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Roll No. :

328847(28)

B. E. (Eighth Semester) Examination, 2020

APR-MAY

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(New Scheme)

(ET&T Branch)

ARTIFICIAL INTELLIGENCE & EXPERT SYSTEM

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : Attempt all questions. Part (a) is compulsory from each unit and solve any two out of (b), (c) and (d). Assume suitable data if required.

Unit-I

1. (a) Explain any two characteristics of AI. 2

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- (b) Explain BFS and DFS technique with suitable example. 7
- (c) Explain applications of AI in different fields 7
- (d) What is forward and backward chaining? 7

Unit-II

- 2. (a) What is heuristic search technique? 2
- (b) What is hill climbing & what are the problems in hill climbing? 7
- (c) Explain A* algorithm with suitable example. 7
- (d) Explain alpha-beta cut off with suitable example. 7

Unit-III

- 3. (a) What is knowledge representation? 2
- (b) Discuss the resolution in predicate logic. 7
- (c) What is Semantic Network? 7
- (d) What is Conceptual Dependency? 7

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Unit-IV

4. (a) What is natural language processing? 2
- (b) Explain RTN and ATN with suitable example. 7
- (c) What is Block Word? Explain with suitable example. 7
- (d) Explain Bayesian network with example. 7

Unit-V

5. (a) What is Expert System? 2
- (b) Explain architecture of expert system. 7
- (c) What is knowledge acquisition? 7
- (d) How AI used in MYCIN? 7