PRN:		Course Code:	AMT16031

TY B. Tech AIML End Semester Examination Summer 2023

Digital Image Processing

Day and Date: Tuesday, 20/06/23 Max Marks: **100**

Time: 10:30 to 1:30 pm Duration: **03**hrs

Instructions: All questions are compulsory.

			Marks	Bloom's Level	CO
Q.1		**Attempt the following**			
	a)	Illustrate fundamental steps in DIP with diagram.	08	L3	CLO1
	b)	Explain the components of an image processing system.	08	L5	CLO1
		OR			
	b)	Explain Sampling and Quantization with graph.	08	L2	CLO2
Q.2		**Attempt the following**			
	a)	Discuss relationships between pixels.	08	L2	CLO2
	b)	Write brief note on Convolution with example.	08	L2	CLO2
		OR			
	b)	Explain in detail sampling.	08	L2	CLO2
Q.3		**Attempt any two from the following**			
	a)	Explain Detection of isolated points, line detection, and Edge detection.	08	L1	CLO3
	b)	Evaluate Laplacian Edge Detector with example.	08	L2	CLO3
	c)	Explain Hough Transformation with example	08	L1	CLO3
Q.4		**Attempt any two from the following**			
	a)	Illustrate Region based segmentation and Region growing with example.	08	L2	CLO3
	b)	Simplify Inter pixel redundancy with example	08	L4	CLO3
	c)	Explain Huffman Coding with example.	08	L2	CLO3
Q.5		**Attempt any Two of the following**			
	a)	Illustrate Sampling of video signals.	09	L3	CLO3
	b)	Compare between Inter and Intra Frame Compression.	09	L2	CLO3
	c)	Demonstrate dimensions of signals and their types.	09	L2	CLO3
Q.6		**Attempt any Two of the following**			
	a)	Summarize the features of extraction.	09	L5	CLO4
	b)	Explain Patterns and Pattern Classes.	09	L2	CLO4
	c)	List out Applications of Pattern Recognition.	09	L1	CLO4

*****

ESE

SGU Library Copy