

NAME  
**ADEDIGBA AYOMIDE PRECIOUS**  
DEPARTMENT  
**HUMAN BIOLOGY**  
MATRIC NO  
**19/SCI04/001**

**BIO102 ASSIGNMENT**

1.

**Eichler's grouping of 1883**

<b>DIVISION</b>	<b>CLASS</b>
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**

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