

Supplementary Summer Examination-2024

Course: B. Tech. Branch: Computer Engineering/CSE Semester: VII

Subject Code & Name: BTCOC701 Artificial Intelligence

Max Marks: 60

Date: 01/07/2024

Duration: 3 Hr.

Instructions to the Students:

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

	(Level/CO)	Marks
Q. 1 Solve Any Two of the following.		12
A) What is Artificial Intelligence? Explain its future scope.	Remember	6
B) Write down brief history and evolution of Artificial Intelligence.	Understand	6
C) Explain in detail, the structure of different intelligent agents.	Understand	6
Q.2 Solve Any Two of the following.		12
A) Give the outline of uniform cost search algorithm with suitable example.	Remember	6
B) Write A* algorithm and discuss the various observations about algorithm.	Remember	6
C) Explain how the steepest accent hill climbing works and Heuristic functions?	Understand	6
Q. 3 Solve Any Two of the following.		12
A) List and Explain the issues in knowledge representation.	Remember	6
B) State representation of facts in propositional logic with an example.	Understand	6
C) Differentiate between forward and backward reasoning.	Understand	6
Q.4 Solve Any Two of the following.		12
A) Discuss briefly about Bayesian Network.	Remember	6
B) Explain about Dempster-shafer theory.	Understand	6
C) List out the planning terminologies and components of planning.	Remember	6

Q. 5	Solve Any Two of the following.		12
A)	What is Natural Language Processing? Explain various types of NLP techniques.	Remember	6
B)	Comparison between Syntactic Processing & Semantic Processing.	Understand	6
C)	With neat sketch, explain the architecture, characteristics features and roles of expert system.	Remember	6

***** End *****