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

CLASS: MSC **SEMESTER: II BRANCH: GEOINFORMATICS** SESSION: SP/19 SUBJECT: GI510 RESEARCH METHODS AND STATISTICS IN GEOINFORMATICS TIME: 3.00 Hrs. **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 a research problem is formulated? [5] Write a Geospatial problem statement in the context of usability of satellite data. [5] Q.1(b) Q.2(a) Write significance of literature review. [5] Q.2(b) Write the components of a project proposal. [5] Q.3(a) What are 'population', 'sample' and 'sampling frame'? Elaborate Probability and Non-Probability [5] sampling methods. Q.3(b) What is meant by 'distribution'? Describe properties of distribution viz. shape, central tendency and [5] variability vis-à-vis representation as graphs & tables. Q.4(a) What are the 'basic principles of research design'? Describe. [5] Q.4(b) Distinguish between quantitative and qualitative data. [5]

:::::26/04/2019 M::::

What are citations and how can citation index be a measure of quality of a research paper? Demonstrate

[5]

What are the elements of a project communication document?

Q.5(a)

Q.5(b)

with suitable examples.