## COOCH BEHAR PANCHANAN BARMA UNIVERSITY

B.A. Honours 4th Semester Examination, 2021

### PHILOSOPHY

### WESTERN LOGIC-I

### CORE-8

Time Allotted: 2 Hours

Full Marks: 40

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

**Answer any *two* questions from the following**     20×2 = 40

1. (a) State the general rules of syllogism to test the validity of arguments according to Copi.    10

    (b) Test the validity or invalidity of the following arguments by means of Venn diagram:    5×2 = 10

    (i) Some mammals are not horses, for no horses are centaurs, and all centaurs are mammals.

    (ii) OAO-2.

2. Construct the formal proof of validity of the following:    5×4 = 20

    (a)    $(Z \supset Z) \supset (A \supset A)$

          $(A \supset A) \supset (Z \supset Z) / A \supset A$

    (b)    $J \vee (\sim J \cdot K)$

          $J \supset L / (L \cdot J) \equiv J$

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

    (d) If either Plato was happily married or else he wasn't, then Plato was a great philosopher. Therefore, Plato was a great philosopher. (H, G)

3. What is Conversion? Explain the various rules of Conversion with reference to A, E, I, O propositions. Can 'A' proposition be converted simply? Discuss.    2+10+8

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