

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

**CLASS: MTECH/PRE-PHD
BRANCH: REMOTE SENSING**

**SEMESTER : I
SESSION : MO/2025**

SUBJECT: RS517 REMOTE SENSING IN CLIMATE CHANGE AND ENVIRONMENTAL IMPACT ASSESSMENT

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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		CO	BL
Q.1(a)	How do weather and climate differ? How can they be perceived as parameters to be observed on different time scales and by different experts?	[5] 1	2
Q.1(b)	What are the greenhouse gases (GHGs)? How do natural and anthropogenic causes lead to rise in GHG and Global warming leading to climate change?	[5] 1	3
Q.2(a)	How are plants affected by changes in carbon dioxide levels in the atmosphere?	[5] 2	2
Q.2(b)	Discuss the present scenario between increasing population and changing climate effect on agriculture	[5] 2	3
Q.3(a)	How can glaciers be significant as climate change indicators?	[5] 3	3
Q.3(b)	What parameter of glacier can be studied temporally using remote sensing to infer its health?	[5] 3	4
Q.4(a)	What is the environmental impact assessment (EIA)? Why do we need EIA?	[5] 4	3
Q.4(b)	Write down the difference between EIA and EMP. How ecological and economical effects can be minimised by EIA?	[5] 4	4
Q.5(a)	What is understood by United Nations Framework Convention on Climate Change (UNFCCC)? Elaborate its inception and follow-up roles.	[5] 5	3
Q.5(b)	What is the Intergovernmental Panel on Climate Change (IPCC)? How does it function to safeguard the World from Global Warming?	[5] 5	4

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