**NAME: ATUZIE VICTORY CHICHEZUM**

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**DEPARTMENT: MEDICAL LABORATORY SCIENCE**

**COURSE CODE:** **BIO102**

1. Eichler classified the plant kingdom into two sub-kingdoms. They are “Cryptogamae and Phanerogamae”. The cryptogams are flowerless and seedless plants. They are simple plants like algae, mosses and ferns which do not produce flowers, fruits and seeds. They are considered as lower plants. WHILE… Phanerogams are seed bearing plants so they are also known as spermatophytes. They are higher plants.
2. (i) It serves as food to people and livestock

(ii) It has high mineral content

(iii) It is used as a source of vitamins

(iv) It is used in the manufacture of iodine

1. Chlamydomonas represents the unicellular and motile forms of green algae. Found in stagnant water usually along with other forms. Flagella are the structures for mobility. The cell is bounded by a cellulose cell wall; contains organelles e.g. nucleus, mitochondria, stigma (eyespot), cup-shaped chloroplast, pyrenoid etc. The nucleus carries the genetic programme of the cell; the stigma for photoreception. The mitochondria mediate the elaboration of energy molecules. Manufactured sugar is processed into starch on the pyrenoid.
2. In *Chlamydomonas*, reproduction can either be vegetative (asexual) or sexual.
3. The pandorina usually occurs in water bloom. The colony consists of 16 cells attached to one another

**WHILE**

The genus volvox (also green colonial form) shows more complex form than pandorina. There are more cells in the colony, number may run into thousands and connected with cytoplasmic strands that run through the cells.

1. **Fucus:** A genus of brown algae whose species are often found on rocks in the intertidal zones of the sea shores. The plant body is flattened, dichotomously-branched thallus with a mid rib, (a vegetative apex, a reproductive apex at maturity) and a multicellular disk (hold fast) with which plant is attached to rock surface.