

Code No: RR310502

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SET-1

**B. Tech III Year I Semester Examinations, December-2011**

**ARTIFICIAL INTELLIGENCE  
(COMPUTER SCIENCE AND ENGINEERING)**

**Time: 3 hours**

**Max. Marks: 80**

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

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1. Define state space. Explain the state space with an example. [16]
2. What is a constraint satisfaction? Explain how constraint satisfaction helps in solving the Crypt- arithmetic problem. [16]
- 3.a) What are the four factors that influence the question of whether it is better to reason Forward or Backward?  
b) Assume the following facts:
  - Steve only likes easy courses
  - Science courses are hard
  - All the courses in the basket-weaving department are easy
  - BK301 is a basket-weaving courseUse resolution to answer the question, "What course would Steve like?" [16]
- 4.a) Define Script. Give some of the applications of scripts in real-world.  
b) Construct a Script for a restaurant and Explain. [8+8]
- 5.a) State Baye's theorem.  
b) What is the difference between JTMS and LTMS?  
c) Write short notes on certainty factors and rule-based systems. [16]
- 6.a) Explain the Min-max algorithm with an example.  
b) Write short notes on Alpha-Beta cutoffs. [8+8]
- 7.a) Explain Waltz algorithm with an example.  
b) What are the steps involved in the process of NLP? [8+8]
- 8.a) Explain Winston's learning problem.  
b) Write notes on decision trees. [8+8]

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SET-2

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(COMPUTER SCIENCE AND ENGINEERING)**

**Time: 3 hours**

**Max. Marks: 80**

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

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- 1.a) What are the four factors that influence the question of whether it is better to reason Forward or Backward?  
b) Assume the following facts:
- Steve only likes easy courses
  - Science courses are hard
  - All the courses in the basket-weaving department are easy
  - BK301 is a basket-weaving course
- Use resolution to answer the question, “What course would Steve like?” [16]
- 2.a) Define Script. Give some of the applications of scripts in real-world.  
b) Construct a Script for a restaurant and Explain. [8+8]
- 3.a) State Baye’s theorem.  
b) What is the difference between JTMS and LTMS?  
c) Write short notes on certainty factors and rule-based systems. [16]
- 4.a) Explain the Min-max algorithm with an example.  
b) Write short notes on Alpha-Beta cutoffs. [8+8]
- 5.a) Explain Waltz algorithm with an example.  
b) What are the steps involved in the process of NLP? [8+8]
- 6.a) Explain Winston’s learning problem.  
b) Write notes on decision trees. [8+8]
7. Define state space. Explain the state space with an example. [16]
8. What is a constraint satisfaction? Explain how constraint satisfaction helps in solving the Crypt- arithmetic problem. [16]

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SET-3

**B. Tech III Year I Semester Examinations, December-2011**  
**ARTIFICIAL INTELLIGENCE**  
**(COMPUTER SCIENCE AND ENGINEERING)**

**Time: 3 hours**

**Max. Marks: 80**

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

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- 1.a) State Baye's theorem.
- b) What is the difference between JTMS and LTMS?
- c) Write short notes on certainty factors and rule-based systems. [16]
- 2.a) Explain the Min-max algorithm with an example.
- b) Write short notes on Alpha-Beta cutoffs. [8+8]
- 3.a) Explain Waltz algorithm with an example.
- b) What are the steps involved in the process of NLP? [8+8]
- 4.a) Explain Winston's learning problem.
- b) Write notes on decision trees. [8+8]
5. Define state space. Explain the state space with an example. [16]
6. What is a constraint satisfaction? Explain how constraint satisfaction helps in solving the Crypt- arithmetic problem. [16]
- 7.a) What are the four factors that influence the question of whether it is better to reason Forward or Backward?
- b) Assume the following facts:
  - Steve only likes easy courses
  - Science courses are hard
  - All the courses in the basket-weaving department are easy
  - BK301 is a basket-weaving courseUse resolution to answer the question, "What course would Steve like?" [16]
- 8.a) Define Script. Give some of the applications of scripts in real-world.
- b) Construct a Script for a restaurant and Explain. [8+8]

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SET-4

**B. Tech III Year I Semester Examinations, December-2011**  
**ARTIFICIAL INTELLIGENCE**  
**(COMPUTER SCIENCE AND ENGINEERING)**

**Time: 3 hours**

**Max. Marks: 80**

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

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- 1.a) Explain Waltz algorithm with an example.
- b) What are the steps involved in the process of NLP? [8+8]
- 2.a) Explain Winston's learning problem.
- b) Write notes on decision trees. [8+8]
3. Define state space. Explain the state space with an example. [16]
4. What is a constraint satisfaction? Explain how constraint satisfaction helps in solving the Crypt- arithmetic problem. [16]
- 5.a) What are the four factors that influence the question of whether it is better to reason Forward or Backward?
- b) Assume the following facts:
  - Steve only likes easy courses
  - Science courses are hard
  - All the courses in the basket-weaving department are easy
  - BK301 is a basket-weaving courseUse resolution to answer the question, "What course would Steve like?" [16]
- 6.a) Define Script. Give some of the applications of scripts in real-world.
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- b) What is the difference between JTMS and LTMS?
- c) Write short notes on certainty factors and rule-based systems. [16]
- 8.a) Explain the Min-max algorithm with an example.
- b) Write short notes on Alpha-Beta cutoffs. [8+8]

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