

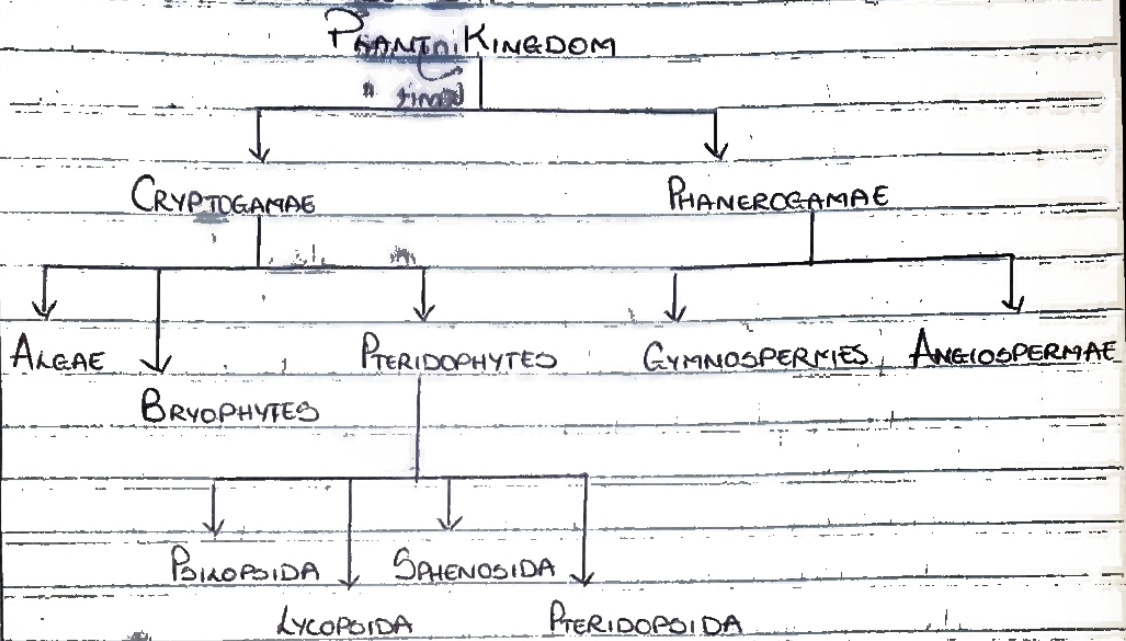
NAME AMIESIMAKA Hannah Iyango.

COURSE Bio 102

DEPART. MEDICINE AND SURGERY

MATRIC NO: 19144501/090

1. EICHER'S GROUPING:



- 2i) Due to its high iodine content, it can be used to prevent goitre.
- ii) It can be used as feed for livestock.
- iii) It serves as thickening agents in icecream and shampoo.
- iv) It is used in manufacturing drugs.
- v) It serves as food for humans due to its high protein content and concentration of minerals and vitamins.

3. CHLAMYDOMONAS: Usually found in stagnant water and uses flagella for mobility. It has a stigma which is for photoreception. It has its cell bounded by a cell wall containing cellulose. It houses a

Amie Emma Hannah Iyongo.

19/MAR/2019

cup-shaped chloroplast and a pyrenoid which is where the manufactured sugar is processed into starch. The nucleus carries the genetic programme of the cell. Reproduction can either be sexual or vegetative.

4. **Asexual Reproduction:** Mitosis occurs. Firstly, the cell about to divide loses its flagella before undergoing mitotic division which leads to 2 nuclei. Cell walls appear which ~~limit~~ the cytoplasm around each nucleus and 2 daughter cells are released.

ii **Sexual Reproduction:** This occurs in favourable conditions where cells in a colony aggregate and pair by their posterior (flagellated) ends. These pairing cells are said to be morphologically identical.

The cytoplasm of the pairing cells fuses and the flagella are lost. The 2 nuclei fuse (fertilization) and a zygote is formed. This zygote secretes a thick cell wall called a zygospore and may remain dormant in this state but sometimes it (zygote) undergoes 2 successive cell divisions with the 1st restoring the haploid condition by dividing the nuclear material into 2 and the 2nd, pushing each haploid nucleus through a ^{normal} process of mitotic division to produce 4 haploid zoospores.

5.

PANDORINA

Volvox

a. Has only 16 cells in a colony.

Has up to thousands.

b. Each cell goes through 4 successive mitotic divisions.

Only the larger cells at the posterior ends divide to form new colonies.

c. Sexual reproduction is by anisogamous pairing.

Sexual reproduction is oogamous.

d. Cells show levels of specialisation and differentiation.

Cells show greater levels of specialisation and differentiation.

AMIOSIMANA Hannah Jyango

19/MH001/090.

6. Fucus: A genus of brown algae found on rocks in the intertidal zones of sea shores. The body is flattened, dichotomously-branched thallus with a mid rib, a vegetative apex, a reproductive apex and a multicellular disk with which the plant is attached to rock surface.

The body also has bladders which is believed to the aid the plant to float on the water. Various species exist but they vary in size ^{and} location of the sex cells. Sexual reproduction is oogamous.