NAME: DABOR AYIRIORITSE ESEOSA

DEPARTMENT: PHARMACY

MATRIC NO: 19/MHS11/045

COURSE CODE: BIO 102

ASSIGNMENT

1. Classify plants according to Eichler’s grouping in 1883.

Cyptogamae are flowerless and seedless plants: They are simple and flowerless plants like algae, mosses and ferns which do not produce flowers, fruits and seeds. They are considered as lower plants.

Phanerogamme are seed bearing plants: They are also known as spermatophytes. They are higher plants. The plant body is differentiated into roots, stems and leaves with well-developed vascular system. Examples; angiosperms and gymnosperms.

1. How are algae of importance to man?

They serve as direct food to man, as a source of agar in the production of ice cream and desserts, as medicines and minerals, as a manufacture of iodine, as a manufacture of soaps and alums, etc. It is also used as fertilizers, used in the production of dyes, buttons and combs and used as ornaments.

1. Describe a unicellular form of algae.

They are also called acellular algae as the function as complete living organisms. They may be mobile or non-mobile. They are plant-like autotrophs and they contain chlorophyll. A diatom is a very good example here.

1. How does the unicellular alga described in the above question carry out its reproduction?

It carries out its reproduction through cell division, also called binary fission as found in chlamydomonas, diatoms, etc. In this method, the vegetative cell divides mitotically into two daughter cells; those finally behave as a new individual.

1. Differentiate between the two types of colonial form of algae.

VOLVOX

A volvox colony is a hallow sphere of mucilage having 500 or more biflagellate algal cells that are equally spaced around on its outer surface. Reproduction is both asexual and sexual.

SYNURA

They have varied number if ovoid golden brown cells. Each cell bears two flagella, whose beatings propel the colony, through the water with a smooth rolling motion. Reproduction is sexual.

1. Describe a named complex form of algae.

Stonewort is in the order of green algae ( class charophyceae) comprising of six genera. Most stoneworts occur in fresh water and generally are submerged and attached to the muddy bottoms of fresh or brackish rivers and lakes.