Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

ME – SEMESTER II (OLD) – • EXAMINATION – SUMMER 2016

Subject Code: 1721311 **Date:21/05/2016**

Subject Name: Geo-Spatial Techniques

Time:10:30 am to 01:00 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 is Geo-informatics? Explain the basic concepts of GIS.	**07**
	(b)	Discuss the concept of spectral signature. What is its significance in remote sensing?	**07**
Q.2	**(a)**	Discuss spatial resolution, spectral resolution and temporal resolution.	**07**
	(b)	What are the elements of visual image interpretation? Discuss each in brief.	**07**
		OR	
	(b)	What are different GIS data model? Explain them in brief.	**07**
Q.3	**(a)**	What are different applications of GIS?	**07**
	(b)	Discuss integrated GIS data system.	**07**
		OR	
Q.3	**(a)**	How is geospatial analysis done? Explain.	**07**
	(b)	Explain different image processing functions.	**07**
Q.4	**(a)**	What is GPS? Explain its basic components and concepts.	**07**
	(b)	Describe the factors affecting GPS and add a note on GPS errors.	**07**
		OR	
Q.4	**(a)**	Discuss various GIS software packages available in market.	**07**
	(b)	How is Remote Sensing, GIS and GPS integrated?	**07**
Q.5	**(a)**	Write note on (Any 2)	**14**

1. Cartography.
2. Vector and Raster data.
3. Air photo interpretation.
4. DTM.

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