Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER IV (NEW) – EXAMINATION – SUMMER - 2017

Subject Code: 2740501 Subject Name: Video Processing Time:02:30PM-05:00PM Instructions:		Code: 2740501 Date: 03/05/20	Date: 03/05/2017 Total Marks: 70	
		2:30PM-05:00PM Total Marks:		
	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a) (b)	Describe Spatial Motion Model for Motion Estimation. Describe Vinegar Syndrome and its removal process.	07 07	
Q.2	(a) (b)	Describe various applications of Digital Video Processing. What are blotches? Describe blotch detection and its removal process. OR	07 07	
	(b)	What is Kinescope Moire phenomenon? Describe the process of Kinescope Moire removal.	07	
Q.3	(a) (b)	Explain Region based Segmentation. Explain template based object tracking method. OR	07 07	
Q.3	(a) (b)	Explain Spatial Change detection using two frame techniques. Explain Region based Object Tracking method.	07 07	
Q.4	(a)	With the help of block diagram, describe generalized video compression system.	07	
	(b)	Compare MPEG-1 and H.261 standards. OR	07	
Q.4	(a) (b)	Explain H.261 Encoder with neat sketch. Compare MPEG-1 and MPEG-2 Video Compression Standards.	07 07	
Q.5	(a)	Describe Human Visual System (HVS) based Image Quality Assessment (IQA) and Video Quality Assessment (VQA) methods.	07	
	(b)	Explain Feature based Video Quality Assessment System. OR	07	
Q.5	(a) (b)	Explain Multi-resolution filters to remove Spatiotemporal Noise. Draw and explain block diagram of MPEG4 part-2 encoder.	07 07	
