

**FIRST YEAR B.A. DEGREE EXAMINATION MARCH/APRIL 2005****Part III-Group IV-Philosophy****Paper I-LOGIC**

Time : Three Hours

Maximum : 100 Marks

*Answer one question each from Sections A, B and C and eleven questions from Section D.  
Answers may be written either in English or in Malayalam.*

**Section A**

1. Define Logic. Explain the nature and scope of logic.
2. What is meant by distribution of a term? Explain the distribution of terms in the four categorical propositions with the help of Euler's circles.
3. Define opposition of propositions. Explain the different kinds of opposition of propositions.  
(1 × 15 = 15 marks)

**Section B**

4. Explain the scientific conception of Causation.
5. Critically examine Mill's method of concomitant variations.
6. What is a Hypothesis? State and explain the recruitments of a good hypothesis.  
(1 × 15 = 15 marks)

**Section C**

7. What is Symbolic Logic? Distinguish between Truth and Validity.
8. What is truth functional compound statement? Explain Negation and conjunction with examples.
9. Explain punctuation in symbolic Logic.  
(1 × 15 = 15 marks)

**Section D**

10. Distinguish between Singular, General and Collective terms.
11. Distinguish between simple and compound propositions.
12. Explain the structure of categorical syllogism.
13. Explain the fallacies of Ambiguous major and Ambiguous minor.
14. Distinguish between Figure and Mood of Syllogism.
15. Explain the valid moods of Hypothetical syllogism.
16. Briefly explain the Laws of Thought.
17. Explain the doctrine of plurality of causes.
18. State and explain the problem of Induction.
19. Briefly explain the conditions of a sound Analogy.

20. What are the postulates of Induction ?
21. Explain the common sense notion of causation.
22. What is meant by Implication ? Explain the truth-table for Implication.
23. Distinguish between statement variable and logical constant.
24. What is meant by Material Equivalence ? Give the truth-table for it.
25. Symbolize the following statements :
- (a) It is raining and it is not getting dry.
  - (b) If a man is clever, than he will act wisely.
26. If A and B are true statements and X and Y are false statements, determine the truth-values of the following statements :
- (a)  $\sim(A \vee B) \supset (X.Y)$ .
  - (b)  $(\sim A \vee B). \sim (X \supset Y)$ .

(11 × 5 = 55 marks)