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Medicine and Surgery  
19/MHS 01/402

BIO 102 ASSIGNMENT

1) Cretcher's grouping of 1883

DIVISION	CLASS
Thallophyta	Phycotinae (Algae) Mycotinae (Fungi)
Bryophyta	Hepaticae Liverworts Musci (Mosses)
Pteridophyta	Psilotinae (Psilotum) Lycopodinae (Lycopodium Selaginella) Equisetinae (Horsetails) Filicinae (Ferns)
Spermatophyta	Gymnospermae (Gymnosperms) Angiospermae (Angiosperms)

2) Importance of Algae to Man

- It serves as food for man
- As a source of agar in the production of ice cream, juices.
- Medicine & minerals
- Manufacture of iodine
- Ornamental uses
- Used as fertilizers

3) Unicellular forms of algae are also called acellular algae as they function as complete living organisms. Unicellular forms are common in all the groups of algae except Rhodophytae, Phaeophyceae & Charophyceae. The unicells may be motile or non-motile

4) Cell division of fission is the simplest method of reproduction for the unicellular forms of algae. It is often called binary fission as found in diatoms. In this method, the two vegetable cells divide mitotically into two daughter cells those finally divide as new individuals. The reproduction is asexual.

5) The colonial forms of Algae: Pandorina & Volvox

Pandorina  
- Sexual reproduction is anisogamous

- Unicellular motile thallus

- It's a genus of green algae

Volvox  
Sexual reproduction is oogamous

Multicellular motile thallus

It's complex form of pandorina

6) Fucus is a named complex form in the algae. It's a genus of the brown algae whose species are found on rocks in the intertidal zones of 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 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 centimetres 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.