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1. Classify plants according to Eichler'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. How are algae of importance to man?

- Algae are important as food for fish
- It serves as food for people and livestock

- They are considered nutritious because of their high protein content and high concentrations of minerals
- They have high iodine content therefore prevent goitre

3. Describe a unicellular form of algae

CHLAMYDOMONAS

It represents the unicellular and module forms of green algae.

It's found in stagnant water

It has the flagella which enables movement

The cell is bounded by a cellulose cell wall

The stigma is for photoreceptor

4. How does this unicellular algae described in question 3 carry out its 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 quantity 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 favourable conditions. These cells pair by their posterior end. This pairing is said to be isogamous because the pairing cells (gametes) are morphologically identical.

5. Differentiate between the two types of colonial forms of algae

The colonial forms in Algae

- Pandora
- Volvox

PANDORINA	VOLVOX
Sexual reproduction is anisogamous	Sexual reproduction is oogamous
Unicellular mobile thallus	Multicellular mobile thallus
It's a genus of green algae	It's complex form of pandorina

6. Describe a named complex form of algae

FUNGUS

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 which the 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.