

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

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

## GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V (OLD) - EXAMINATION – SUMMER 2017

Subject Code: 150606

Date: 15/05/2017

Subject Name: Disaster Assessment using Geospatial Techniques (Institute Elective-II )

Time: 02:30 PM to 05:00 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) Explain the fundamental steps involved in digital image processing. **07**  
(b) What is Disaster? Explain the types of disaster in brief. **07**
- Q.2** (a) What is image enhancement in digital image processing? Explain contrast enhancement in brief. **07**  
(b) What is Sensor? Describe Air Born and Space Born sensors. **07**
- OR**
- (b) What is Radar? Explain Synthetic Aperture Radar (SAR) in brief. **07**
- Q.3** (a) Explain the working principle of GPS measurements. **07**  
(b) What are the applications of and GIS in Disaster management? **07**
- OR**
- Q.3** (a) Explain the advantages and limitations of Remote sensing. **07**  
(b) Write a short note on natural disasters. **07**
- Q.4** (a) Write a short note on Spectral Signature. **07**  
(b) Explain basics of relief and rescue operation by disaster assessment. **07**
- OR**
- Q.4** (a) What do you understand by ‘map’? State the difference between Thematic Maps and Topographic Maps. **07**  
(b) How can geospatial assessment technique minimize the impact of natural disasters? **07**
- Q.5** (a) Write a short note on GPS receivers. **07**  
(b) Give a brief idea about GSLV and PSLV. **07**
- OR**
- Q.5** (a) Explain the function of DBMS. **07**  
(b) Explain the role of GIS and RS in assessing the impact of floods. **07**

\*\*\*\*\*