

**VIT**

Vellore Institute of Technology

School of Computer Science Engineering and Information Systems (SCORE)
CONTINUOUS ASSESSMENT TEST - I
WINTER SEMESTER 2024-2025

REG.NO.: 22MTS0312


SLOT: E2

Programme Name & Branch : MTECH(SE)
Course Code and Course Name : SWE1015/Biometric Systems
Faculty Name(s) : Dr.U.Rahamathunnisa
Class Number(s) : VL2024250502997
Date of Examination : 31-01-2025
Exam Duration : 90 minutes

Maximum Marks: 50

General instruction(s):

- Answer All Questions
 - M - Max mark; CO - Course Outcome; BL - Blooms Taxonomy Level (1 - Remember, 2 - Understand, 3 - Apply, 4 - Analyse, 5 - Evaluate, 6 - Create)
- Course Outcomes
CO1: Comprehend the concepts and terminology of biometric recognition system
CO2: Distinguish among various Biometric Technologies along with their advantages and disadvantages

Q. No	Question	M	CO	BL
1.	How will you solve the problem on "Biometrics are Hackable"? Since a biometric reveals part of a user's identity, if stolen, it can be used to falsify legal documents, passports, or criminal records, which can do more damage than a stolen credit card number. How will you take Biometrics in another level of security?	10	CO1	BL4
2.	Authentication methods verify a user's identity to grant access to a system or service. Analyse the various authentication methods and its properties with suitable examples.	10	CO1	BL2
3.	Feature extraction is the process of identifying and selecting the most important information. Demonstrate the feature extraction process in the given fingerprint image in detail. 	10	CO2	BL3
4.	Discuss the following fingerprint sensors with its advantages and disadvantages a) Optical sensor b) Silicon based sensor	10	CO2	BL3