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19/mhs01/428

MRBS

Bio 102 assignment

1 Division

Class

Thallophyta

Phycobinae (Algae)

Mycobinae (Fungi)

Bryophyta

Hepaticeae (Liverworts)

Musci (Mosses)

Pteridophyta

Psilotobinae (Psilidium)

Lycopodiinae (Lycopodium)

Filicinae (Ferns)

Equisetinae (Horsebals)

Spermatophyta

Gymnospermae

Angiospermae

2) ① They are important as food for fish

2) It serves as thickening agents in ice-cream and shampoo

3) It serves as food for people & livestock

4) Brown algae yield alginic acid

5) Red algae provide agar and carrageenan used for preparation of gels in scientific research.

3) Chlamydomonas represents the unicellular form of green algae. It is found in stagnant water usually along with other forms. They have flagella for mobility. The cell is bounded by cellulose wall and contains organelles. The nucleus carries the genetic programme of the cell, the stigma is for photoreception, the mitochondria mediate the elaboration of energy molecules and the manufactured sugar is processed into starch on the pyrenoid.

4) It has both the vegetative (asexual) or sexual reproduction. In the asexual reproduction mitotic divisions take place which is responsible for increase in size while in the sexual reproduction opposite mating strains fuse in a process called isogamy.

5) Pandorina  
It consists of 16 cells attached to one another.

Value:  
number of cells  
thousands connected with cytoplasmic strands that run through cells.

## Pandorina

2) Sexual reproduction is by anisogamous pairing

3) All cells form new colonies

4) In sexual reproduction, single cells in colonies assume gametic functions and pair by flagella ends.

5) Plasmogamy and karyogamy occur followed by meiosis

## 6) Fucus

7) It is a genus of brown algae whose species are often found in rocks.

## Volvox

Sexual reproduction is oogamous.

Not all cells form new colonies, only the larger ones at posterior ends

In sexual reproduction, the male gamete is mobile while the female gamete is not mobile.

It doesn't occur.

① The plant body is flattened, dichotomously-branched thallus with a midrib, a vegetative apex, a reproductive apex (at maturity) and a multicellular disk (hold fast) with which plant is attached to rock surface.

② They also vary in terms of whether the sex cells are found in the same sexual chamber or in different sexual chambers on different bodies. Sexual reproduction is oogamous, sex cells are produced in conceptacles which have openings (ostioles) on the surface of the thallus.