23CMP213

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2025
(Second Semester)

Branch – COMPUTER SCIENCE

BIO - METRICS

Time: Three Hours   Maximum: 75 Marks

SECTION-A (10 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Find out the physical characteristic. a) Keystroke b) Signature c) Mouse Movement d) Iris	K1	CO1
	2	Which of the following is a benefit of biometrics when compared with traditional methods? a) Non-repudiation b) Accuracy c) Uniqueness d) All the above	K2	CO1
2	3	What is the use of biometric characteristics that are automatically captured with the active participation of the individual is ____ a) Password biometric b) Active biometric c) Passive biometric d) Reluctant biometric	K1	CO2
	4	Choose the authentication protocols: a) Passwords b) Biometrics c) Tokens d) All the above	K2	CO2
3	5	Deep learning based methods that detect facial features are ------- a) CNNs b) EigenFace Algorithms c) Local Binary Patterns d) Active Appearance Models	K1	CO3
	6	The ---- stage of the Iris algorithm applies filters to enhance image quality and remove noise. a) Image acquisition b) Pre-processing c) Sampling d) Vectoring	K2	CO3
4	7	Hidden Markov Model is a _____ algorithm. a) Speech recognition b) Iris recognition c) NLP d) Speaker recognition	K1	CO4
	8	Presenting a fake biometric sample to the system is -------- a) Spoofing b) Replay c) Synthesis d) Manipulation	K2	CO4
5	9	What is a finger-print biometric attribute? a) Minutiae points b) Color c) Pich d) Tone	K1	CO5
	10	Find out the cons of signature biometric. a) Variability b) Potential for Spoofing c) Invasive d) All the above	K2	CO5

SECTION - B (35 Marks)
Answer ALL questions
ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Compare Biometrics with traditional authentication methods.	K5	CO1
		(OR)		
	11.b.	Assess the various issues in Biometric enrollment.		
2	12.a.	Evaluate the various Authentication protocols.	K5	CO2
		(OR)		
	12.b.	Compare Passwords with biometrics.		
3	13.a.	Inspect the Types of algorithms used for interpretation.	K4	CO3
		(OR)		
	13.b.	Analyze Voice biometric technologies.		
4	14.a.	Examine the salient aspects of Retina recognition.	K4	CO4
		(OR)		
	14.b.	Survey the use of Thermo grams.		
5	15.a.	Create a list of Biometric attributes.	K6	CO5
		(OR)		
	15.b.	Compile the Pros and cons of iris biometrics.		

SECTION -C (30 Marks)
Answer ANY THREE questions
ALL questions carry EQUAL Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Compile the benefits of biometrics in identification.	K6	CO1
2	17	Compare Passive and active biometrics.	K5	CO2
3	18	Criticize the Face biometric technologies.	K5	CO3
4	19	Contrast Front-end attack with back-end attack.	K4	CO4
5	20	Examine the various evaluating options for biometrics.	K4	CO5

Z-Z-Z   END