MODULE I

Basics of Ecology and
Life Support System

CEE
Centre for Environment Education

COMMONWEALTH of LEARNING

BASICS OF ECOLOGY & LIFE SUPPORT SYSTEMS
Acknowledgements

The Green Teacher is a unique capacity-building distance education course. This course will give teacher-learners an opportunity to empower themselves with knowledge and skills of effectively transacting education for environment and sustainable development in schools. This Course has been developed by CEE in partnership and with support from the Commonwealth of Learning (COL), Vancouver, Canada. The module ‘Basics of Ecology and Life Support Systems’ has been developed through a workshop with distance learning experts as well as subject experts.

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Rationale and Content

**ABOUT THIS MODULE**

The Green Teacher Diploma in Environmental Education, offers teachers an opportunity to empower themselves with the requisite knowledge and skills to effectively transact EE. The Course is a one year diploma including two compulsory contact sessions and a six month project. There are four modules which make up this Course. This Module is the first of the four in the logical sequence of this Course. In this module, we will try to explore the science of nature, through the discipline called Ecology. The module would require at least 30 learner hours.

In order to be a good environmental educator, one needs to have certain knowledge and skills. This includes an understanding of ecology, or the science of nature. In this module, an attempt has been made to introduce the essential building blocks of ecology, which will help us understand many of the natural phenomena around us. Thus the module will help you observe the world around you and understand it through making observation, gathering information/data, analyzing them and making conclusions. This module will also provide a scientific approach to understanding the natural world, but it does not assume a background in science. The module has been written in a way to make it meaningful for teachers of all subjects with varied background.

In this module, an attempt has been made to provide an introduction to the various factors that make life possible on earth. The module will also help you in strengthening your understanding of Ecology and will give you ideas for transacting ecology concepts in interactive and experiential ways.
COMPONENTS OF A UNIT

Each of the seven units is divided into sections. In between these sections, at appropriate places, you will see ‘Check your progress’. These are assessment tools designed to guide you on your learning as you read through a particular unit. Answers to these are provided towards the end of the Module.

At the end of each unit there is also ‘Unit-end Exercise’. These exercises are designed to help you think about real-life links of this otherwise highly ecology and science oriented module. These exercises ask not just scientific facts, data and definitions, but are designed as ‘ponder over’ thought provoking exercises and may require you to probe more into the subject of ecology. Their scope may go beyond the text provided in this module. Suggested framework answers to these questions are also provided towards the end of the module. Also the list of ‘suggested readings’ provided at the end of module would help you in finding solutions to these questions.

EVALUATION

Module-end Assignment: As you read through this module, you will note that Units 2 to 6 have ‘Teacher Section’. This section acknowledges and appreciates that you are a practicing teacher and is designed to give you ideas in transacting many of the ecological concepts in an interactive way in your classroom.

Each Teacher Section ends with ‘Feedback’, where you as a student of this diploma course, are supposed to carry out a few activities/assignments and submit back. Of the 6 such activities, you would need to pick up any 3 and submit the same for evaluation. The credits from these will get added to your over all score of the Green Teacher diploma.

Besides the module-end assignment, this module would carry a weightage of 10 credits (out of 60 credits) in the final examination.

The following icons will guide you throughout the unit:

- Introduction
- Objectives
- Check your progress
- Unit end exercise
- Teacher section
## Contents

1  Earth: The Living Planet                      1

2  Ecology, Populations and Species            10

3  Communities & Interactions                 26

4  Ecosystems and their Structure             34

5  Ecosystems Processes: Nutrient Cycles       46

6  Ecosystems Processes: Energy Flow           54

7  Evolution, Adaptation and Diversity         62

8  Answer sheet                                 74