**Aquatic Invertebrate**

**LAB (1)**

**Phylum: protozoa (protista)**

**1-Sub phylum: Sarcomastiqophora**

**Class: Cryptophyceae**

**Order: Cryptomonadina**

**Genus: *Chilomonas***

**2-Sub phylum: Ciliophora**

**A-Class: Gymnostomatea**

**Order: Pleurostomatida**

**Genus: *Litonotus***

**B-Class:Heterotrichea**

**Order: Heterotrichida**

**Genus: *stentor***

**3- Sub phylum: Ochrophyta**

**A-Class: Antinochrysophceae**

**Order: Actinophryida**

**Genus: *Actinosphaerium***

**B-Class:Granuloreticulosea**

**Order:Foramlniferida**

**Genus: *Globigerina***

**4-Sub phylum: Bryozoa**

**Class: Gymnolaemata**

**Order: Cheilostomata**

**Genus: *Bugula***

**Genus: *Chilomonas***

-Unicellular organism

-The apex is shifted to the left side

-Two equal flagella for locomotion

- One nuclus in the posterior part

- Cytoplasm includes pyrenoid and starch

- One contractile vacuole is found in the apex of the cell

(for regulation of osmotic pressure)



 ***Chilomonas***

**Genus: *Litonotus***

-Predatory ciliate

-Highly elongated body with anterior neck

- Mouth located alongthe anterior margin

-Macronucleus commonly in two spherical parts with single micronucleus between the two

-One to several contractile vacuoles in the posterior part



***Litonotus***

**Genus: *stentor***

-Rapid contractile body with trumpet shaped

-Pristome wide with adomed central area

-Macronucleus moniliform with 10-20 beads

-Multiple ciliary membranelles spiraling around the regin that leads to the mouth ,it uses these cilia to sweep food particles into its cytostom.

-Usually attach to substrates by posterior thin stalk

 

***stentor***

**Genus: *Actinosphaerium***

- Spherical body with many pseudopods called axopodia

 (to capturing prey and protection from predators)

-Axopodia end in the inner zone of ectoplasm

-Ectoplasm consists large vacuoles in one or several layers for floatting

- Endoplasm with numerous small vacuoles and nuclei



 ***Actinosphaerium***

**Genus: *Globigerina***

* Globose chambers
* Having rounded shell with pores
* Shell made of calcareous with numerous spiny process

 

***Globigerina***

**Genus: *Bugula***

* Flexible bushy branching colonies reddish or brown in colour
* The individuals in colony are called zooids (white and globular)
* Zooids consist of soft parts called the polypide enclosed in a rigid box called the zooecium



 ***Bugula***