



R22 Regulation

Subject code: 4P5FD

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech V Semester Supplementary Examinations, May 2025

BIOMETRICS

(IT)

Maximum Marks: 60

Date: 26.06.2025

Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 10 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X1M=10 Marks)		Marks	CO	Bloom Tx
1.a)	List types of Biometrics.	1M	1	1
b)	Write the advantages of Iris Biometrics.	1M	1	1
c)	Write Biometric System Errors.	1M	2	1
d)	Write about Retina Biometrics.	1M	2	1
e)	Write the challenges in Face Biometrics.	1M	3	1
f)	Write the disadvantages of Iris Biometrics.	1M	3	1
g)	Define Vein and Fingerprint Biometrics.	1M	4	1
h)	Write Basic Hand Geometry.	1M	4	1
i)	Write Vein Pattern of palm.	1M	5	1
j)	Compare various Biometrics.	1M	5	1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	Bloom Tx
2	a) Compare and contrast between the Biometrics Versus Traditional Authentication Methods.	5M	1	3
	b) List and explain the applications of biometrics.	5M		2
OR				
3	a) Explain the architecture of the biometric system.	5M	1	2
	b) Discuss about the performance measures in biometric systems.	5M		2
4	a) Outline the main components of face recognition system, list challenges involved.	5M	2	2
	b) Examine role of neural networks in face recognition.	5M		2
OR				
5	a) Explain the design of Face Recognition System in detail.	5M	2	2
	b) Discuss advantage and disadvantage of using Face Biometrics.	5M		1
6	Explain in brief about the weaknesses of Iris Scan.	10M	3	2
OR				
7	a) Explain different features that are used for iris scan biometrics approach.	5M 5M	3	2

	b) List out the applications of Iris biometrics in detail.			2
8	a) Describe biometric hand gesture recognition for Indian sign language. b) Explain the process of fingerprint recognition system.	5M 5M	4	2 2
	OR			
9	a) Explain the different components of finger scan technology. b) Mention the advantages and disadvantages of SIFT algorithm.	5M 5M	4	2 2
10	a) Classify the privacy issues related to deployment of biometrics. b) Discuss the benefits and challenges of implementing a multi model biometric system.	5M 5M	5	2 2
	OR			
11	a) Explain about biometric cryptography b) Explain about soft biometrics, how do soft biometric differ from traditional biometrics	5M 5M	5	2 2