

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

**CLASS: M.SC
BRANCH: GEOINFORMATICS**

**SEMESTER : I
SESSION : MO/18**

SUBJECT: GI504 ADV. IMAGE ACQUISITION & INTERPRETATION FOR ENV. MAPPING
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.
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- Q.1(a) What are image characteristics of major sedimentary rock types? [5]
Q.1(b) How ore deposits of iron and bauxite minerals can be detected on satellite data? [5]
- Q.2(a) Write advantages and disadvantages of visual and digital interpretation. [5]
Q.2(b) What are image interpretation keys? How will you distinguish on optical satellite data: 1. fallow land and crop land, 2. forest and plantation, 3. water bodies and marshy land 4. palaeo-channels and ox-bow lakes? [5]
- Q.3(a) Describe (a) GLOVIS (B) IPMUS Terra (c) MOSDAC [5]
Q.3(b) Describe in detail about BHUVAN and WRIS Online Satellite data dissemination systems and their applications. [5]
- Q.4(a) What is LIDAR? Discriminate Discrete and Full Form LIDAR. Evaluate the information extraction capability of different LIDAR returns. [5]
Q.4(b) Name Different Types of UAV? Give a detailed writeup on UAV based natural resources assessment Planning. [5]
- Q.5(a) Explain the sensors and the technicalities involved in measuring (a) Gravity (b) Rainfall (c) Atmospheric Studies. [5]
Q.5(b) List 5 sensors required for (a) City Level Planning (b) District Level Planning and (c) Regional Level Planning. [5]

:::07/12/2018 M:::