Reg. No. :

Question Paper Code: 36203

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2019

Sixth Semester

Computer Science and Engineering

01UCS603 - ARTIFICIAL INTELLIGENCE

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

- 1. Define the terms: agent, agent function.
- 2. Write an informal description for the general structure tree algorithm.
- 3. Define unification.
- 4. Define the first order definite clause.
- 5. Distinguish between problem solving and planning.
- 6. What is the drawback of action monitoring? How it is overcome with plan monitoring?
- 7. Sate Bayes' rule.
- 8. What are the inferences in FOL?
- 9. Differentiate supervised and unsupervised learning.
- 10. Define Bayesian and parameter learning.

PART - B (5 x 16 = 80 Marks)

11. (a) Discuss on different types of agent program.	(16)
Or	
(b) Explain greedy best first search and A* search in detail.	(16)
12. (a) Briefly explain the backward chaining mechanism.	(16)
Or	
(b) State and explain the various steps in knowledge engineering process.	(16)
13. (a) Discuss the continuous planning with examples.	(16)
Or	
(b) Explain the GRAPHPLAN algorithm and its termination.	(16)
14. (a) Explain the use of hidden markov models in speech recognition.	(16)
Or	
(b) Explain the concepts of inference in temporal models.	(16)
15. (a) Explain in detail statistical learning methods and reinforcement learning.	(16)
Or	
(b) Illustrate in detail about passive reinforcement learning.	(16)