

Vivekanand Education Society's Institute of Technology, Chembur, Mumbai,

Department Of Artificial Intelligence and Data Science

Year:2022-23 (Even Sem)

Internal Assessment Test 2

Class : TE	Division:-
Semester : VI	Subject: Image and Video Processing
Date: 25/03/2023	Time: 1 hr

Course Outcome	CO3
Percentage %	100%

Q.1)		(Attempt any five of the following)	Marks (20)	Course Outcomes
	a)	Define Image Compression Ratio and Compression Factor.	2M	CO3
	b)	Differentiate between Lossy and Lossless Compression.	2M	CO3
	c)	Explain the fidelity criterion for Lossy image compression.	2M	CO3
	d)	Explain types of Redundancy found in images.	2M	CO3
	e)	Draw Image Compression System Model.	2M	CO3
	f)	Explain Need for Image Compression.	2M	CO3
Q.2)	a)	<div> <div>Perform histogram equalisation of the image</div> <div> </div> </div>	5M	CO3
		OR		
	b)	<div> <div>Filter the following image using a 3×3 neighbourhood averaging by assuming (a) zero padding, (b) pixel replication.</div> <div> </div> </div>	5M	CO3
Q.3)	a)	Consider an image strip of size 50*100. The image consists of five vertical strips. The gray levels of the strips from left to right are 128, 64,32,16 and 8. The corresponding width of strips are 35,30,20,10 and 5 pixels respectively. If this stripe image coded is by Huffman coding, determine its efficiency.	5M	CO3
	b)	Encode [a1,a3,a2,a1] using Arithmetic Coding P(a1)=0.2, P(a2)=0.6, P(a3)=0.2.	5M	CO3

~ All the best!!! ~

