M. Sc. Environmental Sciences

Semester II Practical I

Duration :5Hrs

- 1. Find out the percentage frequency values of grassland species using 1 x 1 size quadrat. Classify the species into frequency classes A to E and prepare the frequency diagram. Compare result with Raunkiers standard frequency diagram.
- 2. Determine the biomass of producers.
- 3. Find out the effect of various quadrat size 25 x 25, 50 x 50, 75 x 75 and 1 x 1 m on percentage frequency result on same grassland plot considered in exercise I
- 4. Find out the species diversity index in disturbed and protected vegetation area.
- 5. Find out the leaf area index of crop field.
- 6. Study of anatomical features of ecological adaptation in selected hydrophytes and xerophytes.
- 7. Study of climatic conditions obtained in open field and under the shade of trees for temperature, light intensity, wind velocity, R.H and comparison of ground vegetation of these areas.

Duration :5Hrs

Analysis of air sample

 (1)Dust fall

$(2)CO_2$

- 2. Analysis of water samples
 - (1) COD
 - (2) Primary productivity
 - (3) Phosphate
 - (4) Conductivity
 - (5) Silicate
 - (6) Dissolved organic matter
 - (7) Carbonate and Bicarbonate
- 3. Analysis of Soil samples
 - (1) conductivity
 - (2) Chlorides
 - (3) Nitrates
 - (4) Total phosphorus and organic carbon
- 4. Study of petro plants and energy plantation found in and around Udaipur. General information through herbarium sheets and field study.
- 5. To compare the soil erosion and water run off from bare and plant covered plots.
- 6. Local field excursion and visits.
- 7. Calculation of total biomass of the given leaf sample.
- 8. Assessment of noise pollution in different zones of the city by Sound level meter.
- 9. Visit to near by PHC to analyse the prevalence of disease any Environmental pollution.
- 10. To determine the age of any forest patch by DBH method.

Practical I

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- 9. Determine the biomass of producers.
- 10. Find out the effect of various quadrat size 25 x 25, 50 x 50, 75 x 75 and 1 x 1 m on percentage frequency result on same grassland plot considered in exercise I
- 11. Find out the species diversity index in disturbed and protected vegetation area.
- 12. Find out the leaf area index of crop field.
- 13. Study of anatomical features of ecological adaptation in selected hydrophytes and xerophytes.
- 14. Study of climatic conditions obtained in open field and under the shade of trees for temperature, light intensity, wind velocity, R.H and comparison of ground vegetation of these areas.