

2018

(April)

PHILOSOPHY
(Elective/Honours)

(Logic)

(PHIL : 11)

Marks : 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer any five questions

1. Define Logic. Discuss that logic is a formal and normative science. 5+10=15
2. What is proposition? Distinguish it from sentence and judgement. 5+10=15
3. Discuss the relation between truth and validity. Can there be valid argument with false premise? 10+5=15

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(Turn Over)

(2)

4. What do you mean by fallacies? Discuss different types of informal fallacies. 3+12=15
5. What is a standard form of categorical syllogism? State and explain its rules. 5+10=15
6. Explain the denotative, connotative and ostensive definitions. 15
7. Briefly examine the concept of square of opposition with reference to the relations that exist between the standard form of categorical proposition. 15
8. Write short notes on any two of the following : 7½×2=15
 - (a) Laws of thought
 - (b) Logical connectives
 - (c) Constants and variables

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(Continued)

(3)

9. Symbolize any five of the following : 3×5=15
 - (a) Alan will not play, unless John plays the game.
 - (b) It is not the case that there is P and there is no Q.
 - (c) I will study hard and pass the examination or I will fail the examination.
 - (d) Either Sheila or Leela will participate in the Quiz but they will not both win the Quiz.
 - (e) If government is re-elected, then it is false that public confidence will be restored and trade will improve. It is false that either public confidence won't be restored or trade won't improve. Therefore, government will be re-elected.
 - (f) Tom and Sam both work late only if it is not a holiday.
 - (g) It is not the case that neither Mira nor Sita will win the election.

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(Turn Over)

(4)

10. Test the validity of the following arguments with truth tables (any three) : 5×3=15

(a) $(p \supset q) \cdot r$

$p \vee r$

$\therefore q \vee r$

(b) $p \supset q$

$\sim q$

$\therefore \sim p$

(c) $p \supset q$

$\sim p$

$\therefore \sim q$

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

$\sim q$

$\therefore p$

(e) $p \vee q$

p

$\therefore \sim q$
