Code No. 14647/CBCS/BL

FACULTY OF ENGINEERING

B.E. (CSE) V-Semester (CBCS) (Backlog) Examination, November 2021

Subject: Artificial Intelligence (P.E-I)

Time: 2 hours **Max. Marks: 70**

Note: Missing data, if any, may be suitably assumed.

PART – A

Answer any five questions. **(5x2 = 10 Marks)**

1 Define the problem as state space search problem and prove water jug problem.
2 What are the limitations of an expert system?
3 Explain unification in Predicate calculus.
4 Define skolemization.
5 What is Bayes network?
6 What is an artificial neuron?
7 List out the applications where Neural networks are used.
8 Name any two speech acts.
9 What is acoustic model?
10 What is constraint graph?

PART – B

Answer any four questions. **(4x15 = 60 Marks)**

11 (a) Explain about alpha beta pruning of adversarial search with an example
(b) Explain about A* algorithm with an example.

12 Explain the importance of Natural Language Processing. Enumerate the various phases in NLP.

13 (a) What is a neural network? What are its different layers?
(b) What is iterative deepening?

14 (a) Explain partial order planning with an example.
(b) Define a Bayes network and explain the three important patterns of inference in Bayes network.

15 Explain learning in decision trees using information theory.

16 (a) What is meant by Recursive STRIPS explain in detail?
(b) Explain Back propagation in multilayer feed forward neural network.

17 Write short notes on :
(a) Linguistics hedges in fuzzy logic
(b) Neuro Fuzzy systems
(c) Alpha-cut threshold

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