

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

**CLASS: M SC  
BRANCH: GEOINFORMATICS**

**SEMESTER : II  
SESSION : SP/2023**

**SUBJECT: GI514R1 GEOINFORMATICS FOR 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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		<b>CO</b>	<b>BL</b>
Q.1(a) Describe the difference between weather and climate.	[5]	1	3
Q.1(b) Describe ENSO in detail.	[5]	1	3
Q.2(a) Describe the different components of time-series analysis.	[5]	2	4
Q.2(b) Describe the Vegetation Health Index (VHI) and its significance in drought assessment.	[5]	2	4
Q.3(a) Explain the significance of snow-area-depletion curves with respect to climate change.	[4]	3	6
Q.3(b) Describe the difference between the indices used for mapping snow cover.	[6]	3	5
Q.4(a) What do you know about global warming? What are the effects of temperature rise?	[5]	1	2
Q.4(b) What is aerosol? Describe the role of aerosols in climate change.	[5]	3	3
Q.5(a) Describe the importance of global policies. Explain one global policy in detail.	[6]	4	3
Q.5(b) Write the full form of UNFCCC, IPCC, REDD, and CBD.	[4]	4	1

**:::::28/04/2023 :::::**