

2022

PHILOSOPHY

(Honours)

Paper Code : IV - A & B

(New Syllabus)

Full Marks : 100

Time : Four Hours

Paper Code : IV - A

(Marks : 20)

Choose the correct answer.

Each question carries 1 Mark.

1. According to Aristotle the opposition of A proposition and E proposition is called —
 - (A) Contrary opposition
 - (B) Sub-contrary opposition
 - (C) Sub-altern opposition
 - (D) Contradictory opposition
2. Which term is not distributed in A proposition ?
 - (A) only subject term
 - (B) only predicate term
 - (C) both the subject and predicate term
 - (D) none of the above
3. On the Boolean interpretation which of the following propositions have existential import ?
 - (A) A and E proposition
 - (B) I and O proposition
 - (C) Both (A) and (B)
 - (D) None

4. $\sim(p \cdot \sim q)$ is logically equivalent to —
- (A) $p \supset q$
 - (B) $p \vee q$
 - (C) $\sim p \vee \sim q$
 - (D) $\sim p \cdot \sim q$
5. If a statement is false, then it implies —
- (A) only true statement
 - (B) only false statement
 - (C) any statement whatsoever
 - (D) none of the above
6. A categorical syllogism of a deductive argument consists of —
- (A) Two categorical proposition
 - (B) Three categorical proposition
 - (C) Four categorical proposition
 - (D) None of the above
7. How many rules of replacement introduced by Copi —
- (A) 10
 - (B) 9
 - (C) 19
 - (D) None
8. How many valid moods are there in second figure ?
- (A) 4
 - (B) 5
 - (C) 6
 - (D) None
9. How many rows are needed for the statement $p \supset q$ in truth-table ?
- (A) 2
 - (B) 4
 - (C) 6
 - (D) 8

10. A disjunctive syllogism will be valid when —
- (A) deny any one disjunct of the disjunctive statement
 - (B) deny both the disjuncts of the disjunctive statement
 - (C) Both (A) and (B)
 - (D) None
11. When a syllogism contains its minor term undistributed in its minor premise, but distributed in conclusion, the argument commits the fallacy of —
- (A) Illicit major
 - (B) Illicit minor
 - (C) Undistributed Middle
 - (D) None of the above
12. An argument will be invalid when its —
- (A) antecedent is true and consequent is true
 - (B) antecedent is true and consequent is false
 - (C) antecedent is false and consequent is true
 - (D) antecedent is false and consequent is false
13. Not both p and q — symbolise as
- (A) $\sim(p \vee q)$
 - (B) $\sim(p \cdot q)$
 - (C) $(p \cdot q)$
 - (D) $(p \vee q)$
14. Rules of absorption is —
- (A) $(p \vee q) \equiv (q \vee p)$
 - (B) $\sim(p \cdot q) \equiv (\sim p \vee \sim q)$
 - (C) Both (A) and (B)
 - (D) None

15. Truth tree method is invented by —
- (A) Aristotle
 - (B) Copi
 - (C) Richard C. Jeffrey
 - (D) Both (A) and (B)
16. 'Nothing is non-nameable'— which symbol of the following is correct for the above statement ?
- (A) $N = O$
 - (B) $\bar{N} = O$
 - (C) $N \neq O$
 - (D) $\bar{N} \neq O$
17. 'All non-poets are not atheists'— symbolisation of the proposition by Venn diagram is —
- (A) $\bar{P}\bar{A} \neq O$
 - (B) $\bar{P}A \neq O$
 - (C) $\bar{P}A=O$
 - (D) None of the above
18. Which one of the following is incorrect ?
- (A) $(x) \equiv \sim(\exists x) \sim$
 - (B) $\sim(\exists x) \equiv \sim(x)$
 - (C) $(\exists x) \equiv \sim(x) \sim$
 - (D) $\sim(x) \equiv (\exists x) \sim$
19. Two statements are logically equivalent when the statement of their material equivalence is —
- (A) tautology
 - (B) contingent
 - (C) contradictory
 - (D) Both (B) and (C)

20. If a statement form that has only true substitution instances is called —

- (A) contradictory
 - (B) self-contradictory
 - (C) tautology
 - (D) contingent
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Paper Code : IV - B

(Marks : 80)

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Section - IAnswer any *four* questions of the following.

15×4=60

1. What is categorical proposition ? Explain the four fold classification of categorical proposition. Do you think every categorical proposition has existential import ? Discuss briefly. 2+8+5
2. Explain why FELAPTON, FESAPO and BRAMANTIP are said to be invalid in modern interpretation. Justify your answer with the help of Venn diagram. 5+5+5
3. What is analogical argument ? Explain the different criteria for the appraisal of analogical argument. 5+10
4. (a) Distinguish between proof procedure and decision procedure.
(b) Determine the validity of the following by means of truth table :

(i) $A \supset (B \vee C)$

(ii) $(P \cdot Q) \supset (R \cdot S)$

$D \supset A$

$P \vee R$

$\therefore B \vee C$

$\therefore Q \vee S$

5+5+5

5. Construct a formal proof of validity of the following :

(a) $A \supset (B \cdot C)$

$(B \vee C) \supset D$

$\therefore A \supset D$

- (b) Only Pacifists are Quakers. Religious Quakers. Therefore pacifists are sometimes religious. (Px, Qx, Rx)

- (c) If the first disjunct of a disjunction is true, the disjunction as a whole is true. Therefore if both the first and second disjunct of the disjunction are true, then the disjunction as a whole is true. (F.W.S.) 5+5+5

6. (a) Test the validity or invalidity of the following argument by truth tree method.

(i) $R \vee (S \& \neg T)$

(ii) $I \rightarrow (J \vee K)$

$(R \vee S) \rightarrow (U \vee \neg T)$

$(J \& K) \rightarrow L$

$\therefore T \rightarrow U$

$\therefore I \rightarrow L$

P.T.O.

(b) Prove the invalidity by assignment of truth values :

$$M \supset (N \vee O)$$

$$N \supset (P \vee Q)$$

$$Q \supset R$$

$$\sim (R \vee P)$$

$$\therefore \sim M$$

5+5+5

7. Test the validity of the following arguments by means of Venn diagram :

(a) All Indians are brain workers, since some software engineers are non-Indian and no non-software engineers are brain workers.

(b) Some politicians are predictable persons, as some non-politicians are diplomats and no unpredictable persons are diplomats.

(c) AAA-4

5+5+5

8. State and explain Mill's method of difference. Discuss in this context, the merits and demerits of it.

5+10

Section - II

9. Answer any *four* questions of the following :

5×4=20

(a) Make a distinction between propositional function and proposition.

5

(b) What is argument ? Write the characteristic features of deductive argument.

5

(c) What is obversion ? Write the rules of obversion with example.

5

(d) Distinguish between Aristotle's square of opposition and traditional square of opposition.

5

(e) Write a short note on crucial experiment.

5

(f) What is existential fallacy ? Give example.

5

(g) Distinguish between Rule of Inference and Rule of Replacement.

5

(h) What is hypothesis ? Define ad hoc hypothesis with example.

2+3
