

NR/RR 320503

NR/RR

Set No. 2

III B.Tech II Semester Examinations, December 2010

ARTIFICIAL INTELLIGENCE

Common to Electronics And Computer Engineering, 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 properties desirable in any knowledge representation? Explain them in brief. [4+4]
- (b) Taking the organization of your college as an example, represent it in
  - i. relational and
  - ii. inheritable forms. Compare their merits. [2+2+4]
2. (a) Give a good state space representation for missionaries and cannibals problem.
- (b) What are the chief characteristics of producer system. [8+8]
3. (a) Describe in detail different types of controllers provided in a "ROBOT". Explain their operation. [4+4]
- (b) Discuss the most important areas where "ROBOT" are better suited than human beings (the comparative advantages). [8]
4. (a) Compare the representations of the sentence. "David Produced a classy innings with his bat" in case grammar and conceptual dependency. [4+4]
- (b) What is Alpha-Beta Pruning? [8]
5. Describe and discuss in detail, the techniques of
  - (a) Parameter adjustment
  - (b) Macro-operations
  - (c) chunking used in problem- solving method of "Learning". Explain the nature of utility problem. [5+5+6]
6. With an example, show how Means-Ends analysis can be applied to solve AI problems? [6+10]
7. (a) What are features of scripts? List down its advantages and disadvantages. [3+2+3]
- (b) Explain the various components involved in a Restaurant Script. [8]
8. (a) What is default logic? Explain with an example. [2+6]
- (b) Briefly explain the following:
  - i. Abduction
  - ii. Inheritance. [4+4]

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7. (a) Give a good state space representation for missionaries and cannibals problem.  
(b) What are the chief characteristics of producer system. [8+8]
8. (a) Compare the representations of the sentence. "Dravid Produced a classy innings with his bat" in case grammar and conceptual dependency. [4+4]  
(b) What is Alpha-Beta Pruning? [8]

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Set No. 1

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NR/RR 320503

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Set No. 3

III B.Tech II Semester Examinations, December 2010

ARTIFICIAL INTELLIGENCE

Common to Electronics And Computer Engineering, Computer Science And Engineering

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(b) Briefly explain the following:  
i. Abduction  
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2. (a) What are features of scripts? List down its advantages and disadvantages. [3+2+3]  
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3. (a) Compare the representations of the sentence. "Dravid Produced a classy in-nings with his bat" in case grammar and conceptual dependency. [4+4]  
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4. Describe and discuss in detail, the techniques of  
(a) Parameter adjustment  
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