



Faculty of Engineering Technology

Term-Test 1 Question Paper – B. Tech.

Department : Computer Science and Engineering
 Programme : B. Tech. (Computer Science and Engineering)
 Semester / Batch : 6th / 2018
 Date of Test : 18th May 2021
 Course Code : 19CSC312A
 Course Title : Artificial Intelligence

Term Test – 1

INSTRUCTIONS TO STUDENTS:

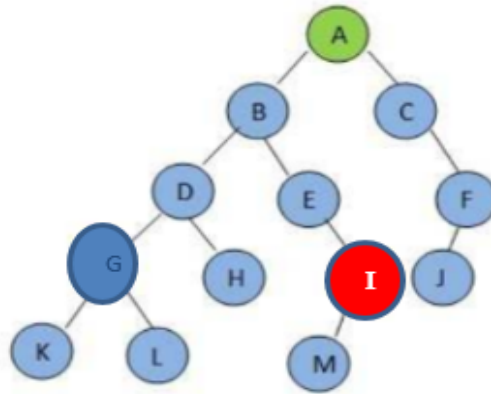
1. **Answer all questions**
2. Use only SI units
3. Use of non-programmable scientific calculator is permitted
4. Use of data handbook permitted wherever applicable
5. Missing data may be appropriately assumed
6. Notations used have usual meaning
7. **Mail the scanned answer sheets in PDF format within the stipulated time to subarna.cs.et@msruas.ac.in**

Maximum Duration: 1 Hour 15 Mins

Maximum Marks: 25

IMPORTANT: You may retain the question paper for future reference

Q.No.	Question	Marks
1	a. Discuss the advantages and disadvantages of Artificial intelligence.	3
	b. Explain the PEAS representation of following AI Agents	2
	i. Google Map	
	ii. Medical Diagnostics	
2	a. Discuss any two types of AI agents	3
	b. Explain four essential properties of search algorithms	2
3	a. Differentiate between uninformed and informed search	2
	b. Identify the number of intermediate nodes that are visited before reaching the goal node "I" starting from node "A" using BFS(Breadth First Search) and DFS (Depth First Search)	3



- 4 a. Draw the state space diagram of Hill Climbing Algorithm showing different regions. 3
 b. Discuss different types of Hill Climbing Algorithms. 2
- 5 Apply the steps of A* Search algorithm to find cost-effective path to reach from start state S to final state G for the following graph 5

