2025/FYUG/ODD/SEM/
PHIDSC-201T/210

FYUG Odd Semester Exam., 2025

PHILOSOPHY

(3rd Semester)

Course No. : PHIDSC-201T

(Logic—I)

Full Marks : 70
Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

UNIT—I

1. Answer any *two* of the following questions : 2×2=4

(a) What is an argument form?

(b) State two differences between deductive and inductive reasoning.

(c) Give an example of deductive reasoning.

2. Answer any *one* of the following questions : 10

(a) Define argument. Explain the structure of argument with example. Distinguish between argument and argument form. 2+4+4=10

(b) Briefly explain the laws of thought.

UNIT—II

3. Answer any *two* of the following questions : 2×2=4

(a) How many forms of opposition of proposition are there according to Boole? Name them.

(b) What type of opposition exists between 'A' and 'I', and 'E' and 'O' propostions?

(c) If 'No man is perfect' is false, what will be the truth value of 'Some men are not perfect'? What kind of opposition exists between these two propositions?

4. Answer any *one* of the following questions : 10

(a) What is existential import? Explain in this connection the Boolean square of opposition. 2+8=10

(b) *(i)* Write a note on traditional square of opposition. 6

(ii) What can be inferred about the truth or falsehood of the remaining propositions in each of the following sets : (1) if we assume the first to be true and (2) if we assume it to be false? 4

(1) All successful executives are intelligent people.

(2) No successful executives are intelligent people.

(3) Some successful executives are intelligent people.

(4) Some successful executives are not intelligent people.

UNIT—III

5. Answer any *two* of the following questions : 2×2=4

(a) What is fallacy?

(b) Give an example of fallacy of division.

(c) What do you mean by fallacy of equivocation?

6. Answer any *one* of the following questions : 10

(a) What do you mean by analytical reasoning? Give an example of analytical reasoning. State the characteristics of analytical reasoning. 2+2+6=10

(b) What is fallacy of ambiguity? How can the fallacies of ambiguity be avoided? 2+8=10

UNIT—IV

7. Answer any *two* of the following questions : 2×2=4

(a) What is syllogism? What are its different kinds?

(b) Give an example of hypothetical syllogism.

(c) What is constructive dilemma? Give example.

8. Answer any *one* of the following questions : 10

(a) What is disjunctive syllogism? Give an example of disjunctive syllogism. Distinguish between hypothetical syllogism and disjunctive syllogism. 2+2+6=10

(b) What do you mean by dilemma? What are its different forms? Explain each of them with example. 2+4+4=10

UNIT—V

9. Answer any *two* of the following questions : 2×2=4

(a) What do you mean by intersection of two sets?

(b) Define a set. Give example.

(c) What is a null set? Give example.

10. Answer any *one* of the following questions : 10

(a) *(i)* What do you mean by domain of individuals? 2

(ii) If

$A = \{1, 2\}$
$B = \{1, 3, 5\}$
$C = \{2, 3, 5, 7\}$
$D = \{4, 5, 6, 7\}$,

then find—

(1) $A \cup C$;

(2) $B \cap D$;

(3) $A \cap C$;

(4) $C \cup D$. 8

(b) Explain with examples the different types of set.

★★★