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Question Paper Code: 46023

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

Sixth Semester

Computer Science and Engineering

14UCS603 - ARTIFICIAL INTELLIGENCE

(Regulation 2014)

Duration: 1:15hrs   Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. An agent that can take the right decision in every situation is

    (a) Local agent   (b) Rational agent
    (c) Logical agent   (d) Intelligent agent

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. Inductive learning involves finding a

    (a) Consistent Hypothesis   (b) Inconsistent Hypothesis

    (c) Regular Hypothesis   (d) Irregular Hypothesis

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. Explain the general approach of informed search technique.   (8)

12. Explain the forward chaining process and efficient forward chaining with example.

        (8)

13. Explain Planning and acting in non-determininstic domains.   (8)

14. Discuss the design issues to be solved to use HMM for real world application.

        (8)

15. Explain decision tree learning machine.   (8)

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