

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE Regular and Supplementary Summer 2024 Course: B. Tech. Branch : ECE/ Electronics & Computer Engineering Semester :VI Subject Code & Name: BTECPC602 Artificial Intelligence and Machine Learning Max Marks: 60 Date: 15/06/2024 Duration: 3 Hr.			
Instructions to the Students: 1. All the questions are compulsory. 2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question. 3. Use of non-programmable scientific calculators is allowed. 4. Assume suitable data wherever necessary and mention it clearly.			
		(Level/CO)	Marks
Q. 1	Solve Any Two of the following.		12
A)	Define: Artificial Intelligence. State what is need of AI?	(Remember)	6
B)	Differentiate between strong and weak artificial intelligence	(Analyze)	6
C)	What is an agent in AI? What are the types of agent program in any intelligent system?	(Understand)	6
Q.2	Solve Any Two of the following.		12
A)	Sate and explain Heuristic Search with example.	(Remember)	6
B)	Discuss any 3 types of Search Algorithms in AI	(Understand)	6
C)	What is a TABU Search? Explain in detail.	(Understand)	6
Q. 3	Solve Any Two of the following.		12
A)	What is Machine Learning? Explain types of machine learning.	(Remember)	6
B)	Describe what is a decision tree with an example?	(Understand)	6
C)	What is the difference between classification and regression?	(Analyze)	6
Q.4	Solve Any Two of the following.		12
A)	What is Evaluation Metrics? Explain types of Evaluation Metrics	(Remember)	6
B)	Explain what is Confusion Matrix	(Understand)	6
C)	How to Choose the Best Evaluation Metrics to evaluate ML models	(Evaluation)	6
Q. 5	Solve Any Two of the following.		12
A)	Explain what is linear regression with types of Linear Regression?	(Remember)	6
B)	Illustrate what is Gradient Descent?	(Understand)	6
C)	What is the difference between Linear regression and Logistic regression?	(Analyze)	6
	*** End ***		