18MT743

Seventh Semester B.E. Degree Examination, Dec.2024/Jan.2025 Artificial Intelligence

Time: 3 hrs. Max. Marks: 100

	N	ote: Answer any FIVE full questions, choosing ONE full question from each mo	dule.
1		Module-1	(1035 1)
1	a. b.	What is Artificial Intelligence? Explain briefly the scope of artificial intelligence.	
	U.	Explain briefly the early work in artificial intelligence.	(10 Marks)
		OR	
2	а	With neat diagram, explain in detail Alan Turing machine.	(10 Marks)
_		What is an intelligent agent? Explain in detail intelligent agent with its character	
		applications.	(10 Marks)
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Module-2			
3	a.	Explain Depth first search algorithm.	(10 Marks)
	b.	Explain Breadth first search algorithm.	(10 Marks)
		OR	
4	a.	Explain simple Hill Climbing algorithm.	(10 Marks)
	b.	Explain Steepest Ascent Hill Climbing algorithm.	(10 Marks)
		Module-3	
5	a.	What is expert system? What are the characteristics of expert system?	(10 Marks)
	b.	Explain the steps to develop an expert system.	(10 Marks)
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		OR	
6	a.	Write in detail about MYCIN and explain how MYCIN works.	(10 Marks)
	b.	Write in detail about DENDRAL and explain Low DENDRAL works.	(10 Marks)
-		Module-4	(10 B # 1)
7	a.	Explain semantic network architecture with neat diagram. Explain decision tree architecture with neat diagram.	(10 Marks)
	υ.	Explain decision tree architecture with heat diagram.	(10 Marks)
		OR	
8	a.	Explain blackboard system architecture with neat diagram.	(10 Marks)
	b.	Explain with neat diagram neural network architecture.	(10 Marks)
		Module-5	
9 a. Define Perceptron. Explain simple perceptron with neat diagram and relevant details.			
	u.	Define I electron. Explain shipse perception with near diagram and felevant deta	(10 Marks)
	b.	Explain Genetic algorithm with flow chart.	(10 Marks)

OR

- 10 a. Explain Learning automation model with a case study of temperature control model.
 - b. What is the role of an intelligent editor? Explain intelligent editors with relevant details.
 (10 Marks)

2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8=50, will be treated as malpractice. Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.

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