

GIET University, Gunupur

Department of CSE (AIML)

Class Test - Answers

Q1. Explain the various techniques of AI.

****1. Techniques of Artificial Intelligence:****

Artificial Intelligence employs various techniques to replicate human-like intelligence in machines. The main techniques are:

- ****Machine Learning (ML):**** Machines learn from data and improve performance over time. Includes:
 - Supervised Learning
 - Unsupervised Learning
 - Reinforcement Learning
- ****Natural Language Processing (NLP):**** Enables machines to understand, interpret, and generate human languages. Used in chatbots, language translation, etc.
- ****Robotics and Automation:**** Enables machines to perform repetitive or risky tasks without human intervention.
- ****Machine Vision:**** Machines process visual information from the world using cameras and sensors, used in face recognition and image analysis.

These techniques enable machines to solve real-world problems in a human-like way.

Q2. Briefly explain the applications of AI.

****2. Applications of Artificial Intelligence:****

AI is widely applied across various domains:

- ****Healthcare:**** For diagnosis, virtual nursing assistants, and drug discovery.
- ****Automotive:**** In self-driving cars and safety systems.
- ****Finance:**** Fraud detection, algorithmic trading, and customer support.
- ****Agriculture:**** AI-powered monitoring, predictive analysis, and robotic farming.
- ****Entertainment:**** Personalized recommendations on platforms like Netflix and Amazon.
- ****E-Commerce:**** Intelligent product recommendations, chatbots for customer service.
- ****Security:**** AI is used for cybersecurity, facial recognition, and threat detection.

These applications show how AI is transforming industries and daily life.