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**Nursing**

**19/MHS02/003**

**Bio102**

 ASSIGNMENT

1. Eichler’s grouping of 1883

Division Class

1. Thallophyta Phycotinae (Algae)

 Mycotinae (Fungi)

1. Bryophyta Hepaticae

 Liverworts

 Musci (Mosses)

1. Pteridophyta Psilotinate (psilotum)

 Lycopodinae

 Lycopodium

 Selaginella

 Equisetinae

 Horsetails

 Filicinae (Ferns)

1. Spermatophyta Gymnospermae

 Gymnosperms

 Angiospermae

 Angiosperms

1. Importance of Algae to man
2. It serves as food for people.
3. It’s contains high iodine content which prevents goiter.
4. It serves as thickening agents in ice cream and shampoo.
5. The red Algae provide agar and carrageen used for the preparation of various gels used for scientific research.
6. Alginic acid from the brown algae is used to stabilize emulsions and suspensions.
7. Unicellular form of Algae
8. It is found in stagnant water.
9. The cell is bounded by a cellulose cell wall.
10. Chlamydomonas represents the unicellular and module forms of green algae.
11. The stigma is for photoreception.
12. It has the flagella which enables movement.
13. Reproduction

Reproduction can either be vegetative (asexual) or sexual

Vegetative results in the production of daughter cells in which the amount and quality of genetic material in the nucleus of the mother cell is maintained in the daughter cells. The amount of genetic material in the mother cell nucleus of n, the daughter cells also have n quality of genetic material. The mitotic division maintains the quality and quantity of genetic material.

Sexual reproduction

It involves union of sex cells, aggregation of cells in a colony occurs under favorable conditions. These cells pair by their posterior end. This pairing is said to be isogamous because the pairing cells (gametes) are morphologically identical.

1. The colonial forms in Algae
2. Pandorina
3. Volvox

Pandorina Volvox

Sexual reproduction is Anisogamous Sexual reproduction is Oogamous

Unicellular motile thallus Multicellular motile thallus

It’s a genus of green Algae it shows more complex form than Pandorina

1. Complex form in the Algae

Fucus

It’s 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 apex and a multicellular disk with which plant is attached to rocks 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 metres in length.

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