Sea	t No.:	Enrolment No.									
		GUJARAT TECHNO M. E SEMESTER – I • EX									
	•	code: 710404N Name: Image Processing				D	ate:	06	6-06-2013		
	•	0.30 am – 01.00 pm			Total Marks: 70						
Ins		tions:									
		Attempt all questions.									
		Make suitable assumptions wh Figures to the right indicate fu		cessai	ry.						
Q.1	(a)	Write a short note on major com	-		_	_	_	-			
	(b)	Perform histogram specification to the 8*8 image given in table1 to the target level given in table2.									
			Table		ı	,					
		Grey levels(r _k)	0 1	2	3		5	6	7		
		Number of $pixels(p_k)$	8 10	10	2	12	16	4	2		
			Table	2							
		Grey levels(r_k)	0 1	2	0		5	6	7		
		Number of $pixels(p_k)$	0 0	0	0	20	20	16	8		
Q.2	(a)	•									
	(b)										
	(b)	Write a short note on HAAR transform.									
Q.3	(a)	What do you mean by image resi	toration? I	Explaii	n wie	ner fil	terin	g me	ethod.		
~	(b)	Apply DFT to the following sequence and verify whether it works.									
			$\mathbf{x} = \{1\ 2\}$	39}							
			OR								
Q.3	(a)	What is histogram? Explain histo			on in	detail					
	(b)	List the edge operators. Explain	LoG in de	tail.							
Q.4	(a)	Write a short note on hough transform. Compute the first difference of the code 0101030303323232212111. OR									
	(b)										
Q.4	(a)	Explain different types of color r	models in l								
	(b)	Prove the validity of the duality expressions $(A \to B)^c = (A^c B^c)$.									

Explain basic grey level transforms for Image Enhancement.

Discuss the application of Digital image Processing.

What do you mean by :co-occurrence matrixø? Explain.

Write a short note on Dilation and Erosion Morphological operations with

OR

(a)

(b)

(a)

(b)

suitable example.

Q.5

Q.5

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