

Code.No: RR411206

RR

SET-1

**IV B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010**  
**ARTIFICIAL INTELLIGENCE**  
**(INFORMATION TECHNOLOGY)**

**Time: 3hours****Max.Marks:80**

**Answer any FIVE questions**  
**All questions carry equal marks**

- - -

1. a) Explain the different control strategies used in problem solving.  
b) Discuss the factors determining the choice of direction for a particular problem. [8+8]
2. Discuss the following in detail:  
a) Hill Climbing.  
b) Best- First Search.  
c) Constraint satisfaction. [6+5+5]
3. Discuss in detail about forward Vs Backward reasoning. [16]
4. a) Suggest a schematic network to describe the furniture in a house. Include all the normally found items.  
b) Explain the algorithm for resolution in predicate logic. [8+8]
5. a) Discuss the problems that arise in implementing non-monotonic reasoning in problem-solving programs.  
b) Describe Breadth First Search and Depth First Search techniques. [8+8]
6. a) Explain Bayes theorem? Explain how Bayes theorem is useful for the problem of letter identification.  
b) Explain the natural language processing methods. [8+8]
7. a) What is planning? Explain the various solution strategies of planning.  
b) Explain goal stack planning and hierarchical planning? [8+8]
8. a) Explain about decision trees in learning.  
b) Explain Winston's learning program. [8+8]

\*\*\*\*\*

Code.No: RR411206

RR

SET-2

**IV B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010**  
**ARTIFICIAL INTELLIGENCE**  
**(INFORMATION TECHNOLOGY)**

**Time: 3hours****Max.Marks:80**

**Answer any FIVE questions**  
**All questions carry equal marks**

- - -

1. Discuss in detail about forward Vs Backward reasoning. [16]
2. a) Suggest a schematic network to describe the furniture in a house. Include all the normally found items.  
b) Explain the algorithm for resolution in predicate logic. [8+8]
3. a) Discuss the problems that arise in implementing non-monotonic reasoning in problem-solving programs.  
b) Describe Breadth First Search and Depth First Search techniques. [8+8]
4. a) Explain Bayes theorem? Explain how Bayes theorem is useful for the problem of letter identification.  
b) Explain the natural language processing methods. [8+8]
5. a) What is planning? Explain the various solution strategies of planning.  
b) Explain goal stack planning and hierarchical planning? [8+8]
6. a) Explain about decision trees in learning.  
b) Explain Winston's learning program. [8+8]
7. a) Explain the different control strategies used in problem solving.  
b) Discuss the factors determining the choice of direction for a particular problem. [8+8]
8. Discuss the following in detail:
  - a) Hill Climbing.
  - b) Best- First Search.
  - c) Constraint satisfaction. [6+5+5]

\*\*\*\*\*

Code.No: RR411206

RR

SET-3

**IV B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010**  
**ARTIFICIAL INTELLIGENCE**  
**(INFORMATION TECHNOLOGY)**

**Time: 3hours****Max.Marks:80**

**Answer any FIVE questions**  
**All questions carry equal marks**

- - -

1. a) Discuss the problems that arise in implementing non-monotonic reasoning in problem-solving programs.  
b) Describe Breadth First Search and Depth First Search techniques. [8+8]
2. a) Explain Bayes theorem? Explain how Bayes theorem is useful for the problem of letter identification.  
b) Explain the natural language processing methods. [8+8]
3. a) What is planning? Explain the various solution strategies of planning.  
b) Explain goal stack planning and hierarchical planning? [8+8]
4. a) Explain about decision trees in learning.  
b) Explain Winston's learning program. [8+8]
5. a) Explain the different control strategies used in problem solving.  
b) Discuss the factors determining the choice of direction for a particular problem. [8+8]
6. Discuss the following in detail:
  - a) Hill Climbing.
  - b) Best- First Search.
  - c) Constraint satisfaction. [6+5+5]
7. Discuss in detail about forward Vs Backward reasoning. [16]
8. a) Suggest a schematic network to describe the furniture in a house. Include all the normally found items.  
b) Explain the algorithm for resolution in predicate logic. [8+8]

\*\*\*\*\*

Code.No: RR411206

RR

SET-4

**IV B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010**  
**ARTIFICIAL INTELLIGENCE**  
**(INFORMATION TECHNOLOGY)**

**Time: 3hours****Max.Marks:80**

**Answer any FIVE questions**  
**All questions carry equal marks**

- - -

1. a) What is planning? Explain the various solution strategies of planning.  
 b) Explain goal stack planning and hierarchical planning? [8+8]
2. a) Explain about decision trees in learning.  
 b) Explain Winston's learning program. [8+8]
3. a) Explain the different control strategies used in problem solving.  
 b) Discuss the factors determining the choice of direction for a particular problem. [8+8]
4. Discuss the following in detail:  
 a) Hill Climbing.  
 b) Best- First Search.  
 c) Constraint satisfaction. [6+5+5]
5. Discuss in detail about forward Vs Backward reasoning. [16]
6. a) Suggest a schematic network to describe the furniture in a house. Include all the normally found items.  
 b) Explain the algorithm for resolution in predicate logic. [8+8]
7. a) Discuss the problems that arise in implementing non-monotonic reasoning in problem-solving programs.  
 b) Describe Breadth First Search and Depth First Search techniques. [8+8]
8. a) Explain Bayes theorem? Explain how Bayes theorem is useful for the problem of letter identification.  
 b) Explain the natural language processing methods. [8+8]

\*\*\*\*\*