

B.A 1ST SEM
PAPER :C2 LOGIC

UNIT -1

Truth and validity

Truth and falsity , validity and invalidity are the fundamental notions of logic . A Proposition is true when it corresponds to reality. As for instance , “Grass is Green” is a true proposition because we see that grass is green in reality. We nowhere see that grass is white . On the other hand the proposition ‘All animals are immortal is a false proposition because we never perceive immortal animals. On the other hand in case of arguments we use the term ‘valid’ is a false proposition because we never perceive immortal animals.

On the other hand in case of argument we use the terms “valid” or “invalid”. A DEDUCTIVE ARGUMENT is valid when the conclusion s necessarily derived from the premises. So , the term validity is not applied in case of propositions. In a valid argument , the propositions which are considered as premises. In a valid argument , the proposition which are considered as premises may be true or false. Therefore , a valid arguments can have true premises or false premises. If the conclusion in an arguments is false, still the arguments can be valid , because the premises may imply the conclusion. Again, in a valid argument there can be false premises, yet the argument can be valid provided the conclusion follows from the premises. Truth and falsity are the attribute of proposition and validity and invalidity are the attributes of arguments.

The relations between true or false propositions and validity or invalidity of arguments are complex. The validity or invalidity arguments depends only upon the relationship of the premises and the conclusion.

We can take some example in that a valid ARGUMENTS CAN HAVE FALSE PREMISES AND AN INVALID ARGUMENTS CAN HAVE TRUE PREMISES.

A. All dogs are cats.

All cats are horses

Therefore All dogs are horses

This arguments shows that the premises are false but the arguments is valid.

B. All dogs are animals

All cats are animals

Therefore All cats are dogs.

This arguments is invalid, although premises are true.

C. All human beings are rich

All businessmen are rich

Therefore All businessmen are human beings.

This is an invalid argument because the premises in the argument tare false. The above discussion hold that truth and validity are basic concept of logic Validity and invalidity of arguments becomes independent of the truth and falsity of the premises. Logicians are concerned with the question of validity and invalidity of arguments depending on the logical relation of the premises and conclusion.