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Department of Zoology

ZO 123: Zoology Practical Paper III

F.Y.B.Sc

Semester I

By

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#### Animal Ecology

#### **Practical No. 5**

### Aim: study of microscopic fauna of fresh water ecosystem.

#### **Principle:**

Microorganisms are simple, single celled organisms that can be found all around the world. They are largely composed of the members of the plant kingdom, fungi, bacteria and protozoa. As such, they are only visible under the microscope.

However, as is the case with some species, microorganisms may cluster together in large numbers (colonies), which allows them to be visible to the naked eye or when using a magnifying glass. Typically, pond water will contain a variety of microorganisms with a drop of the water carrying thousands of these single celled organisms. Some of the most common living in pond water include: Arthropoda such as copepods water fleas and ostracods (crustaceans), Algae, Bacteria, protozoa.

**Requirements:** Pond water Sample or River Water Sample, Cavity Slide, Compound microscope, Filter Paper,

#### **Procedure:**

- 1) Take a drop of given water sample on a cavity slide.
- 2) Observe the slide under the microscope for fresh water fauna.
- 3) Note down the observations and draw the diagram

#### **Observations:**

#### As per SPPU New CBCS Syllabus

The following organisms are observed in given fresh water sample:

- 1) Phytoplankton (algae, diatoms)
- 2) Protozoa (Amoeba, Paramecium, Euglena)
- 3) Arthropoda (Daphnia)
- 4) Bacteria



1) Phytoplankton: - Diatoms & Algae



2) Protozoa:- Amoeba, Paramecium, Euglena

#### As per SPPU New CBCS Syllabus



### **Result:**

The given fresh water sample shows the presence of Phytoplankton (algae, diatoms), Protozoa (Amoeba, Paramecium, Euglena), Arthropoda (Daphnia), Bacteria.