



‘সমাজে মন্ত্র: সগিতি: সমানী’

UNIVERSITY OF NORTH BENGAL
B.A. Honours 1st Semester Examination, 2023

CC2-PHILOSOPHY

Time Allotted: 2 Hours

Full Marks: 60

The figures in the margin indicate full marks.

SECTION-I

1. Answer any *four* of the following questions: 3×4 = 12
- (a) Transform the following sentences into proposition. 1+1+1
- (i) He must be hedonist
- (ii) Players are seldom get failed.
- (iii) Only students are happy.
- (b) If I proposition is true then state the truth value of A ____, E ____ and O ____ propositions. 1+1+1
- (c) What is the definition of contraposition? Explain with an example. Contrapose the following proposition — All men are happy. 2+1
- (d) Make a difference between mediate and immediate inference. 3
- (e) Write a short note on inductive-leap. 3
- (f) Explain which terms are distributed in categorical proposition. 3

SECTION-II

2. Answer any *four* of the following questions: 6×4 = 24
- (a) Use truth table to determine the following statement forms as tautologous, self contradictory and contingent. 3+3
- (i) $[p \supset (q \supset r)] \supset [(p \supset q) \supset (p \supset r)]$
- (ii) $p \equiv [p \cdot (q \vee \sim q)]$
- (b) Prove the validity of the following arguments by applying the method of Reductio-ad-Absurdum. 3+3
- (i) $(A \vee B) \supset (A \cdot B)$
 $\sim (A \vee B) / \therefore \sim (A \cdot B)$
- (ii) $A \supset B$
 $A \vee B / \therefore B$

- (c) Determine the validity and invalidity of the following arguments with the help of Venn diagram: 2+2+2
- (i) AAI — 3rd figure
- (ii) EAE — 2nd figure
- (iii) He must be hedonist because he seeks pleasure.
- (d) What do you mean by conversion? What are the rules of conversion? Explain with example. What is meant by the limitation of conversion? 2+2+2
- (e) What is existential import of propositions? Do all standard forms of categorical propositions have existential import? Explain with examples. 2+4
- (f) What is the fallacy of illicit major and illicit minor? Answer with examples. 3+3

SECTION-III

3. Answer any *two* of the following questions: 12×2 = 24
- (a) Construct the formal proof of validity of the following: 4+4+4
- (i) $(E \vee F) \supset (G \cdot H)$
 $(G \vee H) \supset I$
 $E / \therefore I$
- (ii) $T \supset U$
 $T \supset V / \therefore T \supset (U \cdot V)$
- (iii) If the first disjunct of a disjunction is true, the disjunction as a whole is true. Therefore, if both the first and second disjuncts of the disjunction are true, then the disjunction as a whole is true. (F, W, S)
- (b) Use truth table to determine the validity or invalidity of the following argument forms: 4+4+4
- (i) $(p \supset q) \supset (p \cdot q)$
 $\sim(p \cdot q) / \therefore (p \vee q)$
- (ii) $\sim(p \vee q) \supset (p \equiv \sim q)$
 $\sim(p \equiv \sim q) / \therefore (p \vee q)$
- (iii) $(p \supset q) \cdot (r \supset s)$
 $p \vee r / \therefore q \vee s$
- (c) Determine the validity or invalidity of the following syllogistic arguments or argument forms with the help of syllogistic rules: 4+4+4
- (i) EIO — 4th figure
- (ii) No musicians are astronauts, all musicians are baseball fans; So no astronauts are baseball fans.
- (iii) Some soldiers serve their own country. Soldiers are hard workers. So hard workers serve their own country.
- (d) What is induction? Explain induction by simple enumeration. 6+6