

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

**CLASS: MTECH.  
BRANCH: REMOTE SENSING**

**SEMESTER : I  
SESSION : MO/2024**

**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.

---

		CO	BL
Q.1(a)	How can 'Weather' and 'Climate' be differentiated? Discuss.	[5]	1 2
Q.1(b)	How do 'El Nino' and 'La Nina' events of ENSO cycle take place? How do they influence drought or flood conditions regionally?	[5]	1 3
Q.2(a)	How are plants affected by changes in carbon dioxide levels in the atmosphere?	[3]	2
Q.2(b)	Define Drought? Name two different drought monitoring techniques and explain one of the different drought monitoring techniques in detail.	[3]	2 3
Q.2(c)	Discuss the present scenario between increasing population and changing climate effect on agriculture.	[4]	2 3
Q.3(a)	What is understood by Equilibrium Line Altitude (ELA) and Mass Balance of glaciers?	[5]	3 4
Q.3(b)	How can the impact of climate change be inferred through glacier health?	[5]	3 5
Q.4(a)	What is the impact assessment? Why do we need EIA?	[5]	4 3
Q.4(b)	What are the important components of EIA? Write down the details of it.	[5]	4 4
Q.5(a)	When and where was the United Nations Framework Convention on Climate Change (UNFCCC) signed? What are the significant mandates of it?	[5]	5
Q.5(b)	What is the Intergovernmental Panel on Climate Change (IPCC)? How does it function to safeguard the World from Global Warming?	[5]	6

:::::::22/11/2024:::::::E