



R22 Regulation

Subject code: 4P5FD

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Regular Examinations, December 2024

BIOMETRICS

(IT)

Maximum Marks: 60

Date:06.01.2025

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		CO	Bloom Tx
All the following questions carry equal marks (10X1M=10 Marks)			
1.a)	What is biometrics?	1	1
b)	Write the traditional authentication methods.	1	2
c)	What do you mean by pre-processing in iris biometrics?	2	1
d)	Define face detection in video sequence.	2	2
e)	Identify application of Iris Biometrics.	3	3
f)	Define Determination of Iris Region.	3	2
g)	Write about Fingerprint Biometrics.	4	2
h)	How finger print Recognition system work?	4	2
i)	Define Biometric Cryptography.	5	2
j)	Write about Fingerprint Indexing?	5	2
Part-B		CO	Bloom Tx
Answer All the following questions. (5X10M=50Marks)			
2	A. Determine the application areas of biometrics? [5M] B. Examine different types of Biometrics. [5M]	1	3 3
OR			
3	A. Illustrate various causes of errors in the biometrics? [5M] B. Determine the Basic Working of biometric Matching [5M]	1	3 3
4	A. Examine the process of feature extraction and face recognition [5M] B. Analyze the challenges in face biometrics [5M]	2	2 2
OR			
5	A. Illustrate the neural networks for face recognition. [5M] B. Classify various methods used for the face recognition? Explain. [5M]	2	3 4
6	Analyze the concept of Iris segmentation method? [10M]	3	4
OR			
7	A. Illustrate about the Working of Iris Scan Technology. [5M] B. Distinguish the advantages and disadvantages retina biometrics and iris biometrics? [5M]	3	3 4
8	A. Sketch the vein recognition system with the help of suitable block diagram. [5M] B. Examine the process involved in hand gesture recognition for Indian sign	4	3 3

	language. [5M]		
	OR		
9	A. Identify the strengths and weakness of finger scan technology. [5M] B. Examine SIFT algorithm in detail [5M]	4	3 3
10	A. Determine the concept of multi model biometrics [5M] B. Discuss in detail about privacy concerns associated with biometrics development. [5M]	5	3 3
	OR		
11	A. Distinguish various biometrics in terms of privacy. [5M] B. Sketch about soft biometrics. [5M]	5	4 3