

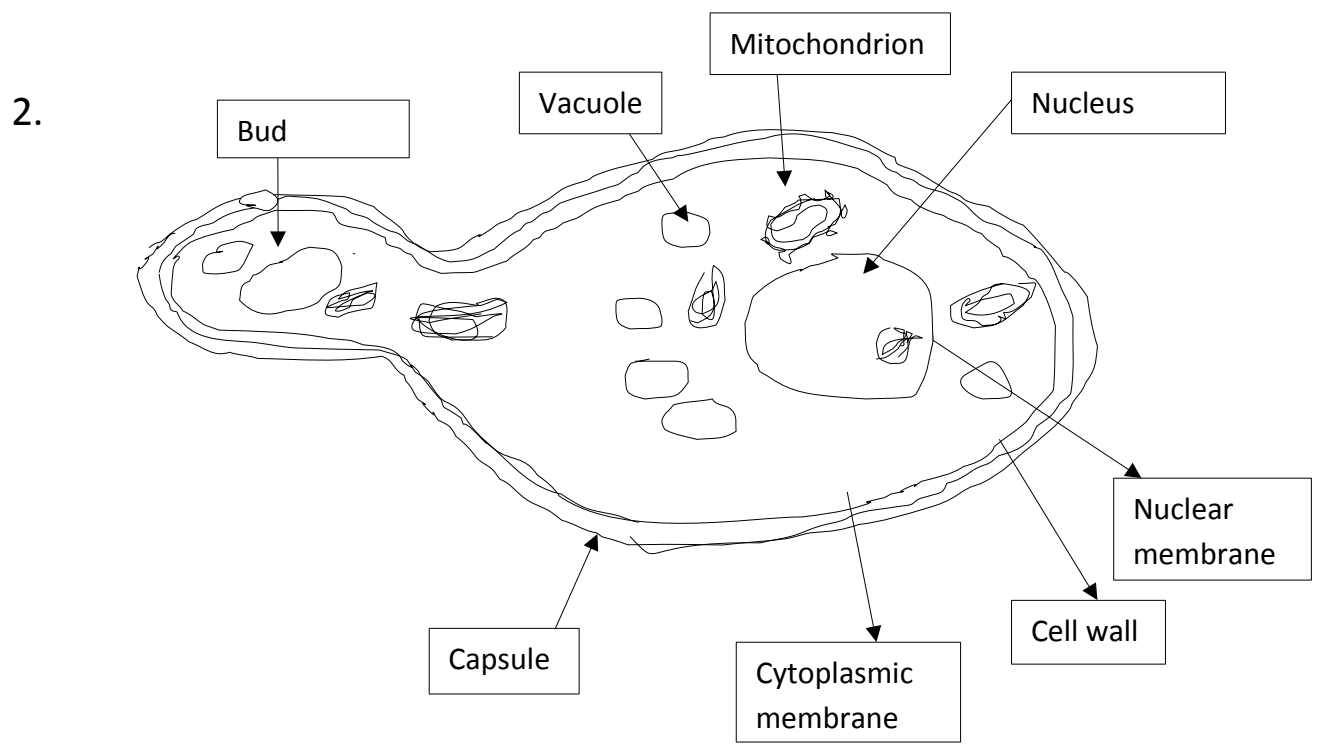
IHECHERE NNABUEZE WILSON

19/MHS01/198

MBBS

BIO 102 ASSIGNMENT.

1.
 - I. Fungi are important decomposers in most ecosystems.
 - II. Fungi, as food, play an important role in human nutrition in the form of mushrooms, and also as agent of fermentation in the production of alcoholic beverages, cheese, and numerous other food preparations.
 - III. Without fungi and other microbes, the earth's surface would have been clogged up with dead matter and all the earth's elements would have been locked up in them instead of returning into various cycles.
 - IV. Some fungi are parasites to some certain harmful pests. As such, they constitute important biological control agents in regard to such pests.



CELL STRUCTURE OF A UNICELLULAR FUNGI.

3. SEXUAL REPRODUCTION IN RHIZOPUS STOLONIFER:

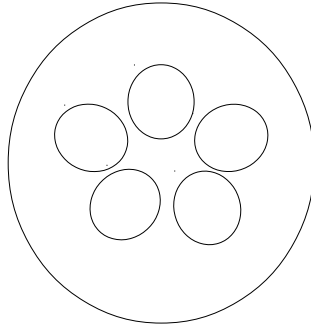
Sexual reproduction here occurs when two mating types of hyphae grow in the same medium. Chemical interaction in the two mating types of hyphae induces growth perpendicular to the hyphae in the opposite direction. These growths are delimited by a wall such that many nuclei are isolated in what is called a gametangium. The two gametangia fuse through plasmogamy and a zygote is formed which may undergo prolonged dormancy or resting stage. The nuclei in the zygotes fuse in twos and undergo meiosis independently. The zygote then germinates under favourable conditions to produce a fruiting that liberates the haploid spores at maturity.

4.

- I. They possess some modifications that permit elimination of excess water from the plant body and not only exchange of gases between the internal parts of the plants and the atmosphere therefore openings are available on the aerial parts of the plant.
- II. They have definite structures for water and nutrient absorption from the soil hence the plant is divided into two (the aerial and subterranean portions).
- III. The aerial that is exposed to the atmosphere demands some modifications that prevent excessive loss of water through the body surface.

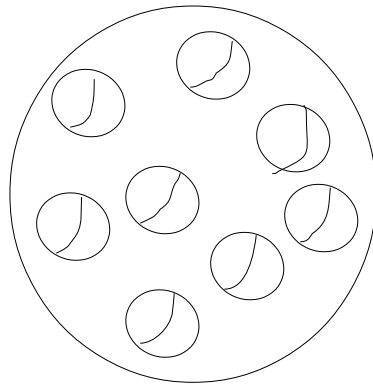
5.

- I. Eustele: This is a type of stele in which the vascular bundles are discrete, concentric collateral bundles of xylem and phloem. It is present mainly in herbaceous dicotyledonous plants.



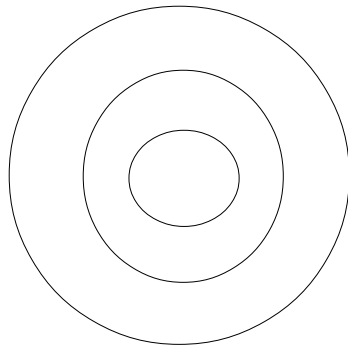
EUSTELE

- II. Atactostele: This is a type of stele where the vascular bundles are scattered.



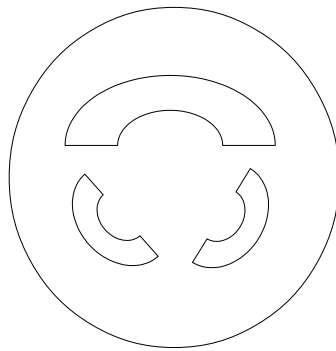
ACTACTOSTELE

- III. Siphonostele: This is a type of stele that is a cylinder enclosing a parenchymous pith.

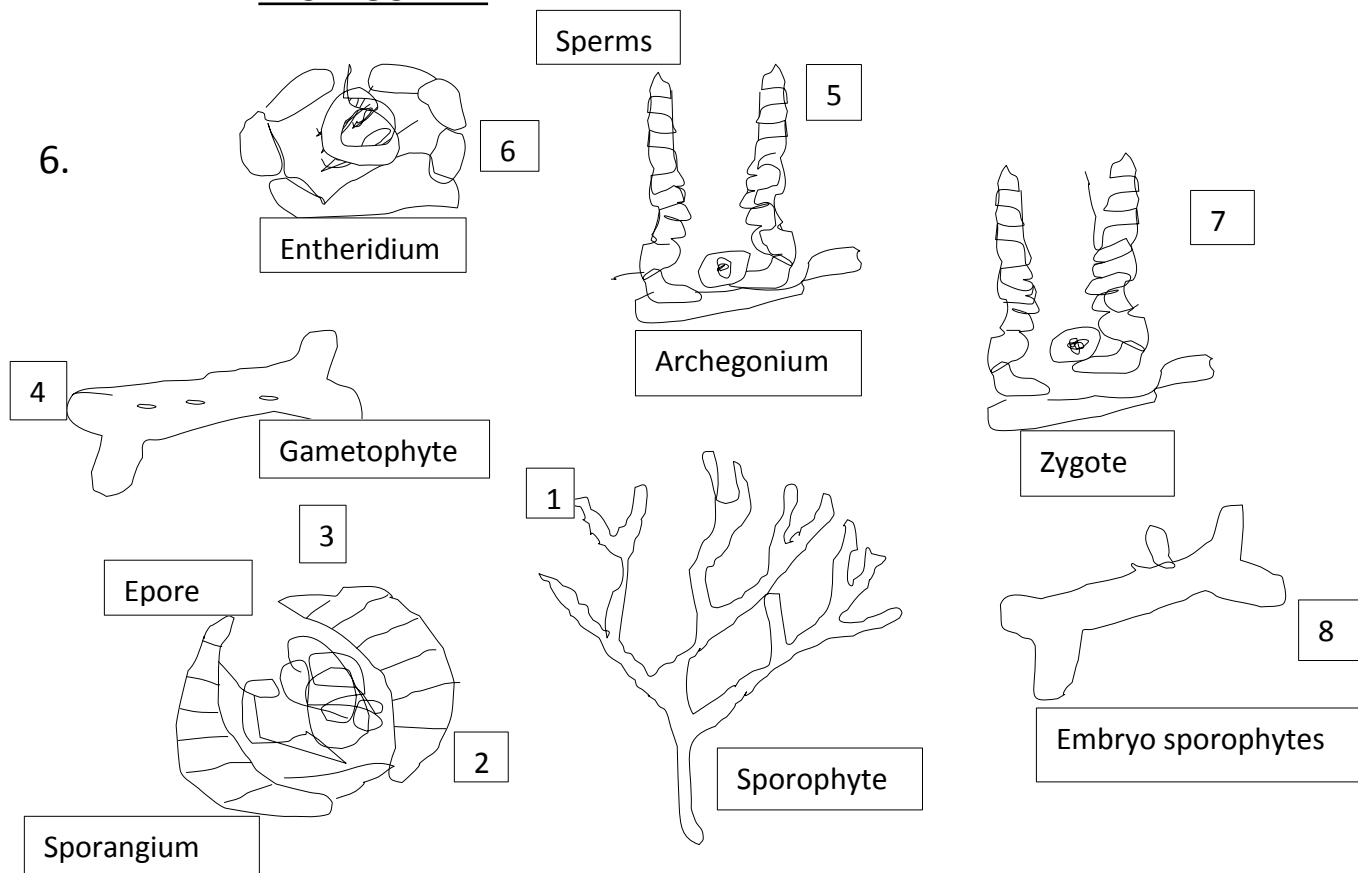


SIPHONOSTELE

IV. **Dictyostele:** This is a stele in which the vascular cylinder is broken up into longitudinal series of network of vascular strands around a circular pith. It is present in most ferns.



DICTYOSTELE



LIFE CYCLE OF PSILOTUM