

SEMESTER-I
Course Name: LOGICAL REASONING
Course Code: SEC 1
Nature of Course: Skill Enhancement Course (SEC)
Total Credits: 3
Distribution of Marks: 70 (End-Sem) + 30 (In-Sem)

Course Objectives:

The objectives of this Course are-

- Acquaintance with the nature and kinds of logical reasoning
- Understand the nature of argument from analogy
- Detect different fallacies involved in arguments
- Examining the argument from analogy and fallacies of language

Unit	Course Contents	L	T	P	Total hours
Unit I (Marks 15)	1. Meaning of Logical Reasoning 2. Nature of Deductive and Inductive Reasoning 3. Relation of Logical Reasoning to Scientific and Philosophical Reasoning	7	1	-	8
Unit II (Marks 15)	1. Nature of Abductive Reasoning, Verbal and Non-verbal Reasoning 2. Inductive Reasoning: Generalizing from a Sample, Statistical Syllogism, Argument from Analogy, Causal Argument	7	1	-	8
Unit III (Marks 20)	1. Logical Fallacy: Distinction between Formal and Informal Fallacy 2. Formal Fallacy: Affirming the Consequent, Denying the Antecedent, Undistributed Middle 3. Informal Fallacy: Fallacies of Defective Induction	10	2	-	12
Unit IV (Marks 20)	1. Informal Fallacy: Fallacies of Relevance, Fallacies of Presumption 2. Fallacies of Equivocation and Amphiboly, Fallacies of Composition and Division	10	2	-	12
	Totals	34	6	-	40

Where,

L: Lectures

T: Tutorials

P: Practicals

Modes of In-Semester Assessment:**30 Marks**

- One Sessional Examination: 10 Marks
- Any two of the following activities listed below: 20 Marks
Seminar/ Group Discussion/ Project /Assignment /Viva

Learning Outcomes:

On completion of this Course, the students will be able to-

- Determine the nature and kinds of logical reasoning
- Recognize different fallacies involved in arguments
- Identify and evaluate argument from analogy and fallacies of language
- Apply the skill of logical reasoning to avoid prejudices of thinking

Suggested Readings:

1. Copi & Cohen: *Introduction to Logic*. Pearson, New Delhi (Ch. 1 & 10) 12th ed. 2006
2. Parker & Moore: *Critical Thinking*. McGraw Hill, New Delhi (Ch. 2 & 8) 13th ed. 2023
3. Sen, Madhuchanda: *An Introduction to Critical Thinking*. Pearson, New Delhi 2010
4. Patrick J. Hurley: *A Concise Introduction to Logic*. Cengage, Delhi (Ch. 1 & 3) 2018
5. Chakraborty, C.: *Logic: Informal, Symbolic and Inductive*. PHI, New Delhi, 2009
6. Patrick J. Hurley: *A Concise Introduction to Logic*, CENGAGE Learning: New Delhi, 2012
7. Gensler, Harry J.: *Introduction to Logic*, Routledge. 2002
8. Sharma, Banajit and Deka, Jahabi: *A Textbook of Logic*. Aak Baak Prakashan, 2012