Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

Subject Code: 2723103

ME SEMESTER-II • EXAMINATION – SUMMER 2015

Date: 28/05/2015

Ti	me:0	. Attempt all questions.	' 0
		Figures to the right indicate full marks.	
Q.1	(a)	What is digital Image? Explain the fundamental steps in digital image processing.	07
	(b)	What is image enhancement? What are different Methods of Image Enhancement?	07
Q.2	(a)	What is edge detection? Classify and explain with different Edge Detectors/Operators.	07
	(b)	Explain various point-wise operations.	07
		OR	
	(b)	Explain histogram equalization and logarithmic compression.	07
Q.3	(a)	Explain any one image acquisition technique.	07
	(b)	Short note on noise removal in the image.	07
		OR	
Q.3	(a)	Explain level set edge detection method.	07
	(b)	Explain geometric map transformation.	07
Q.4	(a)	Short note on Snakes- Active contour model.	07
	(b)	Short note on Skeletonization and its different techniques.	07
		OR	
Q.4	(a)	Briefly explain functional Neuroimaging.	07
	(b)	Explain in detail Markov random field method in image processing.	07
Q.5	(a)	Explain Diffusion Tensor Imaging.	07
	(b)	Short note on hypothesis testing.	07
		OR	
Q.5	(a)	Short note on Permutation test.	07
	(b)	Explain real time imaging application with an example.	07
