

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

CLASS: MSC
BRANCH: GEOINFORMATICS

SEMESTER : I
SESSION : MO/19

SUBJECT: GI504 ADV. IMAGE ACQUI. & INT. FOR ENV. MAPPING
TIME: 3.00Hrs.

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.
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- Q.1(a) What are characteristic features of igneous rocks? [5]
Q.1(b) What are important sedimentary and how they are interpreted on satellite data? [5]
- Q.2(a) Explain the effect of radiometric resolution on the tones and texture of (i) stagnant water bodies, (ii) homogeneous grassland, and (iii) mixed forest respectively on standard false color composite (FCC). [5]
Q.2(b) Describe the different coastal erosional landforms with the help of suitable diagrams. [5]
- Q.3(a) Write the various satellite data available from Bhuvan along with their spatial resolutions. [5]
Q.3(b) Write the three important satellite data and three data products available from USGS GloVis. [5]
- Q.4(a) Explain the functioning mechanism of LIDAR with the help of suitable diagram. [5]
Q.4(b) Explain the different types of data acquisition modes of SAR with the help of suitable diagram. [5]
- Q.5(a) What are different advance satellite sensors? [5]
Q.5(b) Write a short note on satellite sensors available for soil moisture estimation. [5]

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