

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.