

JAMIA HANMAD
Department of Computer Science & Engineering
School of Engineering Sciences & Technology
New Delhi-110062

Examination: Supplementary/Improvement Examination (for Even Semester 2024)

Paper Name: Artificial Intelligence

Paper Code: MCA PE111

Time: 2.5 Hours

Maximum Marks: 60

Note: Mobile Phones or programmable calculators or any equipment with memory are not allowed inside the examination hall.

Follow proper numbering for answering the questions.

Section- A

(Attempt all questions | 4 x 5 = 20)

Q. No.	Question	Marks	CO	BL
1.	What is Artificial Intelligence? What are the foundations on which AI is based?	5	1	3
2.	Explain how Fuzzy Logic differ from Boolean Logic? Which one is more practical and why?	5	2	3
3.	Differentiate between Supervised and Unsupervised Learning.	5	3	4
4.	What is Predicate Logic? Explain.	5	4	3

Section-B

(Attempt any four questions | 4 x 10 = 40)

Q. No.	Question	Marks	CO	BL
1.	Write the steps involved in A* algorithm. Discuss it with the help of a suitable example.	10	1	4
2.	Discuss heuristic approaches for state space search with suitable examples.	10	2	3
3.	Explain Problem Reduction in the context of Game Playing. Discuss Alpha-Beta Pruning with suitable examples.	10	3	4
4.	Discuss advanced Knowledge Representation techniques with suitable examples.	10	4	3
5.	What are Bayesian Belief Networks? Explain with a suitable example.	10	4	4
6.	What are Artificial Neural Networks? Discuss how it is inspired from Biological Neural Networks.	10	5	4

BL – Bloom's Taxonomy Levels (1-Remembering, 2-Understanding, 3-Applying, 4-Analyzing, 5-Evaluating, 6-Creating)