

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

**CLASS: MSc
BRANCH: ENVIRONMENTAL SCIENCE & MANAGEMENT**

**SEMESTER : II
SESSION : SP/2025**

SUBJECT: ES510 REMOTE SENSING AND GIS

TIME: 3 Hours

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)	Diagrammatically explain the process of Remote Sensing	[5]	1 2
Q.1(b)	Explain why vegetation appears in various shades of Red in an FCC	[5]	1 2
Q.2(a)	Compare Imaging and non imaging sensors and Active and passive sensors	[3]	2 3
Q.2(b)	What are the various image interpretation keys. Give examples for each.	[7]	2 2
Q.3(a)	What are the various platforms in remote sensing	[5]	3 2
Q.3(b)	Using suitable example- give the applicability of UAVs in biodiversity conservation	[5]	3 4
Q.4	Explain the various image processing tools and their benefits	[10]	4 3
Q.5(a)	Compare raster and Vector data using suitable examples	[5]	5 2
Q.5(b)	How can GIS be used in Environmental management	[5]	5 3

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