

# 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

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

### OR

- 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

- 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

- 4 a) Bring out the impacts of climate change which has caused the ice mass loss in Greenland and has devastated 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

- 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

- 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**

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SUPPLEMENTARY EXAMS 2023