Study Notes on Syllogism

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With respect to various BBA exams like **DU JAT, IPMAT, JIPMAT, etc** exams, Syllogism is one of the most important topics. If you consult various books for this topic you will find that this chapter has been explained with a lot of terminologies and concepts. But, in this series, we have tried to explain the concept of syllogism using the most important concepts which will cover all the possible types of problems that have been asked related to this chapter. The following is our first article following our series.

To explain Syllogism we first need to understand what is Proposition. The proposition is a grammatical sentence comprising of four components, namely:
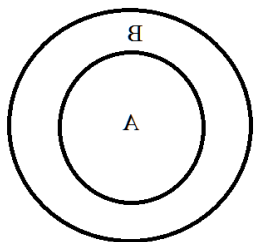
- *Quantifier: The words which specify a quantity are called quantifiers like, some, all, no, etc.*
- *Subject: That part about which something is said.*
- *Predicate: That part of the proposition which is affirmed detail about the subject.*
- *Copula: It is that part of the proposition that denotes the relation between subject and predicate.*

Syllogism means inference or deduction. These deductions are based on propositions. Different types of questions covered in this chapter are as follows:
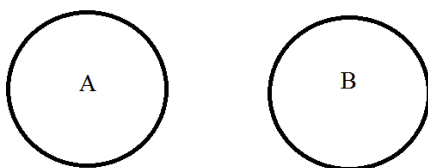
(1) Two statements and two conclusions

(2) Three Statements and two or more conclusions

(3) Four Statements and Two or more conclusions

Type of propositions in Syllogism: There are 4 types of propositions in a syllogism. We will also explain their Venn diagram representation to give a better understanding of these propositions.
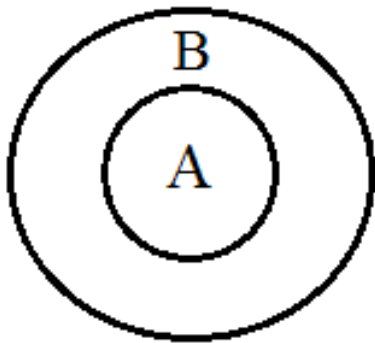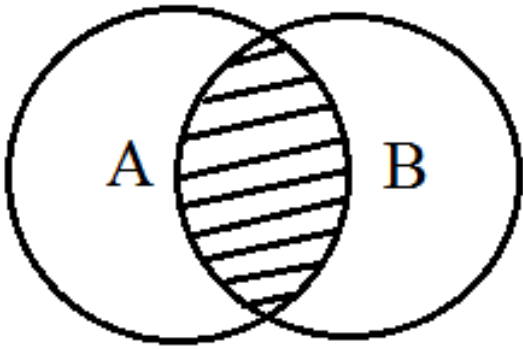
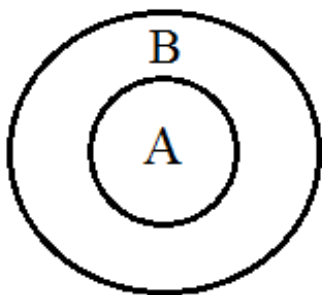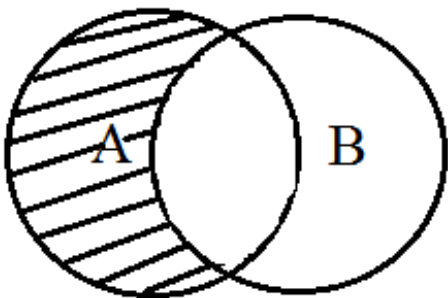**(1) A-Type Propositions (All A are B)**

(2) E Type (No A is B)

(3) I Type (Some A are B)

(4) O Type (Some A are not B)

Inferences that can be drawn from these statements are of two types:

(1) Immediate Inference: When inference is drawn from a single from a single sentence then those type of inferences are immediate inferences.

(2) Mediate Inference: When inferences are drawn from 2 sentences then the those inferences are mediate inference.

In this article we will talk about the mediate inference.

Methods to draw immediate inferences:

There are various methods to find the immediate inferences, but we will read only about two as asked in the exams. These two methods are:

Method I (Implications)

While drawing the inference through this method, Subject remains the subject and predicate remains the predicate

Method II (Conversion)

In this method subject become the predicate and predicate becomes the subject.

Following are the conclusions that are drawn by Implication and Conversion method:

Type of Prepositions	Preposition Format	Immediate Inference	Method
A Type	All A are B	Some A are B	Implication
		Some B are A	Conversion
E Type	No A is B	Some A are not B	Implication
		No B is A	Conversion
I Type	Some A are B	No Valid inference	Implication
		Some A are B	Conversion
O Type	Some A are not B	No Valid Inference	Implication
		No Valid Inference	Conversion

In the given table, we can see what the inferences will be if one of the mentioned Prepositions is given.