



# LEARNING OUTCOMES

## UNIT 1. INTRODUCING LOGIC

*The learner will be able to:*

- 1.1. Identify that every stories, issues and the like underlies certain philosophy.
- 1.2. Identify the meaning and definitions of philosophy.
- 1.3. Classify the areas of philosophy and its branches.
- 1.4.
  1. Infer solution.
  2. Identify that reasoning is the subject matter of Logic.
- 1.5.
  1. Assess different definitions of Logic.
  2. Identify different components of Creighton's definition.
- 1.6. Identify logic is a normative and formal science and differentiate it with positive sciences.
- 1.7. Identify different operation of mind.
- 1.8. Differentiate formal truth and material truth.
- 1.9. Identify the fundamental laws of thought.
- 1.10. Compare and differentiates logic with Psychology
- 1.11. Compare and differentiates logic with ethics
- 1.12. Identify the utility of logic and its area of application.

## UNIT 2. PROPOSITIONS

- 2.1 Analyse and construct ordinary sentence and arguments
- 2.2
  1. Identify different types of sentence
  2. Differentiate the sentence and propositions
- 2.3 Classify-categorical propositions
- 2.4 Identify conditional propositions
- 2.5 Classify simple propositions
- 2.6 Differentiate compound propositions
- 2.7 Construct diagram for distribution of terms
- 2.8 Change ordinary sentence in to logical propositions

### **UNIT 3. INFERENCE**

- 3.1. 1 Find out the conclusion of any given propositions  
2 identify the meaning and definition of inference
- 3.2 Differentiates mediate and immediate inference.
- 3.3 Infer the other three forms of given proposition
- 3.4. 1 Identify the opposition of propositions  
2 Identify the truth values of the opposition of propositions.
- 3.5 Convert, Obvert and find out the other eductions.

### **UNIT 4. SYLLOGISM**

- 4.1 Identify the meaning and definitions of syllogism
- 4.2 Identify different syllogism and identifies three terms and also prepare note.
- 4.3 Recognize the rules and identify the fallacies in argument
- 4.4 Represent syllogism diagrammatically and identify relation of middle terms with major and minor term.
- 4.5 Identify the fallacy and judge the validity of syllogism.
- 4.6 Recognize the rules, identify the fallacy and construct valid syllogism
- 4.7 Create Hypothetical syllogism from life situations, Identify fallacies in argument and form valid arguments.

### **UNIT 5. OBSERVATION AND EXPERIMENTS**

- 5.1 Differentiate observation and experiment
- 5.2 List out the characteristics of scientific observation
- 5.3 List out the instances of different types of observation
- 5.4 Recognize the advantages of observation and list out it.
- 5.5 Analyse the merits and demerits of experiment and observation and arrive conclusions
- 5.6 Discriminate fact and fallacies in art, literature and beliefs

### **UNIT 6. SCIENTIFIC METHOD**

- 6.1 Identify different source of knowledge
- 6.2 Create their own definition of science and identify its characteristics

- 6.3 Arrive at conclusion on inference, deduction and induction
- 6.4 Compare different methods
- 6.5 Employ inductive and deductive arrangement in solving problems

#### **UNIT 7. CAUSALITY**

- 7.1 Identify the term causality and make different definitions; Students can identify the 4 types of causation
- 7.2 Find out the reason for good crops, etc
- 7.3 Find out the cause of the phenomena and write a note about advantages and disadvantages of the method
- 7.4 Identify the factors that which does not occur in phenomena
- 7.5 Identify the cause of the phenomena.
- 7.6 List out the causes of the effect

#### **UNIT 8. HYPOTHESIS**

- 8.1. Find out some guess work that leads to identify the term hypothesis. They can make their own definition of hypothesis
- 8.2 Identify the sources of knowledge
- 8.3 Identify and list out characteristics of good hypothesis
- 8.4 Differentiate types of hypothesis and to find out examples for it

#### **UNIT 9. SYMBOLIC LOGIC**

- 9.1 Outline the importance of the symbols and its use, identify the use of symbols in language and create their own definitions
- 9.2 Differentiate classical and modern logic. They can easily find out the meaning of the sentence.
- 9.3 Identify the truth function and value of the compound statement
- 9.4 Identify different symbols- Conjunction, Disjunction, Implication, Negation, Material implication-and find out the truth value.
- 9.5 Recognise the use of logic gates and construct the table

## **UNIT 10 LOGIC OF RESEARCH**

- 10.1 Identify different research problem and prepare a chart of topic related with daily life
- 10.2 Identify the term research and make their own definitions about research
- 10.3 Identified salient features and developed generalization.
- 10.4 Find out qualities of research, and list out some points.
- 10.4 Write a research report

