Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER-I(New course) • EXAMINATION - WINTER- 2015

Subject Code: 2712308			Date: 04/01/2016	
Subject Name: Image Processing Time:2:30 pm to 5:00 pm Instructions: Total Magnetic		rks: 70		
	2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a)	What is Histogram? Explain in detail process of Histogram Equalization.	07	
	(b)	Discuss image sampling and quantization.	07	
Q.2	(a) (b)			
	(b)	Explain Components of Digital Image Processing.	07	
Q.3	(a) (b)	Describe various steps performed in JPEG 2000. Explain Haar transform. OR		
Q.3	(a) (b)	Explain the filtering process in spatial domain of an image. Explain homomorphic filtering in detail.		
Q.4	(a) (b)	Explain how DCT can be useful in image processing. Write a brief note on Laplacian. OR	07 07	
Q.4	(a) (b)	Explain Hough transform in details. What do you meant by Color model? List the application of each color model. Explain any one color model in brief.	07 07	
Q.5	(a)	State and explain the various application of gray scale morphology.	07	
	(b)	Explain region growing and region splitting operation for image segmentation. OR	07	
Q.5	(a)		07	
	(b)	·	07	
