M.A. PHILOSOPHY (MAPY)
Term-End Examination
December, 2016

MPYE-001 : LOGIC

02709

Time : 3 hours   *Maximum Marks : 100*

Note :   *(i)   Answer all the five questions.*

(ii) All the questions carry equal marks.

(iii) Answers to question no. 1 and 2 should be in about 500 words each.

1. Explain Venn Diagram method of testing validity.   **20**
    Test the validity or invalidity of the following
    argument using Venn Diagram.

    "Some reformers are fanatics, so some idealists
    are fanatics, since all reformers are idealists".

OR

Write down the nine rules of inference and ten   **20**
rules of replacement. Construct a formal proof
of validity for the following argument.

   $Jv(\neg KvJ)$

   $Kv(\neg JvK)$

   $\therefore J \equiv K$

2. Give a detailed account of the development of   **20**
    symbolic logic and its utility.

OR

Describe the structure of various syllogisms with   **20**
examples.

3. Answer **any two** questions of the following in about **250** words each :

   (a) What is Dilemma ? What are the methods of avoiding Dilemma ? — 10

   (b) Write a note on fallacies of Presumption. — 10

   (c) Explain square of opposition. — 10

   (d) Write a note on conditional proof and rule of strengthened conditional proof. — 10

4. Answer **any four** questions of the following in about **150** words each :

   (a) Give a description of Connotation and denotation. — 5

   (b) How do you relate major, minor and middle terms in a syllogism ? — 5

   (c) Write a note on traditional and symbolic logic. — 5

   (d) EIO is valid and IEO is invalid in all the figures. Explain. — 5

   (e) Explain contraposition with an example. — 5

   (f) Distinguish between truth and validity. — 5

5. Write short notes on **any five** of the following in about **100** words each :

   (a) Multivalued logic — 4

   (b) Obversion — 4

   (c) Categorical Proposition — 4

   (d) Figure and Mood — 4

   (e) Tautology and Contradictory — 4

   (f) Logic gate — 4

   (g) Free variable — 4

   (h) Multiply General Proposition. — 4