

Major VIII

LOGIC AND SCIENTIFIC METHOD – II

Unit – 1

Difference between Deduction and Induction, The Problem of Induction and its solution.

Unit – 2

Kinds of Induction – Scientific Induction, Enumerative Induction – Complete and Incomplete Enumeration – Analogy.

Unit –3

Mill's Experimental Methods

Unit – 4

Postulates of Scientific Induction - Stages – Hypothesis – Observation – Experiment – Advantages and Disadvantages.

Unit – 5

Fallacies: Mal observation, Non-observation, Hasty Generalization and Barren Hypothesis - Argument Ad Ignorantiam - Argument Ad Verecundiam - Argument Ad Hominem -Argument Ad Populum - Argument Ad Misericordiam - Argument Ad Baculum - Petitio principii - Complex question

Books for study: (Relevant Chapters only)

1. Irving M. Copi, Introduction to Logic 4th ed.
2. Bholonath Roy, Text Book of Deductive Logic
3. T.M.P. Mahadevan, Introduction to Logic
4. T.N. Ganapathy, Invitation to Logic