**MEV-024**

POST GRADUATE CERTIFICATE IN CLIMATE CHANGE (P. G. C. C. C.)
Term-End Examination
December, 2020

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

*Time : 3 Hours*　　　　　*Maximum Marks : 100*

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

1. Describe the methods for analysing vulnerability. 10

2. Explain the methodology for computing vulnerability index of a region to climate change. 10

3. Write short notes on the following : 5, 5

    (a) Crop simulation model

    (b) Contextual and outcome vulnerability

4. Explain the crop model uncertainty analysis. 10

5.  Explain the steps involved in crop modelling. 10

6.  Define geographic information system. Explain its components.                                    10

7.  What is life cycle assessment ? Explain its characteristics.                                 10

8.  Explain the applications of geoinformatics in climate change studies giving suitable examples.                                        10

9.  Discuss the strengths and limitations of life cycle assessment through a case study of crop production system.                              10

10. What is remote sensing ? Describe the processes involved in remote sensing.          10

11. Briefly discuss the following :          $3\frac{1}{2}, 3\frac{1}{2}, 3$
    (a)  Kirchhoff's law
    (b)  Geospatial data
    (c)  GIS operations

12. Write short notes on the following :     $3\frac{1}{2}, 3\frac{1}{2}, 3$
    (a)  Rayleigh scattering
    (b)  Mie scattering
    (c)  Non-selective scattering

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

    (a)   Climate change adaptation

    (b)   Disaster risk reduction

14. Explain the concept and principles of early warning system.                                   10