K19P 0255

Reg. No. : .....

Name : .....

**II Semester M.A. Degree (Reg./Suppl./Imp.) Examination, April 2019**
**(2014 Admission Onwards)**
**PHILOSOPHY**
**PHI 2C05 : Symbolic Logic**

Time : 3 Hours Max. Marks : 60

PART – A

Answer **any one** question. Answers should **not** exceed **800** words.
**Each** answer carries **15** marks.

1. Demonstrate truth functional compound statements.
2. Construct formal proof of validity of the following argument forms :

a) $C \supset D$
$E \vee \sim D$
$\sim E \cdot A$
$(A \cdot \sim B) \supset C$
$(A \cdot \sim B) \vee B$
Therefore, B.

b) $N \supset M$
$M \supset D$
$M \supset P$
$\sim P$
$N \vee M$
Therefore, D

c) $p \supset q$
$q \supset (s \vee r)$
$r \supset t$
$t \supset u$
$s \supset y$
p
$\sim y$
Therefore, u.

d) $p \supset q$
$q \supset r$
$r \supset s$
$p \vee q$
$\sim s$
Therefore, $q \vee t$

(1×15=15)

P.T.O.

## PART – B

Answer **any three** questions. Answers should **not** exceed **400** words.
**Each** answer carries **10** marks.

3. Explain statement forms.
4. Give an account of Paradoxes of material implication.
5. Briefly explain formal deductive systems.
6. Discuss some attributes of relations with symbolic expressions.
7. Describe shorter truth table technique. **(3×10=30)**

## PART – C

Answer **any three** questions. Answers should **not** exceed **200** words.
**Each** answer carries **5** marks.

8. State the nine rules of inference.
9. Elucidate indirect proof.
10. Distinguish between singular and general propositions.
11. Discuss preliminary quantification rules.
12. Give an account of multiply general propositions. **(3×5=15)**

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