M.A. PHILOSOPHY (MAPY)
Term-End Examination
December, 2014

01410

MPYE-001 : LOGIC

Time : 3 hours   *Maximum Marks : 100*

Note :

(i)   Answer all five questions.

(ii)   All questions carry equal marks.

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

1. (a)   What is Inference ? Explain the various kinds of Immediate Inferences with examples.   *20*

OR

(b)   Describe the rules of Quantification with examples.   *20*

2. (a)   What is Dilemma ? Explain the various kinds of Dilemma. What are the methods of avoiding Dilemma ?   *20*

OR

(b)   Define Argument. Explain its structure and nature.   *20*

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

(a) Explain Formal proof of validity. Give Formal proof for the following argument :

$(H \lor I) \Rightarrow [J \land (K \land L)]$

$I / \therefore J \land K$ *10*

(b) Determine the validity or invalidity of the following argument using truth-table :   *10*

$p \Rightarrow q$

$q \Rightarrow r$

$\therefore p \Rightarrow r$

(c) Explain Distribution of terms.   *10*

(d) Distinguish between Symbolic Logic and Classical Logic. What are the advantages of Symbolic Logic ?   *10*

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

(a) What is meant by figure of a Syllogism ? Explain four figures.   *5*

(b) Distinguish between Connotation and Denotation of terms.   *5*

(c) What is Multi-value Logic ?   *5*

(d) Explain Venn Diagram with an example.   *5*

(e) Describe the Square of Opposition.   *5*

(f) Explain Conjunction, Disjunction and Implication.   *5*

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

    (a) Mood   *4*

    (b) Fuzzy Propositions   *4*

    (c) Digital Logic   *4*

    (d) Enthymeme   *4*

    (e) Double-negation   *4*

    (f) Petitio principii   *4*

    (g) Reductio ad absurdum   *4*

    (h) Sentence forms   *4*

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