Name :	UPES
Enrolment No. :	UNIVERSITY OF TOMORROW

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, Dec 2022

Program Name : BTech-GG	Semester : VII
Course Name : Machine Learning	Time : 3 hours
Course Code : CSAI2001P	Max. Marks : 100
No. of Page(s) : 1	
Instructions : Attempt all sections.	

SECTION-A

S. No.	Questions	Marks	CO
Q.1	Contrast Precision and Recall using examples.	4	CO1
Q.2	Write a short note on Elastic Net Regression.	4	CO2
Q.3	Write a short note on k-nearest neighbours algorithm.	4	CO3
Q.4	Write a short note on decision tree construction.	4	CO3
Q.5	Write a short note on 'Co-reference Resolution'.	4	CO4

SECTION-B

Q.1	Explain overfitting, underfitting and the measures to avoid them.	10	CO1
Q.2	Write a note on any two regularization techniques for regression analysis.	10	CO2
Q.3	Explain DBSCAN and state how it differs from partition-based or hierarchical clustering algorithms. OR Explain and Contrast k-means and k-medoids clustering.	10	CO3
Q.4	Write a note on data transformation techniques.	10	CO4

SECTION-C

Q.1	Show how text-handling techniques will be used on the following sentence step-by-step. "no, no...we have a black mouse..had to repair it laft week ☺."	20	CO4
Q.2	Write a note on ensemble methods. OR What is the difference between probabilistic and deterministic classification? Write a note on any three probabilistic classification algorithms.	20	CO3