



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

**Syllabus  
for**

**T. Y. B. A. (Logic)**  
[Pattern 2019]  
*(B.A. Semester-V and Semester-VI)*

From Academic Year  
**2021-22**

**Fergusson College (Autonomous), Pune**  
**Structure of T.Y.B.A. – Faculty of Arts and Humanities**  
 Under CBCS pattern (2019-20) *effective from June 2021*  
**Equivalence Syllabus for Department of Philosophy**

<b>TY BA</b>	<b>New CBCS Pattern</b>	<b>Old /Existing Pattern</b>
Sem V	CC 1 (3 credits) <b>LOG3501</b> Logic: Methodology of Sciences (Natural and Social)	General Paper 3 Methodology of Natural Sciences

*Note: SEC 1C is CC '1 or 2' (General paper for other department students)*

<b>TY BA</b>	<b>New CBCS Pattern</b>	<b>Old /Existing Pattern</b>
Sem V	CC 1 (3 credits) <b>LOG3601</b> Traditions in Indian Logic	General Paper 3 Methodology of Social Sciences

*Note: SEC 1D is CC-'1 or 2' (General paper for other department students)*

**T. Y. B.A. Semester V**

<b>Title of the Course and Course Code</b>	<b>Logic - CC LOG3501</b>	<b>Number of Credits : 04</b>
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<b>Course Outcomes (COs)</b>	
<b>On completion of the course, the students will be able to:</b>	
CO1	Understand the significance of Logic in methodology of science
CO2	Recognise the characteristics of social sciences vis-a-vis those of natural sciences
CO3	Identify the different models of explanation in natural and social sciences
CO4	Compare and contrast the nature of laws in natural and social sciences
CO5	Critically evaluate the positivistic approach to social sciences
CO6	Take up a position with respect to the unity of method debate

Unit No.	Title of Unit and Contents	No. of Lectures
<b>I</b>	History of Science, Common sense and Science, Classification of sciences, Objectives of science, The concepts of Method, Methodology and Epistemology, Subject matter of social sciences, Concept of social action	12
<b>II</b>	Nature of Scientific Laws – Natural Sciences and Social Sciences, Models of explanation in Natural Sciences, Models of Explanation in Social Sciences	12
<b>III</b>	Approaches to scientific theories (Natural Sciences) (a)Logical Positivism (b)Popper: Counter Inductivism, Positivism: Auguste Comte, Logical Positivism: Unity of method	12
<b>IV</b>	Critique of Positivism with respect to: (a)Explanation / Understanding (b)Objectivity / Value Neutrality	12

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

<b>T. Y. B.A. Semester VI</b>		
<b>Title of the Course and Course Code</b>	<b>Traditions in Indian Logic - LOG3601</b>	<b>Number of Credits : 03</b>
<b>Course Outcomes (COs)</b>		
<b>On completion of the course, the students will be able to:</b>		
CO1	Explain the inter relation between Logic, Epistemology and Metaphysics in the domain of Indian philosophy.	
CO2	Understand the various ways of classification of Anumana	
CO3	Identify inductive and deductive elements in Indian logic.	
CO4	Analyze the various concepts used in traditional Indian Logic	
CO5	Engage in a comparative analysis of western and Indian elements in reasoning.	
CO6	Critically evaluate Buddhist and Nyaya approaches to logical reasoning	

<b>Unit No.</b>	<b>Title of Unit and Contents</b>	<b>No. of Lectures</b>
<b>I</b>	Relationship of Logic, epistemology and metaphysics in the Indian tradition, Primacy of logical reasoning in building knowledge systems, Concepts of ānvikṣikī and anumiti, Logical speculations in Ayurveda	12
<b>II</b>	Nyaya Logic - Anumāna and its kinds: Svarthanumana and Pararthanumana, Kevalanvayi, Kevalavyatireki and Anvayavyatireki, The concepts of Vyapti and Paramarsa.	12
<b>III</b>	Inductive elements in Indian Logic: the concepts of vyāptigrahopāya, sāmānyalakṣaṇaprātyasatti, tarka, upādhi Hetvabhasas, Charvaka Criticism of Anumana	12
<b>IV</b>	Definition, constituents and process of Anumana - Buddhist Logic, Definition, constituents and process of Anumana - Jaina Logic	12

**References:**

1. Annambhatta, Tarkasaṁgraha with Dipika, trans. by Prof. Gopinath Bhattacharya in English, Progressive Pub, 1976
2. A History of Indian Logic, Satishchandra Vidyabhooshan, Motilal Banarasidas
3. History of Indian Philosophy - Surendranath Dasgupta (Vol II) chapter on Medical schools, Motilal Banarasidas
4. An Introduction to Indian Philosophy, Satishchandra Chatterjee and Dhirendramohan Datta, Rupa and company, 2007