## MSC (CA&IT) - Semester: II

(Effective from year 2023-24)

| Course Code:                  | CAIT-206A | Course Title:             | Try to Understand our Mother Earth |
|-------------------------------|-----------|---------------------------|------------------------------------|
| Course Credits:               | 02        | Hour of<br>Teaching/Week: | 02                                 |
| Internal<br>Assessment Marks: | 25        | External Exam<br>Marks:   | 25                                 |
| Exam Duration                 | 2Hrs      | 1                         |                                    |

| Unit<br>1 | Introduction To Environment Science                   | <ul> <li>Introduction to Environment Science: Definition, Scope &amp; Carrier, Approaches, Relation to other branches of Science.</li> <li>Past, Present &amp; Future Scenario, Various fields of Environment Science.</li> <li>Structure and composition of atmosphere, hydrosphere, lithosphere and biosphere.</li> <li>Meteorological parameters - pressure, temperature, precipitation, humidity, radiation. Laws of thermodynamics &amp; Heat transfer processes. Environmental education and awareness. Environmental ethics.</li> </ul>  |
|-----------|---|---|
|           | Unit 2: Atmosphere,<br>Hydrosphere and<br>Lithosphere | Atmosphere: Composition, structure and functions of atmosphere, atmospheric chemistry, classification of elements, earth's energy budget, reactions in the lower and upper atmosphere, radioactivity in the atmosphere, atmospheric stability, inversions and mixing heights, wind roses  Hydrosphere: Structure and properties of water and their environmental significance, distribution of water in earth, fresh water and its chemistry, solubility of gases in water, role of water in environment  Lithosphere: Factors and processes of soil development, soil types and their formation, soil profiles, physical and chemical properties |

## Reference Materials:

- 1. Environmental Science by S C Santra
- 2. Environmental Science by D D Chiras
- 3. Text Book for Environmental Studies by UGC, New Delhi
- 4. Environmental Chemistry by A K Dey
- 5. Fundamental of Ecology by E P Odum
- 6. Ecology and Environment by P D Sharma

External Exam Format: As per Table 1.1, 1.2 and 1.3