

CLASS XII

SUBJECT: ENVIRONMENTAL SCIENCE (ENVSC)

COURSE CODE: PRACTICAL

FULL MARKS: 30

CONTACT HOURS: 40

Evaluation Scheme	Marks
One experiment from Group A	7
One experiment from Group B	7
Spotting (Total three) from Group C. One from each set.	(3X2)=6
Practical Record Book + Viva Voce	(3+2)=5
One Investigatory field study from Group D + viva voce on field study	(3+2)=5

A. List of experiments:

1. Determination of LC50 and LD50 with data provided.
2. Determination of Water Holding Capacity of soil sample provided (at least two samples).
3. Determination of soil moisture content.
4. Determination of soil pH of at least soil sample.

B. List of experiments:

5. Determination of Dust fall rate.
6. Estimation of Noise level (dB(A)).
7. Studies on goodness of fit for regression model with given data set on any environmental issues.
8. Simple staining using curd.

C. Study and observe the following (Spotting):

(Set-I):Identification of pest in agriculture (photographs/ museum specimen) and comment on their economic importance: *Leptocorisa sp* , *Scirpophaga incertulus* , *Gryllinae sp* , *Amphipyra pyramidoides*.

(Set-II): Identification of Microorganisms in environmental sample (Permanent slide / photograph) and comment on their economic importance: *Escherichia coli*, *Bacillus sp*, *Staphylococcus aureus* , *Plasmodium sp* , *Aspergillus sp*

(Set-III): Identification of bio-indicators (Photograph/ museum specimen/permanent slides):

Microbes: *Escherichia coli*, *Lichens*

Plants: *Mosses*, *Water hyacinth*

Animals: *Dragonfly larva*, *Earthworm*

D. Field study

1. Preparation of an Environmental Management Plan on the basis of given scenario.
2. Review on local environmental issues and making design of action plan.
3. Review on social responsibility of environmental management and report submission.
4. Report on global/ local environmental pollution issues.
5. To segregate domestic waste into bio-degradable and non-biodegradable components.
6. To make an audit of the electrical energy consumption by various household appliances.