

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER-V EXAMINATION – WINTER 2018

Subject Code: 2650013

Date: 28/11/2018

Subject Name: Geographical Information System

Time: 10.30 am to 1.00 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) Explain Overview of Four Subsystems of GIS **07**
(b) Explain spatial location and reference. Explain MAP Scale. **07**
- Q.2** (a) Explain any two input device to provide primary data to GIS. **07**
(b) Elaborate Polar coordinate system for Geographical Information System. **07**
- OR
- (b) Explain map projection with its types in detail. **07**
- Q.3** (a) Write short note on calculating polygon length & perimeter with example. **07**
(b) Describe Metadata and Metadata standard with all its category. **07**
- OR
- Q.3** (a) What is Error in Digitizing Process? Explain Errors for Raster and Vector. Also explain the Rubber Sheeting. **07**
(b) Explain different file structure for data storage. **07**
- Q.4** (a) Explain the reclassification method Buffering with various types of Buffers. **07**
(b) Explain Inductive and Deductive modeling. **07**
- OR
- Q.4** (a) Write short note on Nonlinear Interpolation methods in surface with types. **07**
(b) Explain High pass filter and low pass filter. **07**
- Q.5** (a) Which are non-cartographic outputs available for GIS? Explain them. **07**
(b) Write a short note on map design control in GIS output. **07**
- OR
- Q.5** (a) Give the example of cartographic model implementation and verification. **07**
(b) Explain Line in Polygon overlay calculation with diagram. **07**
