



**SRM Institute of Science and Technology**  
**College of Engineering and Technology**  
**School of Computing**

Mode of Exam  
**OFFLINE-  
CLASSROOM**

**DEPARTMENT OF COMPUTATIONAL INTELLIGENCE**

SRM Nagar, Kattankulathur – 603203, Chengalpattu District, Tamilnadu

**Academic Year: 2022- 2023**

**EVEN SEM SET B**

**Test** : CLAT-3

**Date:** 05.05.2023

**Course Code & Title** :18CSE481T / Applied Machine Learning

**Duration:**10.30-12.10.00Hr

**Year &Sem** : III year / VI Sem

**Max. Marks:**50

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

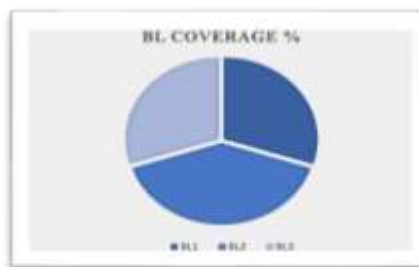
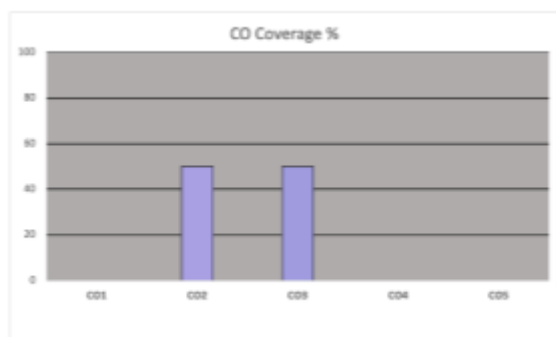
**Part – A**  
**(10 x 1 = 10 Marks)**

**Instructions: Answer All Questions**

Q. No	Question	Marks	BL	CO	PO	PI Code
1	1. Computer vision is concerned with modeling and replicating human vision using computer software and hardware.  A. TRUE B. FALSE C. Can be true or false D. Can not say	1	2	CO3	PO3	3.2.1
2	2. Computer vision is a discipline that studies how to reconstruct, interrupt and understand a 3d scene from its _____.  A. 1d images B. 2d images C. 3d images D. 4d images	1	2	CO3	PO3	3.2.1
3	3. Computer vision is divided into _____ basic categories  A. 1 B. 2 C. 3	1	2	CO3	PO3	3.2.1

	D. 4 _____					
4	Which vision includes object recognition and 3D scene Interpretation?  A. Low-level vision B. Intermediate-level vision C. High-level vision D. All of the above	1	2	CO3	PO3	3.2.1
5	The input and output of image processing are?  A. signal and image B. signal only C. image only D. depends on input	1	2	CO3	PO3	3.2.1
6	How many types of comparisons are there in face recognition? A. One B. Two C. Three D. Four	1	2	CO3	PO4	3.2.1
7	Which one is not a behavioral type biometric? A. Retina scan B. Voice scan C. Signature scan D. All of the above	1	2	CO3	PO4	3.2.1
8	Which application comes under the access management area? A. Permission-based systems B. Data privacy C. Suspect identification D. None of the above	1	2	CO4	PO5	3.2.1
9	SSSIFD? A. Simple Shot Scale-Invariant Face Detector B. Single Shot Scale-Invariant Face Detector C. Simple Scale Shot-Invariant Face Detector D. None of the above	1	3	CO4	PO5	3.2.1
10	Which characteristics are taken together in chromaticity? a) Hue and Saturation b) Hue and Brightness c) Saturation, Hue, and Brightness d) Saturation and Brightness	1	3	CO4	PO5	3.2.1

<b>PART -B (4* 4=16 Marks) Answer any four</b>						
11	How histograms are used in making clear cut Image analysis?	4	1	CO4	PO4	3.2.2
12	Elaborate the steps in learn to extract and load images in image analysis	4	1	CO3	PO4	4.2.3
13	List and explain the major features used for biometric face analysis.	4	2	CO4	PO5	5.1.2
14	How face detector on gray scale image works?	4	3	CO4	PO5	5.2.2
15	How to build eye and nose detector?	4	3	CO4	PO5	5.2.2
<b>PART C (2*12= 24 MARKS) Answer any two</b>						
16.i	Relate the role of SIFT. Use cases of SIFT feature points and SIFT detection for any image processing techniques.	12	3	CO4	PO4	4.2.2
	Or					
16.ii	Write a short on A. Histogram equalization (4) B. Sobel filter (4) C. Canny edge detector (4)	12	3	CO4	PO4	4.2.2
17.i	How to capture and process a video from a Webcam? Give your answers in a detail note.	12	3	CO4	PO5	5.2.2
	Or					
17.ii	Write the procedure to convert a dataset from a five-dimensional set to three-dimensional set.	12	3	CO4	PO5	5.2.2



Approved by the Audit Professor/Course Coordinator