Important Concepts and Tips to Solve Syllogism Questions

SYLLOGISM

- Syllogism – a form of reasoning in which the conclusion establishes a relation between 2 terms on the basis of both the terms being related to same third term as derived in the premises
- It is a mediate deductive inference in which two propositions are given in such an order that they jointly imply the 3rd
- In these types of questions some statements will be given followed by some conclusions that can be verified from the given statements
- We should ignore the actual meaning of the terms
- These questions can be solved by using Venn diagrams
- If the conclusion is FALSE in one Venn diagram and TRUE in another diagram, then the conclusion is deduced as PARTIALLY TRUE
- PARTIALLY TRUE = FALSE

QUESTION

Directions

Select answer (1) if only conclusion I follow

Select answer (2) if only conclusion II follow

Select answer (3) if either conclusion I or II follows

Select answer (4) if neither conclusion I nor II follows

Select answer (5) if both conclusion I and II follows

Statements
Some cars are jeeps.

Some jeeps are bikes.

**Conclusion**

I. Some bikes are cars

II. No bike is car

**SOLUTION**

Consider Statement 1 - **Some cars are jeeps**

The Venn diagram of this statement is as follows

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Cars                Jeeps
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Similarly the Venn diagram for Statement 2 - **Some jeeps are bikes** is as follows

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Jeeps                Bikes
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Now both Statements I and II has a common term Jeeps, so the overall Venn diagram can be drawn as follows

Fig. 1

OR

Fig. 2

Conclusion I: **Some bikes are cars**
As per Fig.1, the conclusion I is FALSE (no relation between bikes and cars)

As per Fig.2, the conclusion I is TRUE (there is a relation between cars and bikes)

Hence the Conclusion I is PARTIALLY TRUE which is considered as FALSE

Therefore Conclusion I is FALSE

Similarly, Conclusion II: No bike is car is considered

As per Fig.1, Conclusion II is TRUE (No relation between car and bike)

As per Fig.2, Conclusion II is FALSE (Car and bike are related to each other)

Hence the Conclusion II is PARTIALLY TRUE which is considered as FALSE

Therefore Conclusion II is FALSE

When both the Conclusions I and II are FALSE, then the terms in both the conclusions are considered. Here,

I. Some bikes are cars
II. No bike is car

Both the conclusions consists of common terms ‘bike’ and ‘car’

Therefore the Answer will be (3), either Conclusion I or II follows

If there were no common terms in the conclusions, then the answer would have been

(4) - neither conclusion I nor II follows