**2019/TDC/ODD/SEM/
PHPSEC–301T/159**

## TDC (CBCS) Odd Semester Exam., 2019

## PHILOSOPHY

### ( 3rd Semester )

Course No. : PHPSEC–301T

Full Marks : 50

Pass Marks : 20

Time : 3 hours

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

Option—A for Honours Students and Option—B for
Pass Students

## OPTION—A

### ( For Honours Students )

Course No. : PHPSEC–301T

### ( LOGICAL REASONING )

#### UNIT—I

1. Answer any *three* of the following questions : 1×3=3

   (a) Who said, an argument as "any group of propositions of which one is claimed to follow from the others, which are regarded as providing support for the truth of that one"?

( *Turn Over* )

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(b) What is meant by analytical reasoning?

(c) An inductive argument is concerned with both formal and material truth. Is it true?

(d) What is deductive reasoning?

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

(a) Analyse the structure of argument.

(b) Define inductive reasoning.

3. (a) Test the validity or invalidity of the following arguments by means of Venn diagram and name the figure and mood if any : 2½×2=5

(i) Some neurotics are not parasites, but all criminals are parasites; it follows that some neurotics are not criminals.

(ii) No criminals are pioneers, for all criminals are unsavory persons and no pioneers are unsavory persons.

*Or*

(b) Explain briefly the Venn diagram technique for testing syllogistic argument. 5

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UNIT—II

4. Answer any *three* of the following questions : 1×3=3

(a) What is syllogism?

(b) How many terms are there in a syllogism?

(c) Give an example of fallacy of four terms.

(d) How many valid moods are there in syllogism according to modern logic?

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

(a) Write the importance of middle term.

(b) Name the valid moods of the second figure.

6. (a) Test the following syllogistic arguments : 2½×2=5

(i) John can pass the examination, for, he is an intelligent boy and intelligent boys alone can pass the examination.

(ii) He is not superstitious, since all ignorant men are superstitious and he is not ignorant.

*Or*

(b) State the fallacies associated with the rules of syllogism. 5

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## UNIT—III

7. Answer any *three* of the following questions : 1×3=3

   (a) What is Anumāna?

   (b) What is Pakṣatā?

   (c) Name the steps of five-membered syllogism of Indian logic.

   (d) What is Pūrvavat Anumāna?

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

   (a) Distinguish between Svārthānumāna and Parārthānumāna.

   (b) Define Parāmarśa.

9. (a) What is Vyāpti? State briefly the role of Vyāpti in Anumiti. 5

   *Or*

   (b) What do you mean by Hetvābhāsa? Name the different kinds of Hetvābhāsa. 5

## UNIT—IV

10. Answer any *three* of the following questions : 1×3=3

    (a) What are the basic truth-functional connectives or logical constants?

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   (b) Can the tidle (~) be used to connect two propositions?

   (c) What is a variable?

   (d) What are the two senses of the word 'or' (∨) in English language?

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

    (a) What is truth-function?

    (b) What is truth-table?

12. (a) Explain in brief the basic truth-function. 5

    *Or*

    (b) Draw the truth table to determine the validity or invalidity of the following : 2½+2½=5

    (i) $[(P \supset q) \cdot P] \supset q$

    (ii) $[P \supset (q \vee \gamma)] \supset \sim q$

## UNIT—V

13. Answer any *three* of the following questions : 1×3=3

    (a) What is a symbol?

    (b) State the rule of absorption.

    (c) What is ideogram?

    (d) State the rule of transposition.

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14. Symbolise the following (any *one*) :     2

   *(a)* I shall not attend the meeting unless I am invited.

   *(b)* It is not true that the cow is not a quadruped animal.

15. Construct formal proof of validity for the following arguments :     $2\frac{1}{2} \times 2 = 5$

   *(a)*   *(i)*     1. $(A \cup B) \supset C$

                  2. $(C \cup B) \supset [A \supset (D \equiv E)]$

                  3. $A \cdot D / \therefore D \equiv E$

      *(ii)*    1. $(H \vee I) \supset [J \cdot (K \cdot L)]$

                  2. $I / \therefore J \cdot K$

*Or*

   *(b)*   *(i)* Use conditional proof to prove the validity :     $2\frac{1}{2}$

                  1. $A \supset (B \cdot C)$

                  2. $(B \vee C) \supset I / \therefore A \supset I$

      *(ii)* Construct an indirect proof of the following :     $2\frac{1}{2}$

                  1. $(A \vee B) \supset (C \cdot D)$

                  2. $C \supset \sim D / \therefore \sim A$

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OPTION—B

**( For Pass Course Students )**

Course No. : PHPSEC–301T

**( LOGICAL REASONING—I )**

UNIT—I

1. Answer any *three* of the following questions :    1×3=3

   *(a)* Define argument.

   *(b)* What are the different kinds of arguments?

   *(c)* State one difference between deductive and inductive inference.

   *(d)* If an A proposition is true, what will be truth value of corresponding O proposition?

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

   *(a)* What is inductive inference? State its characteristics.

   *(b)* What are the constituent parts of an argument? Explain.

3. Having the same subject and predicate terms explain the opposition amongst traditional four-fold proposition. Name the oppositions and represent them through diagram.     5

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## OR

4. *(a)* What will be the truth value of *(ii)*, *(iii)* and *(iv)* if *(i)* is stated to be false? 2½

    *(i)* All successful executives are intelligent people.

    *(ii)* No successful executives are intelligent people.

    *(iii)* Some successful executives are intelligent people.

    *(iv)* Some successful executives are not intelligent people.

  *(b)* What will be the truth value of *(ii)*, *(iii)* and *(iv)* if *(i)* is stated to the true? 2½

    *(i)* No animals with horns are carnivores.

    *(ii)* Some animals with horns are carnivores.

    *(iii)* Some animals with horns are not carnivores.

    *(iv)* All animals with horns are carnivores.

### UNIT—II

5. Answer any *three* of the following questions : 1×3=3

  *(a)* Define fallacy.

  *(b)* What is a fallacy of relevance?

*( Continued )*

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  *(c)* What is the fallacy of equivocation?

  *(d)* Can accent in some words to lead to fallacy?

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

  *(a)* What is Amphiboly?

  *(b)* What is the fallacy of division?

7. Identify the fallacies of ambiguity in the following passages : 2½×2=5

  *(a)* If the parts of the universe are not accidental, how can the whole universe be considered as the result of chance? Therefore, the existence of the universe is not due to chance.

  *(b)* American Indians are disappearing. That man is an American India. Therefore, that man is disappearing.

### OR

8. Mention and explain briefly the different kinds of fallacies of ambiguity. 5

### UNIT—III

9. Answer any *three* of the following questions : 1×3=3

  *(a)* Define syllogism.

  *(b)* What is the figure of syllogism?

*( Turn Over )*

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(c) How many terms are there in a syllogism?

(d) In a syllogism, is the middle term required to be distributed in both the premises?

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

(a) What is the fallacy of illicit major?

(b) Define existential fallacy.

11. Test the validity of the following argument forms by applying I. M. Copi's rules of syllogism : 5

(a) AAA—3

(b) IEO—1

**OR**

12. Mention I. M. Copi's rules for standard form categorical syllogism. State the respective fallacies committed when these are violated. 5

UNIT—IV

13. Answer any *three* of the following questions : 1×3=3

(a) What is a Venn diagram?

(b) Draw a Venn diagram for the proposition :
All men are rationel.

(c) Draw a Venn diagram for the proposition :
Some books are useful.

(d) What does a cross mark (×) indicate in a Venn diagram?

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

(a) How many intersecting circles are required in a Venn diagram of syllogism? What are the methods to indicate a class is empty?

(b) What is the validity characteristic of an argument if the diagram of the conclusion does not come up after drawing the premises?

15. Put any of the following syllogisms into standard form, name its mood and figure and test its validity by Venn diagram : 5

(a) Some philosophers are mathematicians; hence some scientists are philosophers, since all scientists are mathematicians.

(b) All underwater craft are submarines; therefore no submarines are pleasure vessels, since no pleasure vessels are underwater craft.

**OR**

16. Draw Venn diagram for the following forms of syllogism to test their validity : 2½×2=5

(a) OAO—3

(b) |A|—1

UNIT—V

17. Answer any *three* of the following questions : 1×3=3

   *(a)* What is a disjunctive syllogism?

   *(b)* What type of propositions constitute a hypothetical syllogism?

   *(c)* What is dilemma?

   *(d)* Is dilemma a mixed syllogism?

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

   *(a)* What is a constructive dilemma?

   *(b)* What is a destructive dilemma?

19. Identify the form and discuss the validity or invalidity of any of the following arguments : 5

   *(a)* If each man had a definite set of rules of conduct by which he regulated his life he would be no better than a machine. But there are no such rules, so man cannot be machines.

*Or*

   *(b)* Smith is the fireman or Smith is the engineer. Smith is not the fireman. Therefore Smith is the engineer. 5

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