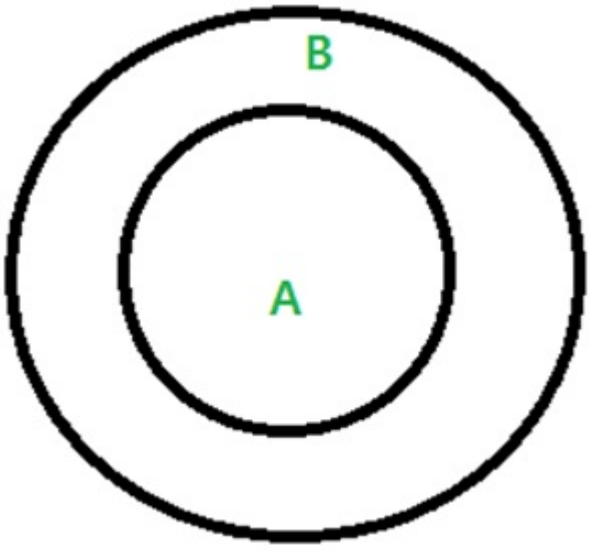
Syllogism

Introduction to Syllogism

Syllogism comes under the Verbal Reasoning Section and is a very important topic which is frequently asked in almost all the competitive exams. These types of questions are very simply framed. They contain generally two or more statements. These statements are then followed by a number of conclusions. Based on the statements, you have to find the authenticity of the conclusions. In simple words you have to find that from the given statements.which conclusions logically follows them. The most widelu used approach in solving these types of questions is the Venn diagram approach.

Types of Syllogism problem

1. **Type: All A are B**
   In this type of questions, first element is the subset of the second element.Representing it by Venn diagram, the pattern consists of a circle representing A, lying within a circle representing B.



Conclusions we get from the above pattern

- Some B are A.
- Some A are B.

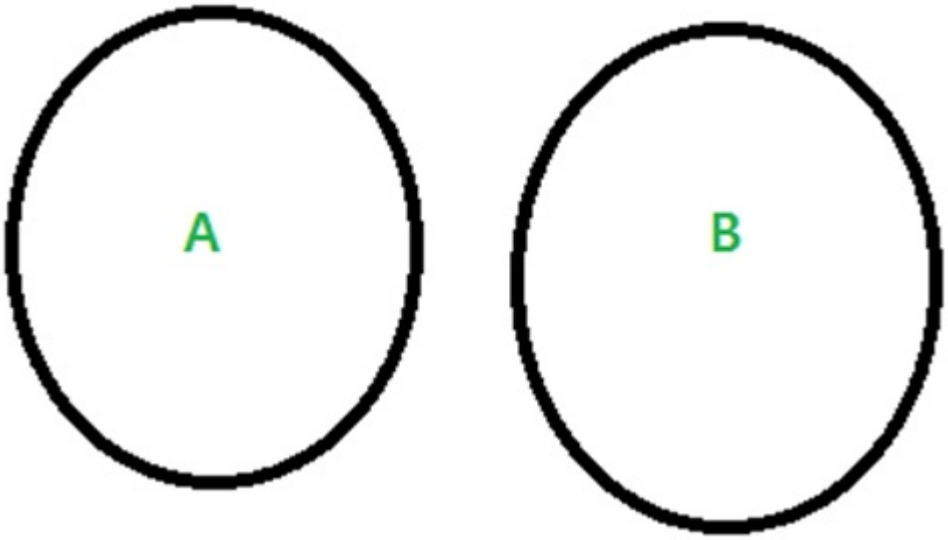
Example: All cats are animals.
Conclusion 1: Some animals are cats
Conclusion 2: Some animals are cats

1. Only conclusion 1 follows
2. Only conclusion 2 follows
3. Either 1 or 2 follows
4. Neither 1 nor 2 follows
5. Both 1 and 2 follows

Answer: Both conclusions follows

2. Type2: No A is B.

In this type of questions, first element is the not at all associated with the second element.Representing it by Venn diagram, the pattern consists of a circle representing A not intersecting the circle representing B.

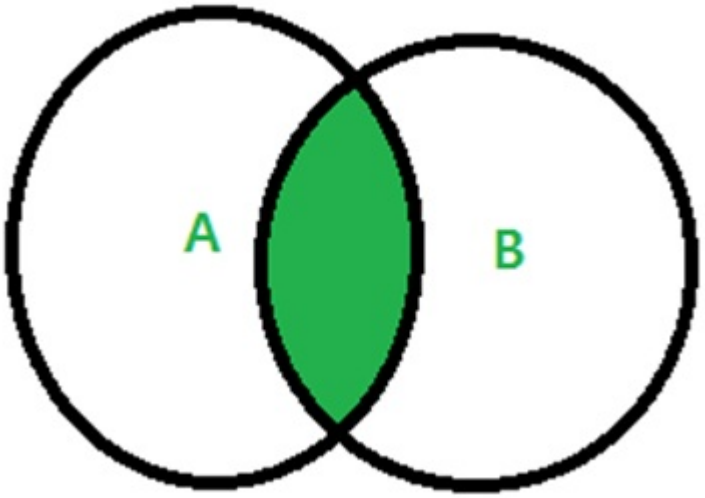


Conclusions we get from the above pattern:
No B is A

Example: No cats are animals.
Conclusion : No animals are cats.
Answer: The conclusion is correct

3. Type 3: Some A are B (Possibility Case)

In this type of questions, first element is having some part in common with the second element.Representing it by Venn diagram, the pattern consists of a circle representing A patially overlapping the circle representing B. The remaining portion of circle A is uncertain whether this portion touches B or not.



Conclusions we may get from the above pattern are based on possibilty and only one or a few out of them will be following the statement.

- Some A are not B
- All A are B.
- All B are A.
- All A are B and All B are A.

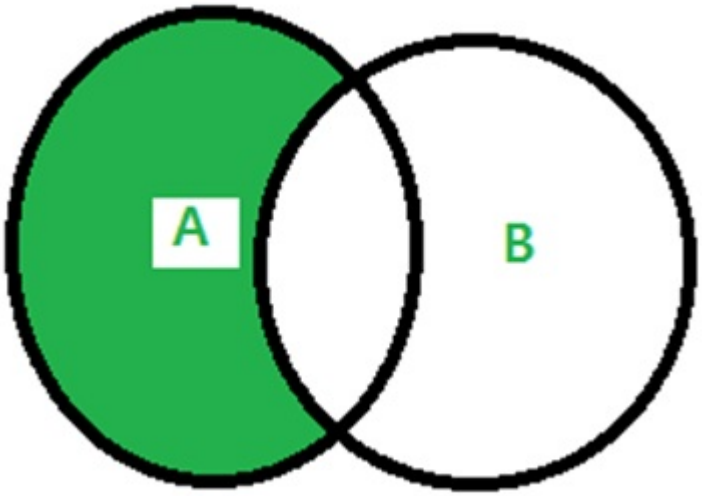
Example: Some bats are cats.
Conclusions:

1. Some bats are not cats
2. All bats are cats
3. All cats are bats
4. All bats are cats and All cats are bats

Answer: All of them

4. Type 4: Some A are not B.

In this type of questions, first element is having some part which is not common with the second element.Representing it by Venn diagram, the pattern consists of a circle representing A having atleast some part that is not overlapping the circle representing B. The remaining portion of circle A is uncertain whether this portion touches B or not.



Conclusions we may get from the above pattern are based on possibilty and only one or a few out of them will be following the statement.

- Some A are not B
- All A are B.
- All B are A.
- All A are not B and All B are not A.

Example: Some bats are not cats.
Conclusions:

1. Some bats are cats
2. All bats are not cats
3. All cats are not bats
4. All bats are not cats and All cats are not bats

Answer: All the conclusions follow

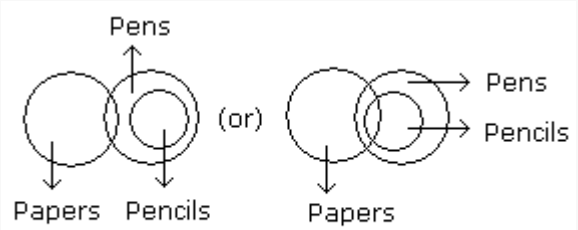
Example1: Statement: Some papers are pens. All the pencils are pens.
Conclusions:

1. Some pens are pencils
2. Some pens are papers

A. Only (1) conclusion follows
B. Only 2 conclusion follows
C. Either 1 or 2 conclusion follows
D. Neither 1 nor 2 conclusions follow
E. Both 1 and 2 follows

Answer: E.

Solution:



Both (1) and (2) follow.

Example2: Statement: Some papers are pens. All the pencils are pens.

Conclusions:

1. Some pens are pencils
2. Some pens are papers

A. Only (1) conclusion follows

B. Only 2 conclusion follows

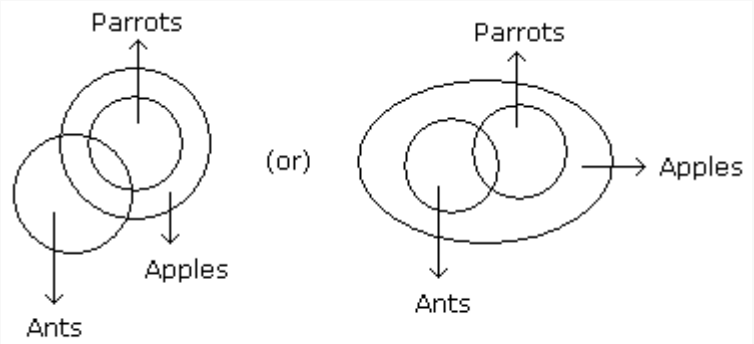
C. Either 1 or 2 conclusion follows

D. Neither 1 nor 2 conclusions follow

E. Both 1 and 2 follows

Answer: B

Solution:



Only (2) follow.