2025/FYUG/ODD/SEM/
PHIDSC–202T/211

FYUG Odd Semester Exam., 2025

PHILOSOPHY

(3rd Semester)

Course No. : PHIDSC–202T

(Logic—II)

Full Marks : 70
Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

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UNIT—I

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

(a) Name three terms that we find in Nyāya Anumāna.

(b) What is Lingaparāmarśa?

(c) State any two points of difference between Nyāya syllogism and Aristotelian syllogism.

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

(a) Explain the different kinds of classification of Anumāna as found Nyāya philosophy.

(b) What is Vyāpti? Discuss the role of Vyāpti in Anumāna. What are the different kinds of Vyāpti? 2+4+4=10

UNIT—II

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

(a) On what ground are the fallacies of inference based? Are the fallacies of inference material fallacies?

(b) Name the five kinds of fallacies or Hetvābhāsas.

(c) Give an example of Savyābhicāra or fallacy of irregular middle.

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

(a) Explain with examples the following fallacies :

(i) Asiddha

(ii) Bādhita

(b) Explain with examples the fallacies :

(i) Satpratipakṣa

(ii) Viruddha

UNIT—III

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

(a) What is conditional proof construction?

(b) What is indirect proof construction?

(c) State the rules of De Morgan's Law and Double Negation.

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

(a) Construct formal proof of validity : 5+5=10

(i) $(Q \vee P) \supset \sim O$
$O \;/\; \therefore \sim Q$

(ii) $G \supset F$
$G \supset E \;/\; \therefore G \supset (F \cdot E)$

(b) For each of the following arguments construct an indirect proof : 5+5=10

(i) $(A \vee B) \supset (C \cdot D)$
$C \supset \sim D \;/\; \therefore \sim A$

(ii) $(R \vee S) \supset T$
$(P \vee Q) \supset T$
$R \vee P \;/\; \therefore T$

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UNIT—IV

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

   (a) What is universal quantifier?

   (b) What is Universal Instantiation?

   (c) What is Existential quantifier?

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

   (a) Translate each of the following into the logical notation of propositional functions and quantifiers, using the abbreviations suggested : 2×5=10

   (i) Few politicians are honest (*Px*, *Hx*).

   (ii) Children are always lovable (*Cx*, *Lx*).

   (iii) Dolphins are not fish (*Dx*, *Fx*).

   (iv) Philosophers are not always scientist (*Ps*, *Sx*).

   (v) Each human is mortal (*Hx*, *Mx*).

   (b) Construct formal proof of validity : 5+5=10

   (i) $(x)(Ux \supset Tx)$
   $(x)(Tx \supset Sx) \; / \therefore (x)(Ux \supset Sx)$

   (ii) $(x)(Nx \supset Kx)$
   $(\exists x)(Nx \cdot Hx) \; / \therefore (\exists x)(Hx \cdot Kx)$

UNIT—V

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

   (a) Name Mill's five experimental methods.

   (b) State any two canons of elimination.

   (c) Three coins are tossed together. What is the probability of getting at least one head?

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

   (a) Explain with examples Mill's method of difference. Is it a method of proof?

   (b) Explain with examples the method of concomitant variation.

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