Reg. No. : ....

Name : ....

K18P 0192

Second Semester M.A. Degree (Regular/Supplementary/Improvement) Examination, March 2018
(2014 Admn. 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. Describe rules of inference and rules of replacement.

2. Write an essay on Formal Deductive Systems.

(1×15=15)

PART – B

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

3. Briefly explain attributes of relations.

4. Bring out the advantages of symbolization.

5. Construct truth tables for conjunction and disjunction.

6. Distinguish between simple and compound statements.

7. Give an account of De Morgan's theorems.

(3×10=30)

PART – C

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

8. Explain statement forms.

9. Describe material equivalence and logical equivalence.

P.T.O.

10. Demonstrate the rule of indirect proof.

11. Construct formal proof of validity for the following arguments :

    A ⊃ ~ (B ⊃ C)

    (D·B) ⊃ C

    D

    ∴ ~ A

12. Prove the invalidity of the following arguments :

    All astronauts are brave.

    Jim is brave.

    Therefore, Jim is an astronaut. (3×5=15)