

19EAI232: Introduction to Artificial Intelligence and its Applications

Question Bank: UNIT 04 and 05

SECTION-I

1. Difference between supervised and unsupervised machine learning? 2 M
2. When should you use classification over regression? 2 M
3. What Are the Different Types of Machine Learning? 2 M
4. Explain the term “Training Set” in a Machine Learning Model. 2 M
5. What Are the Applications of Supervised Machine Learning in Modern Businesses? 2 M
6. Explain Semi-supervised Machine Learning? 2 M
7. What Are Unsupervised Machine Learning Techniques? 2 M
8. Define is propositional logic. 2 M
9. Explain Unification. 2 M
10. What is an expert system? Give an example. 2M
11. State 2 popular examples of the expert system. 2M
12. What are the types of inference engines? 2M
13. What are the components of Knowledge base (KB)? 2M
14. List the characteristics of expert system. 2M

SECTION-II

1. Differentiate between AI and Traditional programming. 5 M
2. List Out Some Advantages and disadvantages and AI. 5 M

3. Explain the different domains of Artificial Intelligence. 5 M
4. How is Artificial intelligence organized into four categories? 5 M
5. Explain the properties of the task environment with examples. 5 M
6. Suggest one real-world applications of AI and justify the use of AI. 5 M
7. Explain the following:
 - a. Role of AI in smart Healthcare
 - b. Role of AI in smart Home
 - c. Role of AI in smart agriculture
 - d. Role of AI in smart education
8. Define the term Machine Learning and explain How data is split in ML. 5 M
9. Compare Supervised Learning with Unsupervised Learning. 5 M
10. Design an application which explain First Order Logic concept. 5 M
11. Difference between First order Logic and propositional logic. 5 M
12. Explain Forward Chaining, Properties of Forward Chaining, Explain Forward Chaining with suitable example. 5 M
13. Explain Backward Chaining, Difference between Forward chaining and backward chaining. 5 M
14. Explain the working of expert system with a neat diagram. 5M
15. Why we need for the expert system? Explain. 8M
16. What are the capabilities of an expert system? 5M
17. List the advantages and disadvantages of the expert system. 8M
18. Explain the components of expert system. 5M

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