

TILAK MAHARASHTRA VIDYAPEETH, PUNE
MASTER OF SCIENCE (M.Sc) in COMPUTER APPLICATIONS
EXAMINATION : MAY - 2026
SEMESTER – IV

Sub : Artificial Intelligence (MSC24-401)

Date : 26/05/2026

Total Marks : 60

Time: 2.00pm to 4.30pm

Instruction:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labelled diagram wherever necessary.

Q. 1. Answer the following in 2 - 3 lines. (Any 5)

(10)

1. List any two applications of AI.
2. Define Deep Learning.
3. What is a heuristic function?
4. Define Greedy Search.
5. What is First-Order Logic?
6. Define unsupervised learning.
7. What is CNN?

Q. 2. Answer the following in short. (Any 4)

(20)

1. Explain ethical issues in AI.
2. Describe Constraint Satisfaction Problems.
3. Compare Greedy Search and A* algorithm.
4. Explain rule-based systems.
5. Explain Naïve Bayes classifier.
6. Describe Recurrent Neural Networks.

Q. 3. Answer the following in detail. (Any 3)

(30)

1. Explain state space representation with example.
2. Discuss propositional logic and inference methods.
3. Explain supervised, unsupervised, and reinforcement learning.
4. Explain Multi-Layer Perceptron and optimization.
5. Discuss AI applications in computer vision and speech processing.
