

Deccan Education Society's  
**FERGUSSON COLLEGE, PUNE**  
**(AUTONOMOUS)**

**SYLLABUS UNDER AUTONOMY**

**THIRD YEAR B.A. (LOGIC)**  
**SEMESTER - V**

**SYLLABUS FOR T.Y. B.A.**  
**Academic Year 2018-2019**

**Deccan Education Society's  
FERGUSSON COLLEGE (AUTONOMOUS), PUNE 411004  
Scheme of Course Structure (Faculty of Arts)  
2018-2019  
T. Y. B. A. - Logic**

<b>Semester</b>	<b>Course Code *</b>	<b>Title*</b>	<b>Paper</b>	<b>Credits</b>	<b>Exam (I / E)</b>	<b>Marks</b>
V	LOG3501	Logic: Methodology of Natural Sciences	General	3	I / E	50 + 50
VI	LOG3601	Logic: Methodology of Social Sciences	General	3	I / E	50 + 50

**T.Y. B.A. (LOGIC) Semester - V**  
**LOGIC PAPER - I:**  
**Title: Logic: Methodology of Natural Sciences**  
**PAPER CODE: LOG3501**

[Credits - 3]

**Learning Objectives:**

1. To acquaint the students with some important issues regarding methodology of Science.
2. To introduce the key methodological approaches in Natural Sciences.

<b>Title and Contents</b>	
<b>Unit - I</b>	1.1 The difference between common sense and science, Classification of sciences, Objectives of science. 1.2 The concepts of Method, Methodology and Epistemology.
<b>Unit - II</b>	1.1 Scientific Induction, the problem of Induction, Hume on Induction 1.2 The notion of cause: Aristotle, Hume, Mill. 1.3 Scientific hypothesis, Conditions of acceptability of hypothesis.
<b>Unit - III</b>	1.1 Approaches to scientific theories: (a) Logical Positivism (b) Instrumentalism (c) Popper: Counter Inductivism
<b>Unit - IV</b>	1.1 The difference between a scientific and non- scientific explanation. 1.2 Models of explanation, Deductive model, Probabilistic model Functional / Teleological model, Genetic Model 1.3 The nature of scientific law

**References:**

1. Nagel E., *The Structure of Science Problems in the Logic of Scientific Explanation* MacMillan, 1961.
2. Hempel C.G., *Philosophy of Natural Science*, Prentice Hall, Englewood Cliff, New Jersey, 1966.
3. Hempel, C.G., *Aspects of Scientific Explanation*, Free Press, New York, 1968.
4. I. M. Copi, Carl Cohen, Kenneth McMahan, *Introduction to Logic*, 14<sup>th</sup> Edition, Pearson Education Ltd. 2014

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**SYLLABUS UNDER AUTONOMY**

**THIRD YEAR B.A. (LOGIC)**  
**SEMESTER - VI**

**SYLLABUS FOR T. Y. B. A.**  
**Academic Year 2018-2019**

**T.Y. B.A. (LOGIC) Semester - VI**  
**LOGIC PAPER - I:**  
**Title: Logic: Methodology of Social sciences**  
**PAPER CODE: LOG3601**

[Credits - 3]

**Learning Objectives:**

1. To acquaint the students with some important issues regarding methodology of Science.
2. To introduce major methodological approaches in Social Sciences.

<b>Title and Contents</b>	
<b>Unit - I</b>	1.1 The subject matter of social sciences, the concept of social action. 1.2 Similarities and differences between the subject matter of natural and social sciences. 1.3 Methodological Individualism and Holism.
<b>Unit - II</b>	2.1 Positivism: Auguste Comte, Durkheim 2.2 Logical Positivism: Unity of method
<b>Unit - III</b>	3.1 Critique of Positivism with respect to: (a) Explanation / Understanding (b) Objectivity / Value Neutrality
<b>Unit - IV</b>	4.1 Types of explanation: Motivational, Historical, Functional, Causal 4.2 Characteristics of Laws in Social Sciences

**References:**

1. Keat Russell Urry, *Social Theory as Science* RKP, London, 1975.
2. Ryan Alan: *Philosophy of Social Science* MacMillan, 1970.
3. Lessnoff M. H.: *The Structure of Social Science: A Philosophical Introduction*, George Allan Unwin Ltd., London, 1974.
4. R. Rudner: *Philosophy of Social Sciences*, Prentice Hall, Englewood Cliff, New Jersey, 1966.