CLASS:	M.TECH	SEMESTER : III
BRANCH:	REMOTE SENSING	SESSION : MO/19

SUBJECT: RS602 DATA SOURCES, STATISTICS AND RESEARCH METHODS IN GEOSPATIAL DOMAIN

TIME: 3 HOURS	FULL MARKS: 50

INSTRUCTIONS:
1. The question paper contains 5 questions each of 10 marks and total 50 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Before attempting the question paper, be sure that you have got the correct question paper.
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

Q.1(a)	How can geospatial research problems be understood? Explain with example.	[5]
Q.1(b)	Describe and justify requirements of geospatial data for research.	[5]
Q.2(a)	Discuss National and International projects with some examples.	[5]
Q.2(b)	Describe geospatial data providers at global and national level.	[5]
Q.3(a)	(i) Why do we need to carry out statistical tests in Research?	[5]
	(ii) Explain Student T-Test.	
	(iii) When you will use ANOVA in your Research?	
Q.3(b)	You are told to make a Height reading at a location. The observations you got at different times are as below: 78.23, 78.54,79.04,78.4, 79.35, 78.90,78.5, 79.22,78.99, 79.44, 77.23, 78.87, 79.05, 78.66, 78.90, 79.33	[2+2+1=5]
	(i) Estimate the Standard Error in this Observation.	
	(ii) What is the probable value range of x at 95% confidence interval?	
Q.4(a)	(i) Differentiate Qualitative and Quantitative Research (QR) in Detail.	[2+2+1=5]
	(ii) What are the difficulties in Qualitative research?	
	(iii) Give 5 different applications where you will apply Questionnaire based survey?	
Q.4(b)	(i) Name 10 different Geoinformatics Tools you are aware of?	[2.5+2.5=5]
	(ii) Name 5 different Research Models used in Forestry, Geology and Water resources domain.	
Q.5(a)	(i) What is Plagiarism in Research?	[2+3=5]
	(ii) Explain the Terminologies: h-index, impact factor, citescore.	
Q.5(b)	(i) Compare different styles of Referencing.	[4+1=5]
	(ii) What is the difference between Bibliography and Reference?	