Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA – SEMESTER-V • EXAMINATION – SUMMER 2016

Subject Code: 650013 **Date: 13/05/2016**

Subject Name: Geographical Information System

Time: 10:30 AM to 01:00 **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)	Answer the following question in short. (1) Define term : GIS (2) What do you mean by matadata in GIS? (3) What is the main difference between GIS & CAD (computer – aided drafting)? (4) What is absolute location in GIS? (5) What is buffer in GIS? (6) What is Euclidean distance in GIS? (7) What do you mean by projection?	07
	(b)	Attempt the following questions	
		(1) Write short note on three point distribution patterns.	03
		(2) Write short note on neighborhood functions.	04
Q.2	(a)	Write short note on different methods of surveying the land.	07
	(b)	What is a hierarchical database structure? How does it work? What are its limitations, especially for GIS?	07
		OR	
	(b)	Explain Raster attribute errors in details with diagram.	07
Q.3	(a)	Explain different types of centroid in higher level point objects with diagram.	07
	(b)	Explain Slicing the statistical surface with diagram.	07
		OR	
Q.3	(a)	Explain MAP Projection with different types.	07
	(b)	Explain Cartographic model with diagram.	07
Q.4	(a)	Write short note on measuring length of linear objects.	07
	(b)	What is filter? Explain different types of it.	07
		OR	
Q.4	(a)	Explain methods of Raster data input in details.	07
Q.4	(b)	Explain Topological Vector Overlay in details.	07
Q.5	(a)	What is Noncartographic output? Explain its type.	07
	(b)	Explain Spatial Measurement Level with diagram.	07
		OR	
Q.5	(a)	Write short note on Matadata standards.	07
	(b)	Explain Pseudo nodes with its types.	07

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