Seat	: No.:	Enrolment No	
		<b>GUJARAT TECHNOLOGICAL UNIVERSITY</b>	
~ •		M. E SEMESTER – II • EXAMINATION – SUMMER • 2014	
Subject code: 1721311 Date: 25-06-2014 Subject Name: Geo - Spatial Techniques Time: 02:30 pm - 05:00 pm Total Marks: 70			
		tions:	
1. Attempt all questions.			
	2.	Make suitable assumptions wherever necessary.	
	3.	Figures to the right indicate full marks.	
Q.1	(a)	Show divisions of electromagnetic spectrum and discuss on suitability of different wave length groups for remote sensing.	07
	<b>(b)</b>	Differentiate and explain active and passive remote sensing.	07
Q.2	(a)	Define: Arc, Attribute, Azimuth, Geoid, Layer, Pixel, Tessellation.	07
	<b>(b)</b>	Describe different spectral bands with their applications in remote sensing.	07
	(b)	OR Enlist various elements of image interpretation and briefly explain each of it.	07
0.3	` ´	Discuss properties of RS.	07
Q.3	(a) (b)	Enlist applications of GIS in various fields.	07
		OR	
Q.3	(a)	Elaborate on DBMS and RDBMS.	07
	<b>(b)</b>	How to minimize errors in GIS database? Explain for various error types.	07
Q.4	(a)	Explain the concept of geo-referencing.	07 07
	<b>(b)</b>	Classify maps. Also, discuss various map scales used in GIS.  OR	U /
Q.4	(a)	Write short note on: Cartography.	07
	<b>(b)</b>	Explain the run-length, chain, block and quad tree encoding.	07
Q.5	(a)	Explain the working principle of GPS.	07
	<b>(b)</b>	What are proximity polygons? How these are useful in GIS?	07
Q.5	(a)	OR Elaborate in detail: Geodesy.	07
	(b)	Briefly explain: (1) DGPS; (2) DTM.	07

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