Name:

**Enrolment No:** 



## UPES End Semester Examination, May 2024 Course: Application of Machine Learning in Industries

Course. Application of Machine Learning in Industries
Program: : B TECH(CSE+BD-BAO-DEV-CCVT-GG-CSF- HNH)
Course Code: CSAI4003P

Semester: 8<sup>th</sup> Time : 03 hrs. Max. Marks: 100

## **Instructions:**

SECTION A (5Qx4M=20Marks)				
Q 1	Define the concept behind Predictive medicine. Explain the role of carrier testing in predictive medicine.	4	CO1	
Q 2	Explain demand forecasting in retail. How does predictive analytics help in forecasting retail demands.	4	CO2	
Q 3	Explain world embedding and its significance in media.	4	CO2	
Q 4	Illustrate some applications of machine learning and artificial intelligence in transportation industry.	4	CO3	
Q 5	Discuss in detail some machine learning applications used in wind energy forecasting.	4	CO4	
	SECTION B			
(4Qx10M= 40 Marks)				
Q 6	Define drug discovery and discuss the role of machine learning in drug discovery. Demonstrate any one ML approach used in drug discovery with a suitable example.	10	CO4	
Q 7	Explain the role of machine learning in education. Discuss any 4 features that justify machine learning is becoming advantageous for education.	10	C01	
Q 8	Describe in detail the key problems in government sector that requires artificial intelligence interventions.	10	CO1	
Q 9	"Machine learning is significant in insurance sector". Justify this sentence answer with at least 5 reasons. Or Demonstrate the deep leaning for smart manufacturing using a suitable diagram.	10	C03	
SECTION-C				
(2Qx20M=40 Marks)				
Q 10	Suppose many citizens have posted their complaints (as comments) on a single post (tweet) of concerned government department on "X" formally known as twitter. Now there is a need to review these complaints (comments). Describe the various factors to study the sentiments of these comments in detail.	20	CO3	

Q 11	An auto insurance company wants to improve its claims processing efficiency and accuracy. The company receives 1TB of claims daily which is challenging for the company to manually assess each claim's validity and determine the appropriate course of action. Describe how insurance company leverage machine learning algorithms to automate claim analysis, in detail. Or	20	CO4
	Discuss in detail various machine learning approaches used to estimate seasonal footwear demand in the retail sector.		