

GUJARAT TECHNOLOGICAL UNIVERSITY
BPLAN – SEMESTER V– • EXAMINATION – WINTER 2016

Subject Code: 1055505**Date:26/10/2016****Subject Name: Geo-Informatics for Planning****Time:10:30 AM to 12:30 PM****Total Marks: 50****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** From the list given below identify which is spatial data and attribute data **06**
- A. Cities
 - B. Hotels
 - C. Roads Type
 - D. Rivers
 - E. Lakes
 - F. Name
- (b)** Define following terms: (Any Four) **04**
- (1) Remote Sensing
 - (2) Spatial Resolution
 - (3) Information
 - (4) Information System
 - (5) Map Projection
- Q.2 (a)** Select the correct full form of abbreviation (Any five) **05**
- i) GIS

(a) Geographic Intelligent Science	(b) Geographic Information System
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 - ii) IFOV

(a) Instantaneous Field of View	(b) Inter File of Varity
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 - iii) NNRMS

(a) Natural nation Ruler Management System	(b) National Natural Resources Management System
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 - iv) DBMS

(a) Data Base Management System	(b) Drastic Barcode Management System
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 - v) NUIS

(a) National Urban Information System	(b) Natural Urban Information System
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 - vi) RS

(a) Remote Sensing	(b) Remote Science
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 - vii) EMR

(a) Entopic Management and Registration	(b) Electro-magnetic Radiation
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- (b)** What are the Limitation of Traditional Surveying? **05**
- OR**
- (b)** Explain Geo-Stationary and Sun-Synchronous Satellites **05**
- Q.3 (a)** Explain the Components of a GIS in detail **05**

(b) Explain any five applications of GIS 05

OR

Q.3 (a) Calculate the area for each land use from the given table below. Here the cell size of each pixel is 30 x 30 Meters 05

Class Name	Number of pixel	Area in square meters
Agriculture	828	
Urban	378	
Waste land	272	
Water Body	635	

(b) Write five Applications of Raster data with explanation 05

Q.4 (a) Write a short note on Vector Data 05

(b) Write Advantage and Disadvantage of Vector data 05

OR

Q.4 (a) Write how where thematic mapping can be used in studying the urban sprawl 05

(b) Explain in detail using diagrams how survey data can be integrated in shape files 05

Q.5 (a) Explain any five terms of the data types in a Geodatabase (Any five) 10

- I. **Feature Class**
- II. **Feature Dataset**
- III. **Table**
- IV. **Geodatabase**
- V. **Topology**
- VI. **Relationship class**
