

केन्द्रीय जनजातीय विद्वविद्यालय आन्धप्रदेवा Central Tribal University of Andhra Pradesh

(A Central University Established by an act of Parliament)

2nd MID term Examinations - March 2025

SEMESTER - IV

Subject

: Introduction to Artificial Intelligence (MAJOR - I)

Program of Study: B.Sc. Artificial Intelligence (Honors/Honors with Research)

Part-A

Answer all the questions. Each Carries 1 mark.

- 1. Differentiate between Predicate Logic and Propositional Logic?
- 2. PROLOG stands for?
- 3. Name various types of knowledge?
- 4. What type of inference mechanism does Prolog use?
- 5. In a semantic network, what do edges represent?

Part-B

Answer either A or B short answer question. Question carries 5 marks

5x1=5

1x5=5

- 6 A). How does Semantic Network Representation work? Explain with an example?
 - B). Define Prolog and its purpose? Explain Prolog's use of facts, rules and queries?

Part-C

Answer either A or B long answer question. Question carries 10 marks

10x1=10

- 7 A). Write the following programs in PROLOG?
 - Write a program on FAIL predicate to find all solutions?
 - Write a program to implement Login mechanism without recursion?

(OR)

- B). Explain about the following?
- i) Computable Functions and Predicates
- ii) Forward versus Backward Reasoning and Resolution