

## **19EAI232: Introduction to Artificial Intelligence and its Applications**

### **Question Bank**

#### **UNIT 01**

### **SECTION-I**

#### **Answer ALL Questions (5\*2=10 Marks)**

1. Define AI and Explain Expectations from AI System
2. Explain Turing Test.
3. Explain AI through a Pictorial Representation.
4. Explain Super AI
5. Define Rationality
6. Define and explain working of Agent
7. What do you mean by Environment?
8. Explain What is Learning Agent
9. What is Problem Solving Agents.
10. Define Informed Search
11. Explain Heuristic Functions.

### **SECTION-II**

#### **Answer any TWO Questions (2\*10=20 Marks)**

1. Explain AI definitions in Four Category. Analysis and explain the Turing test in AI.
2. What are the foundations of the Artificial Intelligency? Explain Any three points out of following. 1. Philosophy, 2. Mathematics ,3. Economics ,4. Decision theory ,5. Neuroscience ,6. Psychology
3. Justify how NEUROSCIENCE is related with Artificial Intelligency.
4. Explain Types of Artificial Intelligency.
5. Justify the Advantages and Disadvantage of Artificial Intelligence in computer science engineering.
6. Analysis the Any 5 Applications of Artificial Intelligence
7. Explain PEAS Representation for the AI Models. Justify the PEAS for self-driving cars.
8. Explain what Ideal rational Agent, Structure of Agent and Explain Simpe Reflex Agent with suitable figures is.

9. What are the Search Algorithm Terminologies, Explain the Properties of Search Algorithms?
10. Explain Breadth-first Search with a suitable example.
11. Analyse the Best-first Search Algorithm (Greedy Search) with suitable examples.
12. Create an agent function, agent program, and agent architecture for the solution of crane lifting goods/ containers in ship
13. Explain PEAS? About Automatic Taxi and Medical Diagnosis.
14. Explain how AI is changing the game industry with an example.
15. Explain the different domains of Artificial Intelligence.
16. Describe the agent function using the Vacuum cleaner agent example.