　　　　　MEV-024

POST GRADUATE CERTIFICATE IN CLIMATE CHANGE (PGCCC)

Term-End Examination

June, 2022

MEV-024 : CLIMATE CHANGE ASSESSMENT TOOLS

Time : 3 hours　　　　　　　*Maximum Marks : 100*

*Note : Answer any **ten** questions. All questions carry equal marks.*

1. Define Vulnerability. Describe the approaches to vulnerability research. *10*

2. Describe physical and social vulnerability. Explain the contributing factors. *10*

3. Explain the following : *10*

   (a) Crop simulation models

   (b) Input factors

   (c) Model output parameters

4. Describe InfoCrop and DSSAT models. *10*

5. What is Remote Sensing ? Explain its advantages and limitations. *10*

6. What is GIS ? Describe its components and applications. *10*

7. What is Life Cycle Assessment ? Explain its concept, characteristics and applications. *10*

8. Describe the importance of General Circulation Models (GCMs) and Regional Climate Models (RCMs) in climate change studies. *10*

9. What are stable carbon isotopes ? Describe stable carbon isotopes enrichment, with suitable examples. *10*

10. Explain greenhouse gas emission inventories and estimation methods. *10*

11. Define Geoinformatics. Explain the applications of geoinformatics in climate change studies. *10*

12. What is disaster risk reduction ? Describe the role of satellite system in disaster management and climate change adaptation. *10*

13. Write short notes on any *two* of the following : *2×5=10*

(a) Model Uncertainty Analysis

(b) Applications of Crop Model

(c) EMR Interactions with Earth Surface

14. What is Carbon Sequestration ? Describe global carbon reservoirs and strategies to capture and store CO_2 in reservoirs. *10*

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