

M. Sc. Environmental Sciences

Semester I

Duration :5Hrs

Practical I

1. Determination of minimum size of quadrat by species area curve method.
2. Study of vegetation by line transect
3. Determination of IVI
4. Find out the similarity and dissimilarity indices between disturbed and undisturbed grassland.
5. Determination of pattern (non randomness) in vegetation.
6. Estimation of total chlorophyll content of herbaceous vegetation on per square meter of land area basis
7. Study of biotic interactions
8. Representation of climate data
 - (1) Simple graph
 - (2) Hytherograph
 - (3) Rainfall variability graph
 - (4) Wind rose
 - (5) Combine bar and line graph
 - (6) Climograph
9. Observation of India weather maps.
10. Preparation of wind rose.
11. working of weather instruments
Thermometer, Rain gauge, Anemometer, Barometer, Pedometer, Compass

Practical II

Duration :5Hrs

1. Analysis of air samples
 - (1) SO₂
 - (2) SPM
2. Analysis of water sample
 - (1) Dissolved oxygen
 - (2) Chlorides
 - (3) Nitrates
 - (4) Hardness
 - (5) Biological oxygen demand
 - (6) pH
3. Analysis of Soil
 - (1) Texture
 - (2) Moisture

- (3) pH
 - (4) Water holding capacity
 - (5) Chloride
 - (6) Wilting coefficient
 - (7) Porosity
4. Quantitative and qualitative analysis of planktons.
 5. Study of foot prints and demarcation of territorial limits of few wild animals.
 6. Estimation of crude proteins
 7. Study faecal coli forms in water sample by M.P.N.
 8. Qualitative and quantitative analysis of water samples for zooplanktons and phytoplankton's.
 9. Preparation of field report of any case study carried out in any areas to assess the pollution status.
 10. Analysis of soil for biotic components like bacterial fungi and soil nematodes.