

M.E.S WADIA COLLEGE OF ENGINEERING,PUNE-411001

Department of Computer Engineering

Assignment – I (2019 PAT)

A.Y(2025-26)

Sem-II

Class:BE ALL

Subject: Deep Learning

Date: 20/04/2026

[Max. Marks **10**]

Q.1) Explain the working of a **Generative Adversarial Network (GAN)** with neat diagram.

Your answer should include:

- Generator and Discriminator roles
- Training process
- Types of GAN (any two)
- Application: Real vs Fake Image Detection

Q.2) Explain **Reinforcement Learning framework** with **Markov Decision Process (MDP)**.

Also answer:

- Q-Learning algorithm with formula
- Difference between Q-Learning and Deep Q-Network (DQN)
- Design a reward system for Tic-Tac-Toe agent

-----BEST OF LUCK-----