

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE SEM-V Examination-Nov/Dec.-2011**

**Subject code: 150606**

**Date: 03/12/2011**

**Subject Name: Disaster Assessment using Geospatial Techniques**

**Time: 2.30 pm -5.00 pm**

**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) What are the seven elements in remote sensing? **07**  
(b) Explain platforms of remote sensing. **07**
- Q.2** (a) Explain image classification and analysis. **07**  
(b) Explain elements of visual interpretation. **07**
- OR**
- (b) What do you understand by image transformation and image enhancement? **07**
- Q.3** (a) Explain factors affecting microwave measurements. **07**  
(b) .Explain in brief GPS system with its application. **07**
- OR**
- Q.3** (a) Explain basic working principles of GPS measurements. **07**  
(b) Describe the process of radar remote sensing. **07**
- Q.4** (a) Why is GIS defined as a knowledge hub? **07**  
(b) What are raster and vector? Write the basic differences between raster and vector. **07**
- OR**
- Q.4** (a) What are the applications of GIS? **07**  
(b) Explain the function of DBMS. **07**
- Q.5** (a) Explain basics of relief and rescue operation by disaster assessment. **07**  
(b) Explain remote sensing and GIS synergy. **07**
- OR**
- Q.5** (a) Explain the different natural disasters and their effects in brief. **07**  
(b) Explain the major data sources of GIS. **07**

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