Enrolment
-----------

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

## GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-VII(OLD) • EXAMINATION – WINTER 2016

	•	ect Code: 170606 Date: 18/11/2016	
	•	ect Name: Application of Geoinformatics in Civil Engineering artment Elective-I )	
	Time	e: 10:30 AM to 01:00 PM Total Marks: 70 actions:	
	insti u	<ol> <li>Attempt all questions.</li> <li>Make suitable assumptions wherever necessary.</li> <li>Figures to the right indicate full marks.</li> </ol>	
Q.1	(a) (b)	Enlist and explain various application of Geo-informatics in Civil Engineering. Define Remote Sensing. Explain the working principle of Remote sensing with neat sketch.	07 07
Q.2	(a) (b)	How GIS can be helpful in decision making of Urban Planning. Enlist and discuss various advantages and limitations of GIS.  OR	07 07
	<b>(b)</b>	Differentiate between: (1) Active and Passive Remote Sensing (2) Attribute data and Spatial Data	07
Q.3	(a) (b)	Discuss the working principle of GPS with neat sketch.  Write short notes on:  (1) Overlapping in Photogrammetry (2) Application of Photogrammetry	07 07
		OR	
Q.3	(a) (b)	State various applications of GPS in civil Engineering.  Differentiate between image enhancement and image interpretation. Also enlist various elements of photo interpretation.	07 07
Q.4	(a) (b)	Enlist various softwares used for Remote Sensing and explain any two in detail. Discuss about use of spectral reflectance curve for vegetation and water with neat sketch.	07 07
		OR	
Q.4	(a) (b)	Enlist various softwares used for GIS and explain any two in detail.  Describe the Raster and Vector model with suitable example.	07 07
Q.5	(a)	Discuss about integrated application of Remote sensing and GIS for the planning of flood water diversion plan.	07
	<b>(b)</b>	Write short notes on: (1) Digitization (2) Georeferencing	07
Q.5	(a)	OR  Discuss about integrated application of Remote sensing and GIS for the planning of smart city.	07
	<b>(b)</b>	Write short notes on: (1) Flight planning (2) Components of GIS	07

\*\*\*\*\*