SRM Institute of Science and Technology
College of Engineering and Technology
School of Computing
DEPARTMENT OF COMPUTATIONAL INTELLIGENCE
SRM Nagar, Kattankulathur – 603203, Chengalpattu District, Tamilnadu
Academic Year: 2022-2023(ODD)   Batch 2 (SET B)

Mode of Exam
OFFLINE

Test: CLAT- 2   **Date: 05.04.2023**
Course Code & Title: 18CSE481T / Applied Machine Learning
**Duration:** 2 periods
Year & Sem: III & 6th sem   **Max. Marks:** 50

Course Articulation Matrix:

S.No.	Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14
1	CO1	H	M	H	-	H	-	-	-			H	H	H	H
2	CO2	H	M	H	-	H	-	-	-			H	H	H	H
3	CO3	H	M	H	-	H	-	-	-			H	H	H	H
4	CO4	H	M	H	-	H	-	-	-			H	H	H	H

	Answer all	Part – A			(10 x 1 = 10 Marks)		
Q. No.	Question	Marks	BL	CO	PO	PI Code
1	_____ means understanding voice by the computer and performing any required task. a) Speech translation b) Speaker identification c) Voice recognition d) Automatic speech recognition	1	1	2	2	2.2.1
2	_____ is not a type of speech recognition model a) Spaker independent b) Speaker dependent c) Speaker isolation d) Speaker adaptive	1	1	2	2	2.2.1
3	_____ is a method used to convert analog signals to digital signals. a) Pulse code modulation b) Sampling c) Coding d) Quantization	1	1	2	2	2.2.1
4	_____ allows us to predict a sequence of unknown variables from a set of observed variables. a) Gaussian Mixture Model b) Naïve Bayes c) Hidden Markov Model d) Bayes Theorem	1	1	2	2	2.2.1
5	The standard sample rate in ADC for telephone is _____ a) 8 KHz b) 16 KHz c) 44 KHz d) 1MHz	1	2	2	2	2.2.1
6	_____ is used to understand how the value of same variable changes over time. a) Graph analysis b) Time series analysis c) Linear regression d) Logistic regression	1	1	3	3	3.2.1
7	_____ is not a component of time series data a) Trend b) Seasonality c) Complexity d) Cyclicity	1	1	3	3	3.2.1
8	_____ is not a method to convert non-stationary time series data into stationary time series data. a)Translation b)Detrending c)Differencing d)Transformation	1	1	3	3	3.2.1
9	Rice crops badly damaged on account of rains is _____ a) Cyclical movement b) Random movement c) Secular trend d) Seasonal movement	1	2	3	3	3.2.1
10	_____ is not an example of time series problem a) Daily stock price b) Weekly Interest rate c) Sales figures d) Disease diagnosis	1	2	3	3	3.2.1

	18CSE481T / Applied Machine Learning Batch 2 (SET B)					
Answer all	**Part – B**				(**4 x 5 = 20 Marks**)	
Q. No.	Question	Marks	BL	CO	PO	PI Code
11	List the applications of speech recognition.	5	2	2	2	2.2.3
12	Brief about reading audio data with Python code.	5	3	2	2	2.2.3
13	Compare stationary and non-stationary time series data.	5	3	3	3	3.2.2
14	Write the importance and applications of Conditional Random Fields.	5	2	3	3	3.2.2
Answer all	**Part – C**				(**2 x 10 = 20 Marks**)	
Q. No.	Question	Marks	BL	CO	PO	PI Code
15 (a)	Explain with Python code how audio signals can be generated with custom parameters.	10	3	2	2	2.2.4
	(OR)					
15 (b)	Illustrate how a speech recognizer can be built using Python code.	10	3			
16 (a)	Elaborate Hidden Markov Model for sequential data using Python code.	10	3	3	3	3.2.3
	(OR)					
16 (b)	Explain transforming and extracting statistics from time series data using Python code.	5+5	3			

*Performance Indicators are available separately for Computer Science and Engineering in AICTE examination reforms policy.

Course Outcome (CO) and Bloom's level (BL) Coverage in Questions
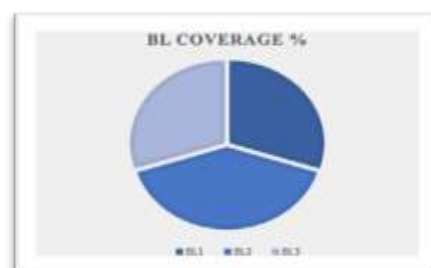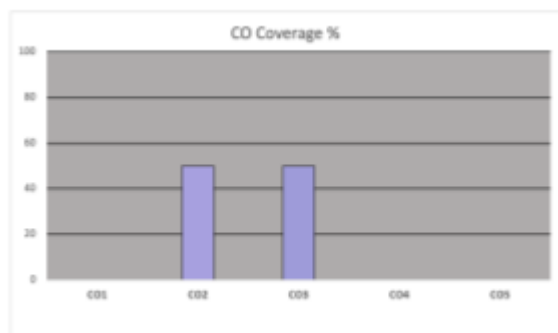
Approved by the Audit Professor/Course Coordinator