Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

ME – SEMESTER II– EXAMINATION – WINTER - 2016

Subject Code: 2724803		Date: 19/11/2016	
ne: 2 cructio 1. 2.	2:30 pm to 5:00 pm ons: Attempt all questions. Make suitable assumptions wherever necessary.	Total Marks:	70
(a) (b)	Explain the key components of GIS. What are the three views in GIS? Explain each in brief.		07 07
(a) (b)	GIS is an information infrastructure. Justify the statement. Enlist the functions and applications of GIS. OR		07 07
(b)	Enlist functional requirements of GIS.		07
(a) (b)	Explain the concept of database, DBMS and RDBMS. What are the data models in GIS? Explain with example. OR		07 07
(a) (b)	What is the role of metadata in GIS? Differentiate between field-based and object-based raster mode.		07 07
(a) (b)	Explain various data compression techniques. Explain encoding of vector data.		07 07
(a)	Define the terms in context of a map: (1) orientation, (2) scale	e, (3) detail, (4)	07
(b)	Explain the classification of map projection.		07
(a)	Define the terms in context of remote sensing: (1) electromagne absorption, (3) scattering, (4) refraction, and (5) reflection.	tic radiation, (2)	07
(b)	Discuss about orbital characteristics of a satellite.		07
(a) (b)	Classify the resolutions in context of remote sensed images. Prepare a detailed note on GNSS.		07 07
]	(a) (b) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	bject Name: Geospatial Techniques and Planning me: 2:30 pm to 5:00 pm ructions: 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. (a) Explain the key components of GIS. (b) What are the three views in GIS? Explain each in brief. (a) GIS is an information infrastructure. Justify the statement. (b) Enlist the functions and applications of GIS. OR (b) Enlist functional requirements of GIS. (a) Explain the concept of database, DBMS and RDBMS. (b) What are the data models in GIS? Explain with example. OR (a) What is the role of metadata in GIS? (b) Differentiate between field-based and object-based raster mode. (a) Explain various data compression techniques. (b) Explain encoding of vector data. OR (a) Define the terms in context of a map: (1) orientation, (2) scal accuracy, and (5) resolution. (b) Explain the classification of map projection. (a) Define the terms in context of remote sensing: (1) electromagne absorption, (3) scattering, (4) refraction, and (5) reflection. OR (a) Classify the resolutions in context of remote sensed images.	bject Name: Geospatial Techniques and Planning me: 2:30 pm to 5:00 pm Total Marks: ructions: 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. (a) Explain the key components of GIS. (b) What are the three views in GIS? Explain each in brief. (a) GIS is an information infrastructure. Justify the statement. (b) Enlist the functions and applications of GIS. OR (b) Enlist functional requirements of GIS. (a) Explain the concept of database, DBMS and RDBMS. (b) What are the data models in GIS? Explain with example. OR (a) What is the role of metadata in GIS? (b) Differentiate between field-based and object-based raster mode. (a) Explain various data compression techniques. (b) Explain encoding of vector data. OR (a) Define the terms in context of a map: (1) orientation, (2) scale, (3) detail, (4) accuracy, and (5) resolution. (b) Explain the classification of map projection. (a) Define the terms in context of remote sensing: (1) electromagnetic radiation, (2) absorption, (3) scattering, (4) refraction, and (5) reflection. OR (a) Classify the resolutions in context of remote sensed images.
