III / PHIL (iii)

2 0 1 4

(3rd Semester)

PHILOSOPHY

THIRD PAPER

(Logic)

Full Marks : 75

Time : 3 hours

(PART : B—DESCRIPTIVE)

(*Marks* : 50)

*The figures in the margin indicate full marks
for the questions*

Answer *any* **five** questions

1. What is logic? Discuss.   10

2. Explain the structure of argument.
   Distinguish between valid arguments from
   invalid ones giving examples.   5+5=10

3. Discuss the different functions of language.   10

4. What is fallacy? Explain the difference between formal and informal fallacies with examples. 2+8=10

5. Distinguish between extension (denotation) and intension (connotation) definitions. 10

6. Define fallacies of presumption with examples. 10

7. Explain the traditional understanding of the square of opposition with complete diagram. 10

8. Discuss in detail the different classification of categorical propositions with diagrams. 10

9. Symbolize any *two* of the following : 5×2=10

   (a) If John plays football, then Paul does not play football, but if Paul does not play football, then Harry will play football.

   (b) Either Railways will win the Football Cup and Navy will not win the Football Cup or both Mohun Bagan and East Bengal will win their football championship.

   (c) If Tata does not win its first game, then it is not the case that either Birla or Reliance win its first game.

   (d) If Tata wins its first game, then not both Birla and Reliance will win their first game.

10. Construct the truth table for the following statement forms and find out whether they are tautologous, contradictory or contingent (any *two*) : 5×2=10

(a) $[(\sim p \cdot q) \cdot r] \supset \sim r$

(b) $(\sim p \vee q) \equiv \sim (p \cdot \sim q)$

(c) $p \vee q$
p
$\therefore q$

(d) $p \supset q$
$\sim q$
$\therefore \sim p$

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(3rd Semester)

PHILOSOPHY

THIRD PAPER

(Logic)

(PART : A—OBJECTIVE)

(*Marks* : 25)

The figures in the margin indicate full marks for the questions

SECTION—A

(*Marks* : 10)

A. Fill in the blanks by choosing the correct answer given in the brackets : 1×4=4

1. Truth and falsity is the property of

....

(sentence, judgement, proposition)

2. When an argument is valid, and all of its premises are true, we call it ....

(sound, valid, deductive)

3. Language is considered the best .... of human minds.

(example, mirror, expression)

4. The definiendum is the .... being defined.

(term, symbol, object)

B. Tick (✓) whether the following statements are True (T) or False (F) : 1×4=4

1. Validity and invalidity is the property of inductive argument.

(T / F)

2. Good definitions are plainly helpful in eliminating verbal disputes.

(T / F)

3. A definition must be circular.

(T / F)

4. Tu quoque means 'look who's talking'.

(T / F)

C. Tick (✓) the correct reason for the given assertion : 1

Assertion : A syllogism is a mediate deductive inference.

Reasons : (a) The conclusion of a syllogism is drawn from two premises taken jointly. ( )

(b) We passes from general to particular. ( )

(c) Syllogism is an inference. ( )

D. Match *List—I* with *List—II* and Tick (✓) the correct answer from the codes given below :   1

	List—I		List—II
A.	Major term	1.	The term which does not occur in the conclusion, appearing instead in both premises
B.	Middle term	2.	The predicate of the conclusion
C.	Minor term	3.	The premise which is stated first
D.	Major premise	4.	The subject of the conclusion

Codes :

	A	B	C	D	
(a)	1	2	3	4	( )
(b)	2	1	4	3	( )
(c)	3	2	1	4	( )
(d)	4	2	1	3	( )

(5)

(*Marks* : 15)

E. Give short answers to the following questions :

   1. Symbolize the following (any *two*) :   3×2=6

      (a) Ram will go to college if and only if Sita is going to college.

(b) Alice and Betty will both not be elected.

(c) If I study hard, then I will get first class or distinction.

2. Give mood and figure of the following categorical syllogism (any *two*) :   3×2=6

    (a) Some students are voters.
        All voters are citizens.
        Therefore, some citizens are students.

(b) No bats are feathered.

   All bats can fly.

   Therefore, some animals which can fly are not feathered.

(c) Some herbs are not useful.
All herbs are medicinal.
Therefore, some medicinal things are not useful.

3. What is quality in categorical propositions? 1

4. Write the names of the three laws of thought.   1

5. What is logical variable symbol?   1

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