Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E.- SEMESTER-I • EXAMINATION – SUMMER • 2014

Subject Code: 711206N		Code: 711206N Date: 24-06-201	Date: 24-06-2014	
	Subject Name: Remote Sensing and Its Applications Time: 02:30 pm - 05:00 pm Instructions: Total Marks: 70			
1110		Attempt all questions.		
	2.	Make suitable assumptions wherever necessary.		
	3.	Figures to the right indicate full marks.		
Q.1	(a)	What do you understand by electromagnetic spectrum? Enlist various regions which are of some use in water resources management with their wavelengths.	07	
	(b)	What is multi spectral remote sensing? Explain it through sketches.	07	
Q.2	(a)	Explain -signaturesø, pixel size and scale.	07	
	(b)	Explain elements of visual interpretation in detail.	07	
		OR		
	(b)	Explain digital image processing in detail.	07	
Q.3	(a)	Explain side looking air borne radar system (SLAR).	07	
	(b)	Explain supervised and unsupervised image classification. OR	07	
Q.3	(a)	Explain image classification and analysis.	07	
	(b)	Explain Remote sensing and GIS synergy.	07	
Q.4	(a)	Describe imaging with microwave radar and show its usefulness in WRM.	07	
	(b)	Write a note on ENVI or ERDAS packages.	07	
	` /	OR		
Q.4	(a)	Explain different resolutions with their significance.	07	
	(b)	Explain thermal infra red remote sensing and detectors.	07	
Q.5	(a)	How remote sensing is used in management of watersheds?	07	
	(b)	Explain satellite characteristics, orbits and swath. Also discuss Instantaneous Field of View.	07	
		OR		
Q.5	(a)	Mention the role of remote sensing in environmental audits.	07	
	(b)	Explain Indian remote sensing program and also discuss characteristics of different space satellites.	07	
