O.P.Code: 20CS1020	R20	H.T.No.									

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

B.Tech. IV Year I Semester Supplementary Examinations December-2024

DIGITAL WATERMARKING

CSE (Internet of Things and Cyber security Including Block Chain Technology)

Time: 3 Hours **Max. Marks: 60**

(Answer all Five Units **5 x 12 = 60** Marks)

		UNIT-I			
1	**a**	Explain briefly importance of digital watermarking.	**CO1**	**L2**	**6M**
	b	How to evaluate watermarking systems.	**CO1**	**L3**	**6M**
		OR			
2	**a**	Explain the concept of Geometric models of watermarking.	**CO1**	**L3**	**6M**
	b	Differentiate steganography and watermarking in detail.	**CO1**	**L2**	**6M**
		UNIT-II			
3	**a**	Explain about Watermarking with informed embedding.	**CO2**	**L3**	**6M**
	b	What is Message Errors? Describe in detail.	**CO2**	**L2**	**6M**
		OR			
4	**a**	Analyze optimal Watermarking for a Single Cover Work technique.	**CO2**	**L4**	**6M**
	b	Explain briefly watermarking with blind embedders.	**CO2**	**L3**	**6M**
		UNIT-III			
5	**a**	Explain about Perceptual Human Evaluation Measurement Techniques.	**CO3**	**L3**	**6M**
	b	How to evaluate Perceptual impact of Watermarks.	**CO3**	**L4**	**6M**
		OR			
6	**a**	Explain Frequency Sensitivity and Loudness Sensitivity.	**CO3**	**L3**	**6M**
	b	Define Perceptual Models? Briefly explain Automated Evaluation.	**CO3**	**L2**	**6M**
		UNIT-IV			
7	**a**	Describe Block-Wise Content Authentication.	**CO4**	**L2**	**6M**
	b	Explain Fragile Watermarks and Telltale Watermarks.	**CO4**	**L3**	**6M**
		OR			
8	**a**	Define Embedded Redundancy. Briefly explain.	**CO4**	**L2**	**6M**
	b	What is Exact authentication? Describe in detail.	**CO4**	**L3**	**6M**
		UNIT-V			
9	**a**	Explain about Statistics Preserving Steganography.	**CO5**	**L3**	**6M**
	b	Explain Matrix Embedding.	**CO5**	**L2**	**6M**
		OR			
10	**a**	Describe Steganography for Criminals.	**CO5**	**L2**	**6M**
	b	Describe the influence of the cover work on Steganalysis.	**CO5**	**L3**	**6M**

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