

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION SP/2025)

CLASS: B.TECH
BRANCH: ECE/CHEM OPEN ELECTIVE(OE)

SEMESTER : IV
SESSION : SP/2025

SUBJECT: GI501 PRINCIPLES OF REMOTE SENSING

TIME: 02 Hours

FULL MARKS: 25

INSTRUCTIONS:

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates

	Marks	CO	BL
Q.1(a) Which wavelength range of EMR is used to find out chemical composition of target object through remote sensing and what is that range?	[2]	CO1	BL2
Q.1(b) Differentiate reflection and scattering. Which is more important in optical remote sensing?	[3]	CO1	BL3
Q.2(a) What is spectral response?	[2]	CO1	2
Q.2(b) Draw spectral response of any three major LU/LC features.	[3]	CO1	1
Q.3(a) What do you understand by spatial resolution? Explain its relevance.	[2]	CO1	4
Q.3(b) Bring out the difference between the multispectral scanners and Panchromatic scanners.	[3]	CO2	2
Q.4(a) What is the difference between Wisk and Push broom sensors.	[2]	CO2	2
Q.4(b) How are Sun Synchronous satellites different from Geo-synchronous satellites? Explain.	[3]	CO2	2
Q.5 Give a detailed classification of sensors.	[5]	CO2	1

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