



# BRAINWARE UNIVERSITY

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Brainware University  
Barasat, Kolkata - 700125

Term End Examination 2022

Programme – B.Tech.(CSE)-2017/B.Tech.(CSE)-2018/B.Tech.(CSE)-2019/B.Tech.  
(CSE)-2020

Course Name – Artificial Intelligence

Course Code - BCSE504B/PEC-501C

( Semester V )

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

## Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) The Key task of a problem-solving agent is given by
- a) Solve the given problem and reach to goal      b) To find out which sequence of action will get it to the goal state
- c) Both a and b      d) None of these
- (ii) Give the agent name that does the problem generator concept?
- a) Learning agent      b) Observing agent
- c) Reflex agent      d) None of the mentioned
- (iii) The agents select actions or task on the basis of priority, called \_\_\_\_\_.
- a) Utility based agents      b) Model based reflex agents
- c) Goal based agents      d) None of these
- (iv) A state space search is formulated by \_\_\_\_\_.
- a) Intermediate state      b) Initial state
- c) Successor function, which takes current action and returns next immediate state      d) None of these
- (v) The concept that hiding detail representation is known as \_\_\_\_\_.
- a) Extraction      b) Abstraction
- c) Information Retrieval      d) Data mining
- (vi) The concept of perceptron implemented by \_\_\_\_\_.
- a) Feed-forward neural network      b) Back-propagation algorithm
- c) Back-tracking algorithm      d) Feed Forward-backward algorithm
- (vii) The search technique that continually moves in the direction of increasing value that is uphill
- a) Up-Hill Search      b) Hill-Climbing
- c) Reverse-Down- Hill search      d) None of the mentioned
- (viii) Limitation of propositional logic can be removed by
- a) Pre-Propositional Logic      b) Boolean Logic
- c) First-Order-Predicate Logic      d) None of these



11. Differentiate DFS, BFS and Bi Directional search (5)

OR

Explain with the help of an example how inheritance is achieved in Semantic networks? (5)

12. "Measure the following into first-order predicate logic. i ) Every gardener likes the sun. ii) (5)  
One can fool all of the people some of the time. iii) All purple mushrooms are poisonous. "

OR

"Prepare a semantic network with the help of a diagram for the following set of (5)

knowledge: ABC is a university. CSE, ECE and EEE are three departments in it. Sudha works  
in department of CSE. CSE is located in C block. She is a professor. Every professor engages  
lectures and has PhD qualification. Sudha's area of interest in AI."

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