. DH
3. CE
4. IG
5. AD

Answer: 5

## Solution 49:

In rest of the options; FA, DH, CE, IG all are seated next to each other. In case of AD they are not seated next to each other.

Q 50. A question and 2 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.

A six storey building consisting of an unoccupied ground floor and above ground floor is floor no. 1, so on and topmost floor is no.5. Different people lives in building viz I, J, KL and M. Who lives on the third floor?
I. K lives on an even numbered floor. I lives immediately above L. J lives immediately above I. M does not live on topmost floor.
II. L lives on an odd numbered floor. I and J are immediate neighbours of each other. Similarly K and M are immediate neighbours of each other. K does not live on an odd numbered floor.

1. 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.
2. 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.
3. The data either in Statement I alone or in Statement II alone are sufficient to answer the question.
4. The data in both the Statements I and II are not sufficient to answer the question.
5. The data in both Statements I and II together are necessary to answer the question.

Answer: 1

## Solution 50:

| 5 | J |
| :--- | :--- |
| 4 | I |
| 3 | L |
| 2 | K |
| 1 | M |
| Ground <br> Floor |  |

From the above details we can see that Data from Statement I alone is sufficient to answer the question.


