BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION MO/2023)

CLASS: B TECH   SEMESTER : VII
BRANCH: OE-CIVIL   SESSION : MO/2023

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

			CO	BL
Q.1(a)	What is Remote Sensing? Difference between scattering and transmission.	[2]	CO1	BL1
Q.1(b)	Explain in detail with a diagram about the different steps of the image acquisition process	[3]	CO1	BL3
Q.2(a)	Short note on Atmospheric Window	[3]	CO1	BL2
Q.2(b)	Compare the Sun Synchronous and Geo Synchronous Satellite	[2]	CO2	BL2
Q.3(a)	Explain in detail the mechanism of whisk broom and push broom scanners with the illustration	[2]	CO2	BL3
Q.3(b)	What do you understand about hyperspectral satellites and write down the advantages over multi spectral satellites?	[3]	CO2	BL2

Q.4   Explain the BIL format with the following data   [5]   CO3   BL3

	Band1	Band2	Band3
Line 1	53 62 21	33 44 56	93 34 55
Line 2	56 32 44	57 87 10	85 43 33
Line 3	45 54 73	37 59 22	21 27 38

Q.5(a)	What do you understand by Open Data Sources.	[2]	CO5	BL1
Q.5(b)	Explain any one Open Data Source useful for RS Data.	[3]	CO5	BL2

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