

QP CODE

Enrollment Number:

A3048

Name:

M.A. DEGREE EXAMINATIONS, DECEMBER 2024

Second Semester

M.A. Philosophy

M23PH07DC – Symbolic Logic

(2023 July admissions)

Time: 3 Hours

Max Marks: 70

Section A

Answer any ten of the following questions in a word or sentence each. Each question carries 1 mark.

1. What is the truth value of a contingent?
2. What is an argument form?
3. Define Quantification
4. Name the double negation in the rule of replacement in Logic
5. The symbol used for implication is.....
6. What is the meaning of the symbol '≡'.
7. How do we symbolize, ' No teachers are actors'
8. Write the symbolization for ' If and only if'
9. If A and B are known to be False, and P and Q are known to be True. Find the value of the following
 $\sim P \vee (\sim A \vee P)$
10. 'A is either B or not B.'-is the principle of -----
11. Define variables in symbolic logic?
12. Define Existential Quantifier
13. What do you mean by propositional function?
14. Who is the Father of Symbolic Logic?
15. Write the name of the argument given below:

$p \supset q$

$\sim q$

$\therefore p$

(1X10=10)

Section B

Answer any five of the following questions in two or three sentences each. Each question carries 2 marks.

16. Draw the truth table of conjunction.

17. Explain the law of identity.
18. What is meant by truth-functional connectives?
19. Write a short note on the symbol of Implication
20. What is meant by the specific form of a statement?
21. Why do we need the method of Quantification?
22. What is the difference between propositional logic and predicate logic
23. Explain how symbolic logic differs from traditional logic.
24. Describe the Square of Opposition in predicate logic.
25. Explain the law of excluded middle.

(2X5=10)

Section C

Answer any five of the following questions in a paragraph each. Each question carries 4 marks.

26. Examine the relation between truth and validity.
27. Illustrate the basic techniques of symbolization.
28. Explain the nature of the three laws of thought.
29. Illustrate the truth table method for testing the validity of the argument.
30. Examine the nature of basic symbols in symbolic logic.
31. Differentiate the argument and argument form.
32. Describe the relationship between truth and validity.
33. Explain the rule of inference by providing any two rules

(4X5=20)

Section D

Answer any three of the following questions in two pages each. Each question carries 10 marks.

34. Explain the nature and scope of symbolic logic.
35. What do you know about the method of Quantification? By using the Square of opposition, discuss the relation between universal and existential quantification.
36. Illustrate and compare the conditional proof and indirect proof?
37. Describe simple and compound statements. Discuss different types of compound statements with their truth table
38. Discuss statement forms and explain the different types of statement forms
39. Discuss the importance of the rule of replacement. Provide an example of double negation and De Morgan's theorem.

(10X3=30)