**YUSUF DEBORAH DAMILOLA**

**19/MHS11/150**

**PHARMACY**

**MHS**

**BIO 102**

**1. 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**

➢ It serves as food for people

➢ The red algae provide agar and carrageen used for the

preparation of various gels used for scientific research

➢ It’s contains high iodine content which prevents goitre

➢ It serves as thickening agents in ice cream and shampoo

➢ Alginic acid from the brown algae is used to stabilize emulsions and suspensions

**3. Unicellular form of Algae**

Chlamydomonas 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 photoreception

**4. 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 cell, 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. The colonial forms in Algae

➢ Pandorina

➢ Volvox

**Pandorina - Volvox**

Sexual reproduction - Sexual reproduction is oogamus

is anisogamous

Unicellular motile thallus - Multicellular motile thallus

It’s a genus of green - it’s a complex form of pandorina

algae

**6. 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 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.