Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER– V • EXAMINATION – WINTER 2016

Subject Code: 150606 **Date: 28/11/2016**
Subject Name: Disaster Assessment using Geospatial Techniques
Time: 10:30AM – 01:00PM **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	How can Geospatial Assessment Technique be helpful for minimizing the impact of an earthquake?	**07**
	(b)	What is Disaster? Explain the types of Disaster in brief.	**07**
Q.2	**(a)**	What is Sensors? Explain types of Sensors.	**07**
	(b)	Explain the systems of image and classification in remote sensing.	**07**
		OR	
	(b)	What are the applications of and GIS in disaster management?	**07**
Q.3	**(a)**	Explain different resolutions with their significance.	**07**
	(b)	Why analysis of Geospatial Data is required? Enumerate the methods used for the same and explain each method in short.	**07**
		OR	
Q.3	**(a)**	What are the advantages of GIS over map and Computer Aided Designs?	**07**
	(b)	Explain the function of DBMS.	**07**
Q.4	**(a)**	What are Raster and Vector? Write the basic differences between Raster and Vector.	**07**
	(b)	Explain various interaction of incident of Electromagnetic energy with the atmosphere in detail.	**07**
		OR	
Q.4	**(a)**	Explain types of Satellite Orbits.	**07**
	(b)	Draw a sketch to explain how a Remote Sensing System works to capture data and transfer it to the laser. State specific practical application of the infrared region of Electromagnic Spectrum.	**07**
Q.5	**(a)**	Explain platforms of Remote Sensing.	**07**
	(b)	Write a short note on: (1) ESRI (2) Network Analysis.	**07**
		OR	
Q.5	**(a)**	Why it is necessary to find out errors of GPS? Explain Atmospheric error and Satellite Clock error in detail.	**07**
	(b)	How is Data Reception, Transmission and Processing done in Remote Sensing?	**07**

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