	Harcourt Butler Technical University Kanpur		MID SEM II
Branch	**MCA**	Program	**MCA**
Course Name	**Machine Learning**	Semester	**IV**
Course Code	**ECA 554**	Year	**2023-24**
Time: **1.00Hr**	**Answer All Questions**	Maximum Marks	**15**

Knowledge Level (KL)	**K1:** Remembering		**K3:** Applying		**K5:** Evaluating
	K2: Understanding		**K4:** Analyzing		**K6:** Creating

Q. No	Questions	Marks	COs	KL
1	Discuss how to calculate the distance between the test data and training data for KNN. Why, KNN is termed as lazy learning algorithm?	3	CO3	K2
2	What are the advantages and disadvantages of decision tree based model for machine learning. Illustrate the algorithm for *best split* based on *information gain* criteria with the help of an example.	3	CO4	K3
3	Discuss few practical applications where Clustering is suitable. Explain the K-means clustering algorithm.	3	CO4	K4
4	Write short notes on any *two*: (i) Bagging and Boosting (ii) Dimensionality Reduction (iii) PCA	6	CO5	K2

************************ End of Question Paper *****************************

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