Reg. No. : | | | | | | | | | | |

Question Paper Code: 36203

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Sixth Semester

Computer Science and Engineering

01UCS603 - ARTIFICIAL INTELLIGENCE

(Regulation 2013)

Duration: 1:15hrs Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. Artificial Intelligence is building systems that

   (a) Act like humans (b) Act rationally
   (c) Think like humans (d) All the above

2. Which instruments are used for perceiving and acting upon the environment

   (a) Sensors and Actuators (b) Sensors
   (c) Perceiver (d) None of these

3. Which mechanism is applied to use a design pattern in an OO system?

   (a) Inheritance (b) Composition
   (c) Coupling (d) None of these

4. A heuristic is a way of trying

   (a) To discover something or an idea embedded in a program
   (b) To search and measure how far a node in a search tree seems to be from a goal
   (c) To compare two nodes in a search tree to see if one is better than the other
   (d) Only (a), (b) and (c)

5. _____ planning checks what is actually happening in the environment at predetermined plans.

(a) Continuous planning (b) Replanning

(c) Multiagent planning (d) Conditional planning

6. Which is the best way to go for Game playing problem?

(a) Linear approach (b) Heuristic approach

(c) Random approach (d) Optimal approach

7. Uncertainty arises in the wumpus world because the agent's sensors give only

(a) Full & Global information (b) Partial & Global Information

(c) Partial & local Information (d) Full & local information

8. A* algorithm is based on

(a) Breadth-First-Search (b) Depth-First –Search

(c) Best-First-Search (d) Hill climbing

9. Automated vehicle is an example of

(a) Supervised learning (b) Unsupervised learning

(c) Active learning (d) Reinforcement learning

10. Automated vehicle is an example of

(a) Supervised learning (b) Unsupervised learning

(c) Active learning (d) Reinforcement learning

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. Discuss on different types of agent program. (8)

12. Briefly explain the backward chaining mechanism. (8)

13. Discuss the continuous planning with examples. (8)

14. Explain the use of hidden markov models in speech recognition. (8)

15. Explain in detail statistical learning methods and reinforcement learning. (8)