



CBCS SCHEME

USN

--	--	--	--	--	--	--	--	--	--

18MT743

Seventh Semester B.E. Degree Examination, Dec.2023/Jan.2024 Artificial Intelligence

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. What is artificial intelligence? Explain briefly the early work in artificial intelligence. (10 Marks)
- b. Explain briefly the scope of artificial intelligence. (10 Marks)

OR

- 2 a. With neat diagram explain in detail Alan Turing machine. (10 Marks)
- b. What is an intelligent agent? Explain in detail intelligent agent with its characteristics and applications. (10 Marks)

Module-2

- 3 a. Explain Depth First search Algorithm and write its advantages. (10 Marks)
- b. Explain Breadth First Search Algorithm with relevant example. (10 Marks)

OR

- 4 a. Explain Simple Hill Climbing Algorithm with relevant example. (10 Marks)
- b. Explain Steepest Ascent Hill Climbing Algorithm. (10 Marks)

Module-3

- 5 a. What is expert system? With a neat diagram, explain expert system architecture. (10 Marks)
- b. Write in detail about MYCIN and explain how MYCIN works. (10 Marks)

OR

- 6 a. Explain the steps to develop an expert system. (10 Marks)
- b. Write in detail about DENDRAL and explain how DENDRAL works. (10 Marks)

Module-4

- 7 a. Explain semantic network architecture with neat diagram. (10 Marks)
- b. Explain decision the architecture with a neat diagram. (10 Marks)

OR

- 8 a. Explain Black-board system architecture with neat diagram. (10 Marks)
- b. Explain with a neat diagram neural networks architecture. (10 Marks)

Module-5

- 9 a. Define perceptron. Explain simple perceptron with neat diagram. (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. (10 Marks)
- b. What is the role of an intelligent editor? Explain intelligent editors with relevant details. (10 Marks)

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