

CBCS SCHEME

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15MT832

Eighth Semester B.E. Degree Examination, November 2020 Artificial Intelligence

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions irrespective of modules.

Module-1

- 1 a. Define artificial intelligence write importance of AI. (08 Marks)
b. Explain AI and related fields. (08 Marks)

- 2 a. Describe Alan turing machine. (08 Marks)
b. Explain intelligent agent concept in detail. (08 Marks)

Module-2

- 3 a. Write production rules for water jug problem. (08 Marks)
b. Write and explain depth first search algorithm. (08 Marks)

- 4 a. Explain generate and test algorithm. (06 Marks)
b. Write Hill climbing concept. (10 Marks)

Module-3

- 5 a. Explain the following: (08 Marks)
i) Characteristics of expert system.
ii) Need of expert system.
b. i) Draw expert system architecture. (08 Marks)
ii) Steps to develop an expert system.
- 6 Describe the following: i) MYCIN ii) DENDRAL. (16 Marks)

Module-4

- 7 a. Explain rule based system architecture. (08 Marks)
b. Explain frame architecture in expert system. (08 Marks)
- 8 a. Explain decision, tree architecture. (08 Marks)
b. Explain neural network architecture. (08 Marks)

Module-5

- 9 a. Explain perception in AI. (08 Marks)
b. Explain checkers players example. (08 Marks)
- 10 Explain the following: (08 Marks)
i) Genetic algorithm (08 Marks)
ii) Intelligent editors. (08 Marks)

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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.