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Medicine and Surgery

19/MTHSO1/329

Bio 102 (ASSIGNMENT)

① Eichler's grouping of 1883

Division	Class
Thallophyta	Phycobinae (Algae) Mycotinae (Fungi)
Bryophyta	Hepaticae (Liverworts) Musci (Mosses)
Pteridophyta	Psilotinae (Psilotum) Lycopodiinae (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, jellies, desserts etc.
- Medicine and 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 Rhodophyceae, Phaeophyceae and Charophyceae. The unicells may be mobile or non-motile.

④ Cell division or fission is the simplest method of reproduction for the unicellular forms of algae. It is often called binary fission as found in dictyostelium. In this method, the two vegetative cells divide mitotically into two daughter cells; these finally divide as new individuals. Their reproduction is asexual.

⑤ The colonial forms in algae

- Pandorina

→ Volvox

Pandorina

Volvox

- Sexual reproduction

Sexual reproduction is

is asexual

is asexual

- Unicellular mobile

Multicellular mobile

Thallus

Thallus

- It's a genus of

It's complex form of

green algae

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 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 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.