## Inference

Que.1. Anu approaches you with a project given by her teacher. She need some clarification on the steps of scientific induction. Can you explain the different steps of scientific Induction.

[Marks:(5)]

**Ans.** explain four steps of scientific induction.

Que.2. One postulates of induction states that 'the same cause will be produce the same effect under similar circumstances'. [Marks :(3)]

Identify the postulates.

Briefly explain the postulates of induction.

**Ans.** The Law of Uniformity of Nature – explain the Law od Universal Causation and the Law of Unity of Nature.

Que.3. Differentiate between complete enumeration and simple enumeration with example. [Marks :(3)]

Ans. types of unscienific induction

Que.4. 'Acid is the cause of the colour change in litmus paper.' Find out the postulates of induction behind this example and state it. [Marks:(2)]

**Ans.** the law of Universal causation - this law states that everything must have a cause.

Que.5. Briefly explain the main differences between induction and deduction. [Marks:(2)]

**Ans.** induction – particular to general

Deduction – general to particular.

Que.6. Square of opposition is the relationship between A,E,I, O propositions having the same subject and predicate. Can you draw the diagram showing the opposition of propositions and explain it?

[Marks:(6)]

Ans. contraries, contradictories, subaltern, subcontraries

Que.7. Write the contraposition of the following proposition? [Marks :(4)]

Some students are not smart

**Ans.** some non smart being are students

some non smart are not non students

Que.8. List out the rules of obversion.

[Marks :(3)]

Ans. three rules of obversion

Que.9. The proposition 'Some farmers are not hardworking' has no converse. Why?

[Marks :(1)]

[Marks :(1)]

Ans. No converse, third rule of conversion

Ans. 'O' Proposition

Que.10. Find the obverted converse of the following proposition.