Chukwuma Blessing Chioma

Nursing

19/MHS02/038

BIO 102

Answers

1 . Classification of Plants according to Eichler's grouping of 1883

Division. Class

Thallophyta. Phycotinae(algae)

Mycotinae(fungi)

Bryophyta. Hepaticae(liverworts)

Musci(mosses)

Pteridophyta. Psilotinate(psilotum)

Lycopodinae(lycopodium,

selaginella)

Equisetinae(horsetails)

Filicinae(ferns)

Spermatophyta. Gymnospermae

(gymnosperms)

Angiospermae

(angiosperms)

2 . Importance of algae to man are:

1. It can be used as food for man
2. As a source of vitamins
3. As a source of agar
4. Can be used as medicines and minerals.

3 . **Description of unicellular form of algae:**

Unicellular forms of algae are also called acellular algae as they function as complete living organisms. Unicellular forms are common in all the frouod of algae except Rhodophyceae, Phaeophyceae and Charophyceae. The unicells may be motile or non-motile. Unicellular algae are plant-like autographs and contain chlorophyll. They include groups that have both unicellular and multicellular species: Euglenophyta, flagellated, mostly unicellular algae that occurs in fresh water.

4 . **How unicellular algae carry out its reproduction:**

Algae regenerates by sexual reproduction, involving Male and female gametes(sex cells), by asexual reproduction, or by both ways. Many small algae reproduce asexually by ordinary cell division or by fragmentation, whereas larger algae reproduce by spores.

5 . **Difference between the two types of colonial form of algae:**

* Pandorina
* Volvox

Pandorina. Volvox

Sexual reproduction. Sexual reproduction

is anisogamous. is oogamus.

Unicellular motile. Multicellular motile

thallus. thallus.

It's a genus of green. It's a complex form

algae. of pandorina.

6 . **Complex form of algae.**

Focus.

It is a genus of the brown algae whose species are found on rocks in the intertidal zones of the sea shores. The body of the plant is flattened, dichotomously-branched thallus with a mid rib, a vegetative species and a multicellular disk with which plant is attached to rock surface. The body has air bladders which is believed to aid the plant to float on the water. It varies in size from a few centimeters to about 2 meters in length.

Sexual reproduction is monogamous, sex cells are produced in conceptables which have openings(ostioles) on the surface of the thallus.