

R18

Code No: 157EG

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, February/March - 2022

ARTIFICIAL INTELLIGENCE

(Common to CE, ECE)

Time: 3 Hours

Max. Marks: 75

**Answer any Five Questions
All Questions Carry Equal Marks**

- 1.a) What is problem solving agent and explain components of it.
- b) Explain breadth first search algorithm. [8+7]
- 2.a) Write about Uniform cost search technique.
- b) Explain backtracking in detail. [7+8]
- 3.a) Elaborate Alpha Beta pruning.
- b) Explain components of game search algorithm. [7+8]
- 4.a) Explain different quantifier.
- b) Discuss about forward chaining with example. [8+7]
- 5.a) Explain semantics of first order logic in knowledge representation.
- b) Write about backward chaining in first order logic. [7+8]
- 6.a) Explain about ontology for an event.
- b) Write about resolution in first order logic. [8+7]
- 7.a) What is partial order planning? Explain with examples.
- b) Explain conditional planning agent. [7+8]
- 8.a) Explain joint probability distribution with example.
- b) Explain Baye's Rule and its use. [8+7]

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