

NORTH MAHARASHTRA UNIVERSITY, JALGAON
SYLLABUS (With effect from June, 1992)

F.Y.B.A.

Logic and Methodology of Science.

General Paper-I

(Traditional Logic and Propositional Logic)

Section : I.

- 1) Definition, Natures and Scope of Logic.
Logic as a formal Science, argument and argument form.
Traditional Classification of propositions and fourfold
Scheme of Categorical propositions. Doctrine of distribution
of terms.
- 2) Immediate inference: Varieties of inference based on
opposition rules- Square of opposition- education-
conversion and observation.
- 3) Categorical syllogism:- Its nature and general rules.
Mixed Hypothetical Syllogism, mixed disjunctive Syllogism,
Dilemma.
- 4) Fallacy incidental to forms mentioned in 2,3 above and the
following fallacies Division, Composition, Accident, Converse
accident, petitio principis. Ignoratio elenchii - Its
various forms.

SECTION : II.

- 5) Limitations of traditional Logic, Modern classification of
proposition and criticism of traditional classification-
Truth functional connectives- conjunction, disjunction,
negation, implication and logical equivalence- symbolization
of propositions. Basic truthables.
- 6) Statement forms:- Tautologous, contradictory and contingencies.
- 7) Decision procedures:- Truth tables, shorter truth tables and
truth trees.
- 8) Method of deduction :- Rules of inference and rules of
replacement, Direct proof.

LIST OF BOOKS:-

BOOKS FOR READING:-

- 1) Introduction to Logic :- I.M.Copi and Cohen.
- 2) Symbolic Logic :- I.M.Copi.
- 3)
- 4)

BOOKS OF REFERENCE :-

- 1) Elements of formal logic:- Hughes and Londey
(Relevant Chapters only.)
- 2)

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