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PHARMACY

BIO 102 ASSIGNMENT

[1] The Eichler system was the first Phylogenic evolutionary system. He classified plants into two major groups namely, THE CRYPTOGAMAE AND PHANEROGAMAE.

THE CRYPTOGAMAE ARE FLOWERLESS AND SEEDLESS PLANTS. THEY ARE CONSIDERED AS LOWER PLANTS. EXAMPLES ARE ALGAE, MOSSES AND FERNS.

THE PHANEROGAMAE ARE SEED BEARING PLANTS, ALSO KNOWN AS SPERMATOPHYTES. THEY ARE HIGHER PLANTS DIFFERENTIATED INTO ROOTS, STEMS AND LEAVES WITH WELL DEVELOPED VASCULAR SYSTEM. EXAMPLES ARE ANGIOSPERMS AND GYMNOSPERMS.

[2] Importance of algae to man

- Source of food

-Manufacture of iodine

-Used as fertilizer

-Ornamental uses

-As a source of alga in the production of ice cream, jellies, desserts

[3] Unicellular forms of algae are also called Acellular algae as they function as complete living organisms. Unicellular forms are common in all groups of algae except Rhodophyceae, Phaeophyceae and Charophyceae. The unicells may be motile or sedentary.

[4] Cell division or fission is the simplest method of reproduction of alga. It is often called binary fission and found in Chlamydomonas. In this method, the two vegetative cells divide mitotically into two daughter cells, which form a new individual. The reproduction is asexual.

[5] Difference between Volvox and Synura

In Volvox, Reproduction is sexual and asexual. Spherical colonies up to 50,000 cells.

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In Synura, Reproduction is sexual and few in colonies.

[6] 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 with which plant is attached to the rock surface. It has air bladders to enable him float on water. Sexual reproduction Oogamous, sex cells are produced in the conceptacles which have openings on the surface of thallus. The Conceptacles undergoes meiosis.