Master of Science (Botany)
M. Sc Botany Semester II

Course Code	PS02CBOT55	Title of the Course	LAB-II
Total Credits of the Course	04	Hours per Week	08

Course Objectives:	1. To perform various field and lab oriented ecological experiments and determine the local ecological factors. 2. To gather firsthand information on local vegetation by conducting field study. 3. To get familiarised with the linkages between flora and fauna of local ecosystems. 4. To assess the ecological status of local water bodies.

PS02CBOT55 (Lab IIA)

(Ecological Principles)

Sr.No.	**Practical Exercises**
1	Examining various biotic and abiotic components of nearby natural ecosystem. Based on their observations, food web is to be prepared.
2	Study of little or undisturbed aquatic ecosystem in terms of structure and function by visiting a nearby pond or lake.
3	Study of disturbed (Eutrophicated) aquatic ecosystem in terms of structure and function by visiting a suitable pond or lake.
4	Observation and recording phytoplantkons from a village pond.
5	Observation and recording different organisms from: (i) organic farm wherein chemical fertilizers are not used or used in minimum. (ii) traditional farm wherein chemical fertilizers are extensively used.
6	Culturing microbes (bacteria/fungi/algae) from unpolluted and polluted soils.
7	Determination of Biological Oxygen Demand
8	Determination of Chemical Oxygen Demand

PS02CBOT55 (Lab II-B)

	Practical Exercises will be related to elective papers

Learning Methodology	Practical exercises will be conducted in the regular M.Sc. Labs and in the field depending upon the nature of experiment. Some of the exercises will be performed individually by each student, whereas someother will be done in a group. Some exercises may be limited to demonstration.

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination (As per CBCS R.6.8.3)	20%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce and Attendance (As per CBCS R.6.8.3)	10%
3.	University Examination	70%

Course Outcomes: Having completed this course, students will be able to:	
1.	Identify and recognise various cell organells in different tissues.
2.	Operate different kinds of lab instruments and conduct microscopic assays.

	References:
1.	Ambasht, R. S., Ambasht, N. K. (2017). Textbook of Plant Ecology.15thEdn. Students Friends Publishers, Varanasi.