



‘সমানো মন্ত্র: সমিতি: সমানী’

UNIVERSITY OF NORTH BENGAL
B.A. Honours 2nd Semester Examination, 2024

GE1-P2-PHILOSOPHY

LOGIC

Time Allotted: 2 Hours

Full Marks: 60

The figures in the margin indicate full marks.

SECTION-I

1. Answer any **four** questions from the following: 3×4 = 12
- (a) Distinguish between mediate and immediate inference. 3
- (b) What is a class? In what context is the concept of class brought in Logic? 3
- (c) Transform the following sentences into standard form categorical propositions (any **three**): 1×3 = 3
- (i) Snakes are poisonous
- (ii) Only the members are voters
- (iii) All men are not dishonest
- (iv) Eggs are not square.
- (d) What do you mean by analogical argument? Give an example. 3
- (e) Obvert the following: 1½ × 2 = 3
- (i) Only women are kind hearted.
- (ii) Flowers are white.
- (f) What is a syllogism? Give an example. State its figure and mood. 3

SECTION-II

2. Answer any **four** questions from the following: 6×4 = 24
- (a) What do you mean by distribution of terms? Reduce the following into logical form and show which term / terms are distributed: 2+2+2
- (i) Scientists are educated
- (ii) Not all flowers are white.
- (b) Explain ‘Contrary’ and ‘Contradictory’ opposition of propositions with examples. 3+3
- (c) What is conversion? What are the rules of conversion? 2+4

- (d) Test the validity of the following arguments by syllogistic rules: 3+3
- AII - 2nd Figure
 - Some philosophers are mathematician. So all politicians are philosopher, because all politicians are mathematicians.
- (e) Use truth-table to determine the validity or invalidity of the following arguments: 3+3
- $q \supset (p \supset r)$
 $\sim q / \therefore p \supset r$
 - Either Ramesh is a doctor or he is a teacher. He is not a doctor, therefore, he is a teacher.
- (f) Distinguish between good analogy and bad analogy with examples. 3+3

SECTION-III

3. Answer any *two* questions from the following: 12×2 = 24
- Explain the structure and characteristics of categorical syllogism. What are the rules of categorical syllogism? Explain with examples. 2+4+6
 - Use truth table to determine the following statements form as tautologous, self-contradictory or contingent: 4×3 = 12
 - $[(p \supset q) \supset (p \supset r)]$
 - $p \supset [\sim p \supset (q \cdot \sim q)]$
 - $p \equiv [p \cdot (p \vee q)]$
 - Test the validity of the following arguments with the help of Venn-diagram: 4×3 = 12
 - AIO – 3rd Figure
 - EAE – 1st Figure
 - Some scholars are poets, all poets are educated, so some educated men are scholars.
 - What are the criteria for the appraisal of analogical arguments? Discuss. 12

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