

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END SEMESTER EXAMINATION)

CLASS: M.Tech.  
BRANCH: REMOTE SENSING

SEMESTER : II  
SESSION : SP/22

SUBJECT: RS 521 DATA SOURCES, STATISTICS AND RESEARCH METHODS IN GEOSPATIAL DOMAIN

TIME: 2 Hours

FULL MARKS: 50

**INSTRUCTIONS:**

1. Answer all questions
2. Marks for each question is indicated against the respective questions

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- Q.1(a) In geospatial research domain, what are the types of various geospatial data required? Give a concise account with suitable examples from national and international projects. [6]
- Q.1(b) Discuss two significant international and national web-based sources each providing access to geospatial data for research. [5]
- Q.2(a) What are the contents of a research proposal? Elaborate [6]
- Q.2(b) What is the difference between a section and a paragraph? Give example of a coherent paragraph [5]
- OR
- What is a topic sentence paragraph? Explain structure of a topic sentence paragraph with an example.
- Q.3(a) a. Classify sampling techniques, graphically. [3]
- b. What is the difference between probability-based sampling vs. non-probability based sampling. [2]
- Q.3(b) Explain with example: [5]
- a) Z test
- b) Chi-square test
- Also mention when will you use each one of them.
- Q.4(a) What is understood by quantitative and qualitative research? Elaborate the differences between these two types of research [5]
- Q.4(b) What are research techniques and tools? Give a short narration. [5]
- Q.5(a) Explain following terms with examples: Impact Factor and h-index [4]
- Q.5(b) Write short notes on any two models: i. SRM ii. PRMS iii. HBV iv. UBC Model [4]

:::29/04/2022:::