

Four Year Undergraduate Programme - 2024

Philosophy (Major)

Semester – III

Paper- MJPL06

Western Logic

Time: 3 hours

Full Marks: 80

Questions are of value as indicated in the margin.

Answer **any four** questions from the following

1. Define propositions and arguments. Explain the relation between truth and validity with the help of examples. 4+16=20
2. a. State the form of Categorical Proposition, express as equalities or inequalities and symbolize by means of a Venn Diagram. 4+4=8
 - i. No birds with keel bones are flightless.
 - ii. Some patients with dementia also have bipolar disorder.
- b. If the above statements are true, the truth value of which other statements can be immediately inferred and how? Explain with the help of the traditional square of opposition. 8
- c. State the main point of difference between Aristotle's and Boole's interpretation of Categorical Propositions. 4
3. a. Symbolize (if needed) and find the truth value of the following statements 5+3=8
 - i. If either Stockholm is the capital of Norway or Paris is not the capital of France, then it is not the case that Stockholm is not the capital of Norway and London is not the capital of England.
 - ii. $[(A \supset Y) \cdot B] \equiv Z$ (A and B are True; Y and Z are False)
- b. Construct the truth table of material implication. Show the connection between conditional and biconditional with the help of truth table. 3+5=8
- c. Use truth-table to show whether the following statement form is tautologous/ contradictory/ contingent: 4
 - i. $p \equiv [p \supset (p \cdot q)]$

4. a. Symbolize and construct a formal proof of validity: 6+6=12

- i. If Japan continues to increase the export of automobiles, then either Korea or Laos will suffer economic decline. Korea will not suffer economic decline. Therefore, if Japan continues to increase the export of automobiles, then Laos will suffer economic decline. (J, K, L)
- ii. If either Ravi or Asha wins, then both Jini and Nisha lose. Ravi wins. Therefore, if Nisha loses then Jini loses.

b. Construct a formal proof of validity: 4+4=8

- i. $J \vee (\sim J \cdot K)$
 $J \supset L$
 $\therefore (L \cdot J) \equiv J$
- ii. $(R \vee S) \supset (T \cdot U)$
 $\sim R \supset (V \supset \sim V)$
 $\sim T$
 $\therefore \sim V$

5. a. Show the validity or invalidity through complete truth-table method: 8+8=16

- i. $P \supset (Q \cdot R)$
 $(Q \vee R) \supset \sim P$
 $\therefore \sim P$
- ii. $P \supset Q$
 $Q \supset R$
 $\sim R$
 $\therefore P \cdot \sim Q$

b. Derive the Rule of Material Implication with the help of a truth table. 4

6. a. Show the validity or invalidity through shorter truth-table method: 8

- $$(O \cdot P) \supset (Q \supset R)$$
- $$\sim (P \supset \sim S)$$
- $$\sim (O \supset Q)$$
- $$\therefore Q \supset R$$

b. Distinguish between 6+6=12

- i. Argument and Argument form.
- ii. Rules of inference and Rules of replacement

Four Year Undergraduate Examination 2024
Programme – Philosophy (Major)
Semester - III
Paper –MJPL05
Indian Metaphysics

Time: 3 Hours

Full Marks: 80

Questions are of value as indicated in the margin.
Answer **any four** questions from the following.

1. Why do the Sāṃkhya philosophers accept the *satkāryavāda* as a theory of causality? Examine the arguments given by Sāṃkhya in favour of *satkāryavāda*? 5+15=20
2. Explain in detail the Buddhist theory of non-self (*anātmavāda*). 20
3. Why is *prakṛti* considered as the material cause of the world according to Sāṃkhya philosophy? In this connection, explain in detail the evolution of the world after Sāṃkhya philosophy. 5+15=20
4. Give an account of the vedāntic theory of causality. How does vedāntic theory of causality differ from that of Sāṃkhya? Explain. 15+5=20
5. Explain in detail the concept of self after Nyāya philosophy. 20
6. Give a detailed account of the *paramāṇuvāda* after Vaiśeṣika philosophy. 20

Four Year Undergraduate Examination - 2024

Programme – Philosophy (Major) Semester – III

Paper: SECPL 03 (Induction: A Method of Acquiring Knowledge)

Time: 3 Hours

Full Marks: 60

Questions are of equal value or as indicated in the margin

Marks

Answer any 4 questions

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| 1. What is an ampliative induction? Explain its importance for natural science with examples. | 15 |
| 2. Illustrate the difference between summative and intuitive induction. | 15 |
| 3. Explain why Hume argued that it is impossible to justify any inferences concerning causal connections. | 15 |
| 4. Discuss the basic ideas of analytic justification and inductive justification of induction. | 15 |
| 5. Give an account of Mill's method of concomitant variation. How does it differ mainly from the other experimental methods of Mill? | 12+3 |
| 6. Discuss Mill's method of agreement and its limitations. | 12+3 |