

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER-V • EXAMINATION – WINTER 2015

Subject code: 650013

Subject Name: Geographical Information Systems (GIS) Date: 10/12/2015

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) Answer the following question in short. **07**
(1) What are the spatial elements in GIS?
(2) Define term: Attribute Data.
(3) What is GIS?
(4) What is DEM?
(5) What is the different between data and information?
(6) What is a model?
(7) Define term: Entity and Attribute.
- (b) Attempt the following.
(1) What do you mean by simple lists file? **02**
(2) What is GPS? **02**
(3) Define term: Digitizing. **02**
(4) Give Definition: Data Stream. **01**
- Q.2** (a) What are the methods of raster GIS data model? **07**
(b) Explain different type of spatial measurement level. **07**
- OR**
- (b) Write short note on map projection. **07**
- Q.3** (a) What are basic methods of raster data input? **07**
(b) Explain high level line object with different type of network. **07**
- OR**
- Q.3** (a) Write short note on interpolation method. **07**
(b) Describe the approach to identifying high level point objects. **07**
- Q.4** (a) How to measuring polygons? **07**
(b) Discuss the different type of regions. **07**
- OR**
- Q.4** (a) Explain the revolving window of filter. **07**
Q.4 (b) Write short note on types of buffer. **07**
- Q.5** (a) Write short note on cartographic map output. **07**
(b) Explain the various point pattern in spatial arrangement. **07**
- OR**
- Q.5** (a) Explain various types of map design control. **07**
(b) Explain gravity model with suitable example. **07**
