C.U.SHAH UNIVERSITY Summer Examination-2018

Subject Name : Image Processing

	Subject	Code: 4TE08IMP1		Branch: B.Tech (EC)			
	Semester	::8 Date:	24/04/2018	Time : 02:30 To 05:30	Marks : 70		
	(1) U (2) I (3) I	 Instructions: (1) Use of Programmable calculator & any other electronic instrument is prohibited. (2) Instructions written on main answer book are strictly to be obeyed. (3) Draw neat diagrams and figures (if necessary) at right places. (4) Assume suitable data if needed. 					
Q-1		Attempt the follow	ving questions:			(14)	
	a) b)	Give a definition of What is a pixel?	f digital image.			01 01	
	c)	-	e required for cor	werting continuous image into d	igital image?	01	
c) Which processes are required for converting continuous image ind) Which parameters used for quality measures of digital image?				0	Igital Illage!	01	
	e)	How much storage capacity required to store 8-bit grayscale image with size of 256×256 .					
	f)	What is basic use of histogram in image processing?					
	g)	What types of filters are most effective on salt & pepper noise?					
	h)	Which sensor is mostly used for image acquisition?				01	
	i)	What is basic differ	rence between for	rier transform and wavelet trans	form?	01	
	j)	Write any 3×3 low pass filter mask for an image.					
	k)	Give full names of				01	
	l)	Enlist different colo				01	
	m)		_	ion of shapes and objects in an ir	nage?	01	
	n)	Write masks for sol	-			01	
Atte	mpt any f	our questions from	Q-2 to Q-8				
Q-2		Attempt all questi	ons			(14)	
		Explain basic comp				07	
	b)	Explain image sam	pling and quantiz	ation process in detail.		07	
Q-3	a) b)	-	any three gray lev	el transformations for image enh ain various types of histogram		(14) 07 07	
Q-4		Attempt all question		and distance measures		(14)	
	a)	Discuss about neigi		and distance measures.	Page 1 c	04	
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b) Draw a histogram of given matrix. Find out its normalized value.

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