

**VIT**Vellore Institute of Technology
Established by the Vellore Institute of Technology Society, Vellore, Tamil Nadu, India. (1984)**Final Assessment Test- April 2023**

Course: BCLE214L - Global Warming

Class NBR(s):1216 / 2500 / 2739

Time: Three Hours

Slot: B2+TB2

Max. Marks: 100

Faculty Name: Prof. KAVITHA M.S / Prof. THIRUMALINI S / Prof. VAANI N

KEEPING MOBILE PHONE/SMART WATCH, EVEN IN "OFF" POSITION IS TREATED AS EXAM MALPRACTICE**Answer any TEN Questions****(10 X 10 = 100 Marks)**

- ✓ 1. Explain in detail about how "ozone hole" has appeared over Antarctica when ozone depleting substances are present throughout the stratosphere.
- ✓ 2. Discuss in detail about the vertical profile of the atmosphere mentioning the permanent and variable gases present in it and their role.
- ✗ 3. Draw and describe about the seven pressure belts of the world and its variation due to climate change.
- ✓ 4. List and discuss the deliberate approaches of smart traffic management techniques that can cut carbon emissions.
- ✓ 5. Infer your understanding on the processes that drive changes in global average sea level and local sea level. Explain the methods by which the sea level changes are measured and monitored.
6. What are uncertainties in the impacts of global warming and how significant is a vulnerability assessment in terms of addressing the impacts?
- ✓ 7. Detail the importance of the following in the development of climate model
 - a) Parametrization
 - b) Hindcasting
- ✗ 8. What do you mean by climate downscaling? Describe the ways by which the climate models are downscaled.
- ✓ 9. What are the objectives of Clean Development Mechanism and how is it made operational in India?
- ✓ 10. Discuss about the brave and ambitious national commitments delivered by our honourable Prime minister in COP26 to combat climate change and the road ahead for India.
- ✓ 11. Elaborate in detail about the three types of carbon capture techniques along with the beneficial reuse of captured carbon.
- ✓ 12. What are eco-friendly plastics? Describe the innovative ways of recycling the plastic.

