

Roll No. _____

Paper Code
3C3003

MCA III-Sem (Main & Back) Exam Jan 2026
MCA-303(N) Artificial Intelligence
3C3003

Time : 3 Hours

Maximum Marks : 70

Instructions To Candidates:

- 1) The question paper is divided in three parts.
- 2) Part A contains 10 questions which are compulsory. Part B contains eight questions out of which five are to be attempted. Part C contains one question which is compulsory.

Part A (Word limit 25)

All questions are compulsory.

10x2=20

- Q.1 What is an intelligent Agent ?
- Q.2 Define the term Machine learning.
- Q.3 What is adversarial search ?
- Q.4 State any two foundation areas of artificial Intelligence.
- Q.5 State nearest neighbor rule.
- Q.6 What is reinforcement learning?
- Q.7 What is fuzzy sets?
- Q.8 What are different components of NLP ?
- Q.9 What is the use of expert system?
- Q.10 What do you mean by knowledge representation?

Part B

Attempt any five questions.

5x6=30

- Q.1 What do you mean by forward & backward chaining techniques ?
- Q.2 Discuss K-means clustering Algorithm.

- Q.3 What is statistical learning?
- Q.4 How do you solve MINI- MAX algorithms in game planning.
- Q.5 What is language modeling?
- Q.6 What is the concept of learning? What are the types of learning?
- Q.7 Explain various steps involved in natural language processing.
- Q.8 Discuss steps & Algorithm to construct decision tree.

Part-C

(Compulsory)

- Q.1 Explain expert system. Explain it's architecture in detail with diagram.

T-000

20