

FACULTY OF INFORMATICS**B.E. 3/4 (IT) II-Semester (Supplementary) Examination, January 2013****Subject : Artificial Intelligence****Time : 3 Hours****Max. Marks: 75****Note: Answer all questions of Part - A and answer any five questions from Part-B.****PART – A (25 Marks)**

1. What is production system? Explain the four categories of production system. (3)
2. What is Artificial Intelligence? (2)
3. Illustrate Sussman Anomaly. (2)
4. What is frame problem? (2)
5. Give Bayes rule, explain its use with an example. (2)
6. What is a Decision Tree? (2)
7. Explain Training curve in multilayer feed forward Networks. (3)
8. Explain Lexical and Referential Ambiguity in efficant communication. (3)
9. Define speech Recognition. (2)
10. What is feature vector explain with an example? (3)

PART – B (5x10=50 Marks)

11. Write simulated annealing search algorithm and explain its working. (10)
12. Explain forward and backward chaining. Write forward chaining algorithm and explain its working. (10)
- 13.(a) Describe hierarchical planning using an example. (5)
(b) Explain Goal Planning. (5)
14. Write Back propagation Algorithm. Explain its working. (10)
15. Explain how Rule-Bared expert system work. (10)
16. Write decision tree learning algorithm. Explain its working using an example. (10)
17. Describe speech Recognition in terms of Language model and Acoustic model. (10)
