



UNIVERSITY OF NORTH BENGAL
B.A. Honours 1st Semester Examination, 2020

CC2-PHILOSOPHY

LOGIC-I

Full Marks: 60

Assignment

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

Prepare Assignments on any *three* of the following within 800 words 20×3 =60

1. Explain with examples the existential import of A, E, I and O proposition. 20
2. (a) Determine the validity or invalidity of the following arguments with the help of Venn diagram: 5×2 = 10
 - (i) OAO-4th figure
 - (ii) Some reformers are fanatics, so some idealists are fanatics, since all reformers are idealists.
- (b) Explain the fallacy of undistributed middle and fallacy of illicit minor with examples. 10
3. (a) Make a distinction between mediate and immediate inference. 10
- (b) Explain the traditional square of opposition with example. 10
4. Use truth table to determine the following statement forms as tautology, self-contradictory or contingent: 4×5 = 20
 - (i) $(p \cdot q) \cdot (q \vee r)$
 - (ii) $(p \cdot q) \cdot (q \cdot \sim p)$
 - (iii) $p \supset [p \supset (q \cdot \sim q)]$
 - (iv) $A \equiv [A \vee (A \cdot B)]$
 - (v) $(M \supset \sim N) \cdot (\sim M \supset N)$

5. Construct formal proof of validity of the following:

5×4 = 20

(i) $A \supset B$
 $A \vee (C \cdot D)$
 $\sim B / \therefore D$

(ii) $\sim C \supset B$
 $A \supset C$
 $\sim C$
 $\therefore B \cdot \sim A$

(iii) $(N \vee M) \supset (L \cdot K)$
 $\sim L$
 $\therefore \sim N$

(iv) $\sim A$
 $\therefore A \supset B$

6. Explain the different criteria for the appraisal of analogical argument with examples.

20

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