



CBCS SCHEME

22MBABA403

Fourth Semester MBA Degree Examination, June/July 2026 Machine Learning

Time: 3 hrs.

Max. Marks: 100

- Note:** 1. Answer any *FOUR* full questions from Q.No.1 to Q.No.7.
2. Question No. 8 is compulsory.
3. *M* : Marks, *L*: Bloom's level, *C*: Course outcomes.

			M	L	C
Q.1	a.	Define Interpreter.	3	L1	CO1
	b.	Explain Q-learning in Reinforcement learning.	7	L2	CO1
	c.	Explain the models of evolution and learning in Genetic Algorithm.	10	L3	CO3
Q.2	a.	Define Compiler.	3	L1	CO1
	b.	Explain the working of Support Vector Machine.	7	L2	CO2
	c.	Distinguish between Linear and Logistic Regression.	10	L4	CO2
Q.3	a.	Define Augmented Reality.	3	L1	CO4
	b.	Explain Words and Sentences in Python.	7	L2	CO1
	c.	The generation of successors in genetic algorithm is determined by set of operators that recombine and mutate selected members. Justify.	10	L3	CO3
Q.4	a.	Define Virtual Reality.	3	L1	CO4
	b.	Explain the Model Combination Schemes.	7	L2	CO3
	c.	Explain Expectation Maximization Algorithm.	10	L2	CO3

Q.5	a.	State the meaning of Flight Simulation.	3	L1	CO3																											
	b.	Differentiate between Augmented Reality and Virtual Reality.	7	L4	CO4																											
	c.	Debugging is the processes of finding the cause of error in your code defend.	10	L5	CO4																											
Q.6	a.	State the meaning of KD Tree.	3	L1	CO2																											
	b.	Explain the issues in Decision Tree Learning.	7	L2	CO3																											
	c.	Explain about Temporal Difference learning in Reinforcement Learning.	10	L2	CO4																											
Q.7	a.	State the meaning of Nearest Neighbor Smoothing.	3	L1	CO2																											
	b.	Explain about challenges with Augmented Reality.	7	L2	CO4																											
	c.	Explain about benefits of Virtual Reality.	10	L2	CO4																											
Q.8	Case Study : Compulsory Calculate Entropy and Information gain for each attribute for a binary classification dataset with Target Variable [Play Tennis : Yes (No) and with two attribute [A and B]		20	L4	CO3																											
<table><tr><td>A</td><td>B</td><td>Play Tennis</td></tr><tr><td>T</td><td>T</td><td>Yes</td></tr><tr><td>T</td><td>F</td><td>No</td></tr><tr><td>F</td><td>T</td><td>Yes</td></tr><tr><td>F</td><td>T</td><td>No</td></tr><tr><td>T</td><td>F</td><td>Yes</td></tr><tr><td>F</td><td>T</td><td>Yes</td></tr><tr><td>T</td><td>F</td><td>No</td></tr><tr><td>F</td><td>F</td><td>No</td></tr></table>			A	B	Play Tennis	T	T	Yes	T	F	No	F	T	Yes	F	T	No	T	F	Yes	F	T	Yes	T	F	No	F	F	No			
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