

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

Autonomous Institute Affiliated to VTU

## August 2024 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**

**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) Explain carbon cycle with neat diagram. **05**
- b) Discuss the formation of ozone with equations. **05**
- c) Discuss greenhouse effect and explain various gases responsible for Greenhouse effect. **10**

### OR

- 2 a) Explain Hydrological cycle with neat diagram. **05**
- b) Justify the statement “radiation and greenhouse effect made earth inhabitable.” **05**
- c) Explain briefly the effects of ozone depletion. **10**

### UNIT - II

- 3 a) Explain with sketches, different lapse rates and temperature inversion related to the atmosphere. **10**
- b) Explain the vertical structure or profile of the atmosphere with a neat sketch. **10**

### UNIT - III

- 4 a) Discuss the influence of climate change, which has caused floods in many parts of the country leading large scale devastations. **10**
- b) Explain the impact of climate change on agriculture and forestry. **10**

### UNIT - IV

- 5 a) Discuss the salient features of Montreal protocol and IPCC on global warming. **10**
- b) Articulate the trade relation between developing and developed countries to earn carbon credits through Kyoto Protocol. **10**

**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.

### **UNIT - V**

- 6 a) Discuss possible way of achieving sustainable development through Clean Development Mechanism. **10**
- b) Highlight the necessity of switching over Renewable energy resources. Explain in detail the process of achieving Natural Compost as an efficient Alternate Energy. **10**

### **OR**

- 7 a) Describe carbon sequestration and explain various methods for carbon capture and storage. **10**
- b) Explain the advantages and disadvantages of harnessing the solar energy and wind energy. **10**

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SUPPLEMENTARY EXAMS 2024