

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

CLASS: MSC/PRE-PHD
BRANCH: MGI/RS

SEMESTER : I/NA
SESSION : MO/19

SUBJECT: GI501 PRINCIPLES OF REMOTE SENSING

TIME:

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) (i) Explain: Scattering, Reflectance and Atmospheric Windows. [5]
Q.1(b) (i) What do you understand by Spectral Signature? [2+3]
(ii) Explain the real-life spectral signature characteristics of Vegetation and Water.
- Q.2(a) Compare Geo-Synchronous and Sun Synchronous satellite systems from Remote Sensing Perspective. [5]
Q.2(b) Compare Multispectral and Hyperspectral Satellites in terms of their data and usability. [5]
- Q.3(a) Explain BIL, BSQ, BIP with proper diagram. [5]
Q.3(b) Explain different levels involved in Satellite Product Generation using Flow Chart. [5]
- Q.4(a) Evaluate thermal remote sensing and optical remote sensing. [5]
Q.4(b) Evaluate Microwave remote sensing and optical remote sensing. [5]
- Q.5(a) (i) Why Ground Truthing is important in Remote Sensing Studies? [2+3]
(ii) What are the ground truth measurements you take in remote sensing studies.
Q.5(b) How you will utilise remote sensing for Water Resources Applications. Explain in detail. [5]

::::::25/11/2019::::::E