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DEPARTMENT:MBBS

1. According to eichler's grouping, plants can be grouped into four divisions: Division Thallophyta, Division Bryophyta, Division Pteridophyta, and Division Spermatophyta.
2. Algae are of great economic importance to man. Certain species serve as food for both man and animals. Algae are used in the production of drugs for the treatment of certain illnesses. Some species of red algae provide agar, which is commonly used in the preparation of gels used for scientific research and preservation of canned meat, and carrageenan which is used as a thickening and stabilizing agent.
3. Chlamydomonas is a unicellular and motile form of green algae. It has a pair of flagella which it uses for mobility. The cell is bound by a cellulose cell wall containing organelles such as the nucleus ; which contains the cell's genetic material, the stigma or eye spot; which is used for photoreception, the mitochondria; which breaks down the food engulfed by the cell to produce energy, the pyrenoid; which processes manufactured sugar into starch, the chloroplast; which houses the chlorophyll, and the contractile vacuole; which removes the cell's waste and excess water.
4. Reproduction in Chlamydomonas may be vegetative or sexual.
5. (i) Volvox has a more complex form than pandorina, with thousands of cells in one colony. Meanwhile, pandorina has just 16 cells in one colony.  
(ii) Sexual reproduction in volvox is oogamous, while that of pandorina involves anisogamous pairing.  
(iii) Volvox is more evolutionarily advanced than pandorina.
6. Fucus, which is a genus of brown algae often found on rocks on the intertidal zones on the sea shore.