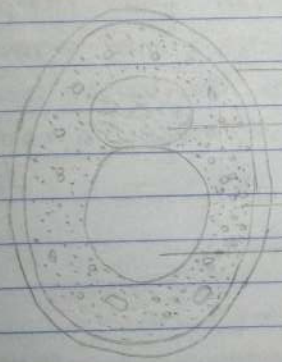
Name: Onwere, Joanna Kamsi
Department: MBBS
Matric No: 19/MHS01/352

1. Fungi is important to mankind because of the following:
a. It is responsible for the mediation of decay of organic matter.
b. Without it, the surface of the earth would have been clogged up with dead matters with all the various elements locked up in them instead of returning into various cycles.
c. It is important in food industry, e.g yeast (saccharomyces species).
d. Mushrooms are eaten by many human societies. Species eg Penicillium notetum produce important antibiotics.
e. Some fungi are parasites to some certain horrible obnoxious pests and therefore constitute important biological control egents in regard to such pests.

2.



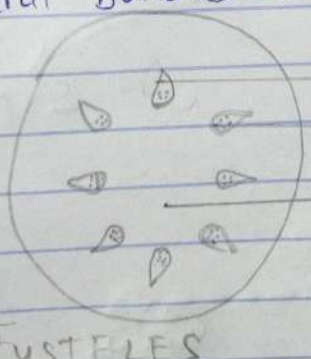
THE CELL STRUCTURE OF A UNICELLULAR FUNGUS

3. Sexual reproduction in a typical filamentous form of fungi:
It occus when ~~the~~ two mating types of hyphae grow in the same medium. Chemical interaction in the two mating types of hyphae induces growths perpendicular to the hyphae in opposite directions. These growths are delimited by a wall such that many nuclei are isolated in what is called a gametangium. The zygote

germinates under favourable conditions to produce a fruiting which at maturity liberates the haploid spores.

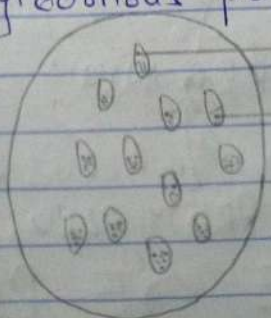
4. Bryophytes adapt to their enviroment in the following ways:
a. They have definite structures for water and nutrient absorption from the soil; therefore the plant body is divided into two (an aerial portion and a subterranean portion). The subterranean portion is the rhizoid and is not a true root as the case of land plants that are advanced.
b. The aerial portion being exposed to the atmosphere demands some modifications that prevents excessive loss of water through the body surface and some other modification that permits elimination of excess water from the plant body and not only exchange of gases between the internal parts of the plant and the atmosphere therefore openings are available on the aerial parts of the plant.

5a. Eustele: This is the kind of vascular organization found in herbaceous dicotyledonous plants in which the vascular bundles are discrete, concentric collateral bundles of xylem and phloem.



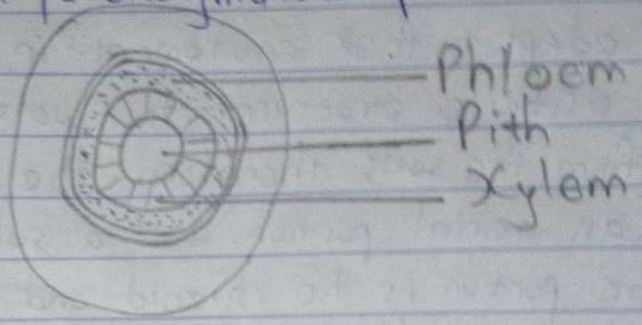
EUSTELES

b. Atactostele: This is the kind of vascular organization found in grasses and many monocotyledonous plants where the vascular bundles are scattered.



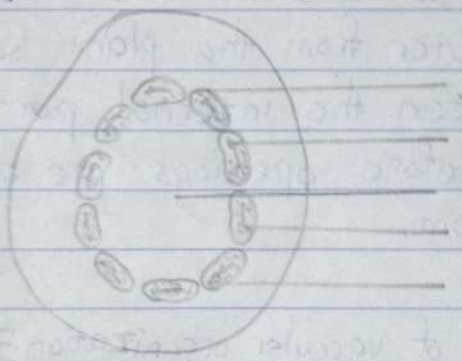
ATACTOSTELE

c. Siphonostele: This is the type of vascular organization found in stems of ferns and higher vascular plants where the stele is a cylinder enclosing a parenchymatous pith.



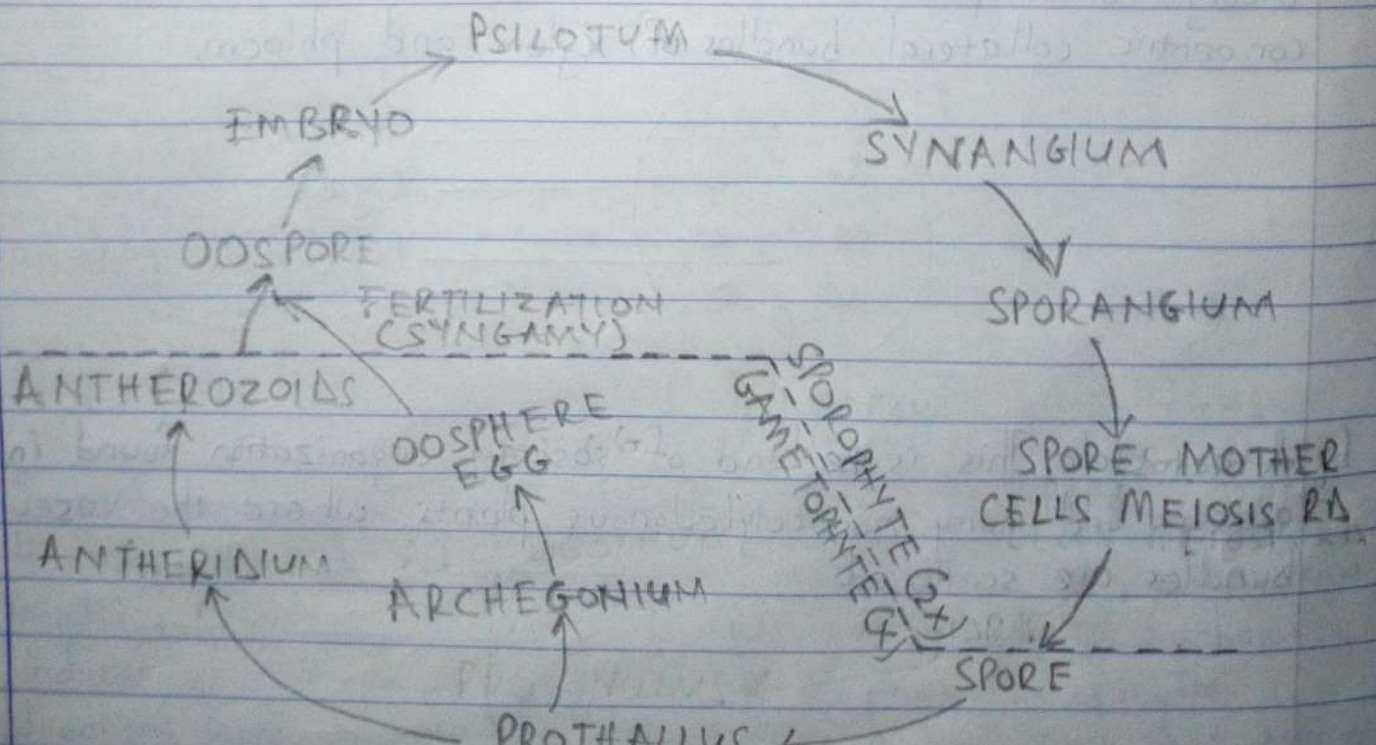
SIPHONOSTELE

d. Dictyostele: It is found in siphonostele where vascular supply to leaves is associated with leaf gaps and the conducting cylinder is a dissected one.



DICTYOSTELE

6.



LIFE CYCLE OF PSILOTUM (PRIMITIVE VASCULAR PLANT)