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

CLASS: OE **SEMESTER : VII**
BRANCH: ALL **SESSION : MO/2024**

SUBJECT: GI501 PRINCIPLES OF REMOTE SENSING

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.

			CO	BL
Q.1(a)	Describe the components of remote sensing from the energy source to the end user.	[5]	1	2
Q.1(b)	Explain Spectral, Spatial, Temporal, and Radiometric resolution.	[5]	1	2
Q.2(a)	What is a Platform? Distinguish between Sun-synchronous and Geosynchronous satellites.	[5]	2	2
Q.2(b)	Explain Active Sensor and Passive Sensor with suitable example.	[5]	2	2
Q.3(a)	Write a note on any three Satellite Data formats	[5]	3	2
Q.3(b)	What are open data sources in remote sensing. Explain.	[5]	3	2
Q.4(a)	What is Thermal Remote Sensing? write about its application?	[5]	4	2
Q.4(b)	Show with a figure the following angles for a flat terrain in a Radar: Look angle, Depression angle, Angle of incidence, Azimuth direction and Range direction	[5]	4	2
Q.5(a)	Explain why ground truth is a necessary part of Remote Sensing.	[5]	5	3
Q.5(b)	Draw the spectral reflectance curve of vegetation and explain it.	[5]	5	2

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