Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER–V • EXAMINATION – SUMMER • 2014

Subject Code: 650013 **Date: 02-06-2014**

Subject Name: Geographical Information System

Time: 10:30 am - 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)**	Definition of GIS and Evolution of GIS.	**07**
	(b)	What do you mean by Map Projection? Explain different types with example.	**07**
Q.2	**(a)**	Elaborate cartesian coordinate system for Geographical Information System.	**07**
	(b)	Explain different methods of compacting raster data.	**07**
		OR	
	(b)	Write short note on input subsystem.	**07**
Q.3	**(a)**	Explain file structures with suitable figure.	**07**
	(b)	Explain Gravity Model with suitable example.	**07**
		OR	
Q.3	**(a)**	Explain higher level point object with suitable figure.	**07**
	(b)	How to calculate Perimeter and Length of Polygons?	**07**
Q.4	**(a)**	Explain high pass filter and low pass filter.	**07**
	(b)	Explain different types of buffers of reclassification process.	**07**
		OR	
Q.4	**(a)**	Explain Nonlinear interpolation method with figure.	**07**
	(b)	Explain sliver polygons and wired polygons with figure.	**07**
Q.5	**(a)**	Give principles of cartographic design in GIS.	**07**
	(b)	Write short note on map design control in GIS output.	**07**
		OR	
Q.5	**(a)**	Discuss Connectivity and circuitry of Linear Objects.	**07**
	(b)	Describe Digital elevation model (DEM) in detail.	**07**

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