

No. of Printed Pages : 3

MEV-024

**POST GRADUATE CERTIFICATE IN
CLIMATE CHANGE (PGCCC)**

Term-End Examination

December, 2025

**MEV-024 : CLIMATE CHANGE ASSESSMENT
TOOLS**

Time : 3 Hours

Maximum Marks : 100

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

1. What is life cycle assessment ? Explain the various stages of life cycle assessment. 10
2. What is soil carbon sequestration ? Discuss the strategies to promote carbon sequestration for climate mitigation. 10
3. What are Greenhouse Gases ? Discuss the different approaches for GHG inventories. 10

A-369/MEV-024

P. T. O.

4. What is remote sensing ? Explain the interaction of electromagnetic radiation with the atmosphere and earth surface. 10
5. Write short notes on the following : $2\frac{1}{2} \times 4 = 10$
- (a) Kirchhoff's law
 - (b) Planck's law
 - (c) Stefan-Boltzmann's law
 - (d) Wien's displacement law
6. Write short notes on the following : 5+5
- (a) Vector data analysis
 - (b) General circulation models
7. Write short notes on the following : 5+5
- (a) Climate resilience
 - (b) Non-selective scattering
8. What is early warning system ? Explain the concept and key principles of early warning system. 10
9. What is Geoinformatics ? Explain the applications of geoinformatics in climate change studies. 10

[3]

10. Write short notes on the following : 5+5

(a) Spatial data infrastructure

(b) Climate risk assessment

11. What is climate change vulnerability ?

Explain the methods for analysing climate change vulnerability. 10

12. What is crop simulation model ? Explain the structure and applications of crop simulation models. 10

13. Write short notes on the following : 5+5

(a) Descriptive modelling

(b) Stochastic models

14. Write short notes on the following : 5+5

(a) Urban heat island

(b) Forest fires

x x x x x