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B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

September / October 2023 Supplementary Examinations

Programme: B.E.

Branch: Institutional Elective

Course Code: 20CV6OEGWC

Course: Global Warming and Climate Change

Semester: VI

Duration: 3 hrs.

Max Marks: 100

Date: 25.09.2023

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

UNIT - I

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|---|---|----|
| 1 | a) Broadly outline the role of Ozone in environment. | 10 |
| | b) Describe the radiative effects of Greenhouse Gases on environment. | 10 |

OR

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|---|---|----|
| 2 | a) Demonstrate the Average Annual Radiation budget of the earth based on the data from the sellers. | 10 |
| | b) Describe Hydrological cycle laying emphasis on Global warming. | 10 |

UNIT - II

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|---|---|----|
| 3 | a) Explain the lapse rates based on the effect of temperature wind direction and profile of the ground level. | 10 |
| | b) Discuss the vertical structure of earth's atmosphere with a sketch. | 10 |

UNIT - III

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|---|---|----|
| 4 | a) Bring out the impacts of climate change which has caused the ice mass loss in Greenland and has devasted the settlement and society | 10 |
| | b) Presently, the Arctic is warming twice as fast compared to the rest of the world. Outline its impact with respect to temperature on Environment. | 10 |

UNIT - IV

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| 5 | a) Brief the objectives of Kyoto protocol and IPCC on global warming | 10 |
| | b) Explain the evidences of changes in climate and environment with respect to Indian Scenario | 10 |

UNIT - V

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|---|---|----|
| 6 | a) Explain briefly how biodiesel contributes to clean development mechanism | 10 |
| | b) Explain the elements of a Carbon Capture and Sequestration Scheme | 10 |

OR

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
Revealing of identification, appeal to evaluator will be treated as malpractice.

- 7 a) Define carbon Trading. Solar Energy is an example of future clean technology. Explain it. **10**
- b) Bring out the key mitigation technologies adopted in infrastructure sector to reduce the effect of climate change **10**

SUPPLEMENTARY EXAMS 2023