FYUG Odd Semester Exam., 2023
(Held in 2024)

PHILOSOPHY

(1st Semester)

Course No. : PHISEC-101T

(Logic—I)

Full Marks : 50
Pass Marks : 20

Time : 2 hours

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

SECTION—A

Answer *fifteen* questions, selecting any *three* from each Unit :   1×15=15

UNIT—I

1. Is logic a science or an art or both?

2. "Logic is the study of the methods and principles used to distinguish correct (good) from incorrect (bad) reasoning." Who says this?

(Turn Over)

3. What kind of science logic is?

4. "An argument is either true or false." Is the statement true?

UNIT—II

5. What kind of opposition that exists between A and O proposition?

6. What is proposition?

7. "Universal propositions have existential import." Is it true?

8. Give an example of a general proposition.

UNIT—III

9. How many propositions are there in an immediate inference?

10. Is contraposition a deductive inference?

11. Can O proposition be converted?

12. "Quality is changed in conversion." Is it true?

UNIT—IV

13. Name one valid mood of second figure.

14. What is the position of middle term in the 1st figure?

15. State any one rule of syllogism.

16. State the number of rules of syllogism as advocated by I. M. Copi.

UNIT—V

17. Give an example of a set.

18. Give symbolic representation of the following statement :

"*A* is the subset of *B*."

19. What is the name of the symbol '∈'?

20. If the set *A* = human beings, set *B* = rational animals, is *A* equal to *B*?

(4)

SECTION—B

Answer *five* questions, selecting *one* from each Unit :

$$2 \times 5 = 10$$

UNIT—I

21. What is the law of contradiction?

22. What is argument form?

UNIT—II

23. What is existential import?

24. State any two points of difference between traditional square of opposition and Boolean square of opposition.

UNIT—III

25. Mention any two points of difference between Conversion and Obversion.

26. What is simple conversion and conversion by limitation?

UNIT—IV

27. What is figure of syllogism?

28. What is existential fallacy?

UNIT—V

29. What is null set (empty set)?

30. What is set?

SECTION—C

Answer *five* questions, selecting *one* from each Unit :

5×5=25

UNIT—I

31. Explain briefly the nature of logic.

32. Write a short note on 'truth and validity'.

UNIT—II

33. Define with examples different kinds of simple propositions.

34. Explain briefly traditional square of opposition.

UNIT—III

35. What is obversion? Mention any three rules of obversion.   2+3=5

36. Reduce the following sentence into logical form and then convert, obvert and contrapose :

1+1+1+2=5

"Mothers are always kindhearted."

UNIT—IV

37. What is categorical syllogism? State any three characteristics of categorical syllogism.   2+3=5

38. Use Venn diagram technique to test the validity or invalidity of the following argument :

Some reformers are fanatics.
All reformers are idealists.
∴ Some idealists are fanatics.

UNIT—V

39. Explain with example :

    "Set membership"

40. Explain with examples union of sets and intersection of set.

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