

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

1. Differentiate between reactive and functional systems.
2. What is an Intelligent agent and how is the performance defined?
3. Define the prisoner's dilemma.
4. Give any two roles of intentions in practical reasoning.
5. Define Pareto efficiency.
6. What is meant by skill sequencing in 3T architecture?
7. What is called Human Computer Interface? Give an example.
8. List the use of OWL Lite.
9. Write the function of expertise finders.
10. Give any two differences between RPC and mobile agents.

PART B (5 x 16 = 80 Marks)

11. a) (i) Write about abstract architectures for Intelligent Agents. (8)
(ii) List the components of Concurrent MetateM agent and explain about it. (8)
(OR)
b) (i) Explain about the various views of the field of Multi-agent systems. (8)
(ii) How are agents used as theorem provers? Explain. (8)
12. a) (i) Explain about situated automaton and any one hybrid agent (10)
(ii) Give the limitations of reactive agents (6)
(OR)
b) (i) Define the notion of Nash equilibrium, and briefly explain the utilities and preferences (8)
(ii) Explain the advantages and disadvantages of hybrid agent architectures with the aid of examples. (8)

13. a) (i) Explain about Speech Acts and their associated theories. (8)
(ii) Describe the structure of messages in the KQML agent communication languages. (8)
(OR)
b) What are the types of auctions? Explain.
14. a) (i) Write notes on the three stages for generating synchronized multi-agent plan. (10)
(ii) Why and how do agents work together? (6)
(OR)
b) Briefly discuss about the two main modes of cooperative problem solving using a suitable example.
15. a) Elucidate about agents that are used for e-commerce and social simulation.
(OR)
b) Write notes on
(i) Correspondence theory used in normal modal logics (8)
(ii) Logics used for knowledge and belief (8)
