

ACTIVITY 5 — (Nostoc)

Q 1. Give the kingdom of Nostoc.

Ans. The kingdom of Nostoc is Prokaryota (Monera).

Q 2. What are heterocyst?

Ans. Heterocysts are the larger and thick walled cells of Nostoc filament. They perform the functions of nitrogen fixation and reproduction.

Q 3. What do you mean by heterotrichous plant body?

Ans. Heterotrichous plant body contains different types of branches.

Q 4. Why Nostoc is known as Prokaryote?

Ans. In Nostoc cells there is no true and complete nucleus, so it is called Prokaryote.

Q 5. What are hormogonia?

Ans. Hormogonia are the pieces of *Nostoc* filaments, which take part in reproduction.

ACTIVITY 6 — (Algae)

(Volvox, Chlorella, Euglena, Ulothrix, Ulva)

Q 1. Give the systemic position of Chlorella?

Ans. It belongs to class chlorophyta (green algae), Kingdom Protocista.

Q 2. What is the shape of chloroplast in Chlorella?

Ans. In Chlorella the chloroplast is cup-shaped.

Q 3. What is the systemic position of volvox?

Ans. It is a green alga belongs to kingdom Protocista.

Q 4. What is the shape and size of volvox?

Ans. It is in the form of spherical or oval-shaped structure of pin head size.

Q 5. What is the coenobium?

Ans. Coenobium is the colony of volvox.

Q 6. How the cells of volvox are connected?

Ans. The cells of volvox are connected by cytoplasmic strands, called plasmodesmae.

Q 7. What is the shape of chloroplast of volvox?

Ans. The chloroplast of volvox is cup-shaped.

Q 8. Give the systemic position of Ulva and Ulothrix?

Ans. Ulva and Ulothrix belong to Chlorophyta (green algae) of Kingdom Protocista.

Q 9. What is the habitat of Ulva?

Ans. Ulva is found in marine water.