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MATRIC NO: **19/MHS01/103**

**MBBS BIOLOGY 102 ASSIGNMENT.**

**QUESTION 1.**

Division Class

1. **Thallophyta**  a) Phycotinae ( algae)

b) Mycotinae (fungi)

1. **Bryophyta**  a) Hepaticae (liverworts)

b) Musci (mosses)

1. **Pteridophyta**  a) Psilotinate (psilotum)

b) Lycopodinae (lycopodium)

c) Equisetinae (horsetails)

d) Filicinae ( ferns)

4. **Spermatophyta**  a) Gymnospermae (gymnosperms)

b) Angiospermae (angiosperms)

**QUESTION 2**

1. Human beings use them as food.
2. It is used in cosmetics.
3. They are used as thickening agent in ice-cream and shampoo etc.
4. They are nice in trace elements.

**QUESTION 3.**

An example of an unicellular algae is **chlamydomonas**. They are the motile form of algae. It has two flagella, an eye spot (stigma), cup-shaped chloroplast, nucleus, mitochondria and it has a cellulose cell wall. The stigma in chlamydomonas is used as a photo receptor. Manufactured sugar is processed into starch on the **pyrenoid**. The nucleus carries the genetic programme of the cell.

**QUESTION 4.**

It can reproduce both **sexually and asexually**. Asexually results in production of daughter cells, in which the amount and quality of genetic material in the nucleus of the mother cells is maintained in the daughter cells. The kind of cell division which maintains the quantity and quality of genetic material is called mitotic division.

**While sexually**, they produce gamete called mating strains. Two opposite mating strains will fuse together in a process called **Isogamy** to form zygote and they have two cells of chromosome. They fuse at their posted end when mating. They are **isogamy** because they are **morphologically identical.**

**QUESTION 5.**

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| **PANDORINA** | **VOLVOX** |
| 1. Its colony contains 16 cells attached to each other. | 1. There are thousands of cells attached to each other in a colony |
| 1. All the cells produce daughter colonies. | **b)** Not all cells produce daughter colony, only the larger ones close to the posterior end produce daughter cells. |
| 1. Sexual reproduction is achieved by anisogamous pairing. | **c)** sexual reproduction is achieved by oogamius. |

**QUESTION 6.**

An example of complex form of algae is **fucus.** They are often found on ricks in the intertidal zones of the sea shores. The plant body is flattened, dichotomously branched thallus with a mild rib, a vegetative apex, a reproductive apex at maturity and a multicellular disk (hold fist) with which plate is attached to rock surface. They vary in size of few centimeters to about 2 meters in length.

They also vary in terms of sex cells are found in the same sexual chamber or in different sexual chamber on different plant bodies. Sexual reproduction is oogamius, sex cells are produced in conceptacles which openings( ostroles) on the surface of the thallus.