Tota	l No.	of Questions : 8] SEAT No. :			
P72	28	[Total No. of Pa	iges: 2		
		[5870] 1013			
		T.E. (Civil)			
	RE	EMOTE SENSING & GEOGRAPHIC INFORMATION	[		
		SYSTEM			
		(2019 Pattern) (Semester - II)			
Time	e: 2½	[Max. Mari	ks : 70		
Instructions to the candidates:					
	1)	Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.			
	2)	Figures to the right side indicate full marks.			
	<i>3) 4)</i>	Assume suitable data, if necessary.  use of electronic pocket calculator is allowed in the examination.			
	5)	Neat diagrams must be drawn wherever necessary.			
<b>Q</b> 1)	a)	Describe Global Navigation satellite system in detail.	[6]		
	b)	Explain the necessity of GNSS in various fields.	[6]		
	c)	Compare different GNSS systems throughout the world.	[5]		
		OR			
<b>Q2</b> )	a)	Define IRNSS and illustrate its structure.	<b>[6]</b>		
	b)	Define DGPS. Write sources of errors of DGPS.	<b>[6]</b>		
	c)	Write Advantages of GPS.	<sup>(5)</sup> [5]		
			Y		
<i>Q3</i> )	a)	List the image interpretation keys and explains any two in detail w			
		help of necessary diagram.	[6]		
	b)	Describe digital image classification (supervised & unsupervised)	). [6]		
	c)	Define Triangular Irregular network Model (TIN) and its application	ons.[ <b>6</b> ]		
		OR OR			
<b>Q4</b> )	a)	What is Digital Image Processing? What are the most common processing functions.	image <b>[6]</b>		

Differentiate between Visual and Digital image interpretation.

processing functions.

State the application of DEM.

b)

c)

**[6]** 

**[6]** 

**[6]** 

*P.T.O.* 

<i>Q5</i> )	a)	Write in detail about various components of GIS.	[6]
	b)	Illustrate Cloud computing with types and applications.	[6]
	c)	Define Database? Name the types of data base.	[5]
		OR	
<b>Q6</b> )	a)	Write a note on fundamentals of Cartography and map creation in GIS	5.[6]
	b)	Define Geographical Information system and state spatial data types	s. <b>[6]</b>
	c)	Enlist the applications of GIS in Civil Engineering & Explain any on	
		detail.	[5]
<i>Q7</i> )	a)	Define Raster and Vector Data types. Explain with neat diagram.	[6]
	b)	Explain the application of GIS in Demarcation of Dam Catchment.	[6]
	c)	What is Georeferencing of GIS data? And explain its importance in	
	X	field of GIS?	[6]
		OR	
<b>Q</b> 8)	a)	Enumerate different Attribute Data models and explain any one of th	em. [ <b>6</b> ]
	b)	Write GIS data types and its representation.	
	,	Explain the application of CIS in Italian Planning	
	c)	Explain the application of GIS in Urban Planning.	101
		Explain the application of GIS in Orban Planning.	,0
		8,	
		Write GIS data types and its representation.  Explain the application of GIS in Urban Planning.	