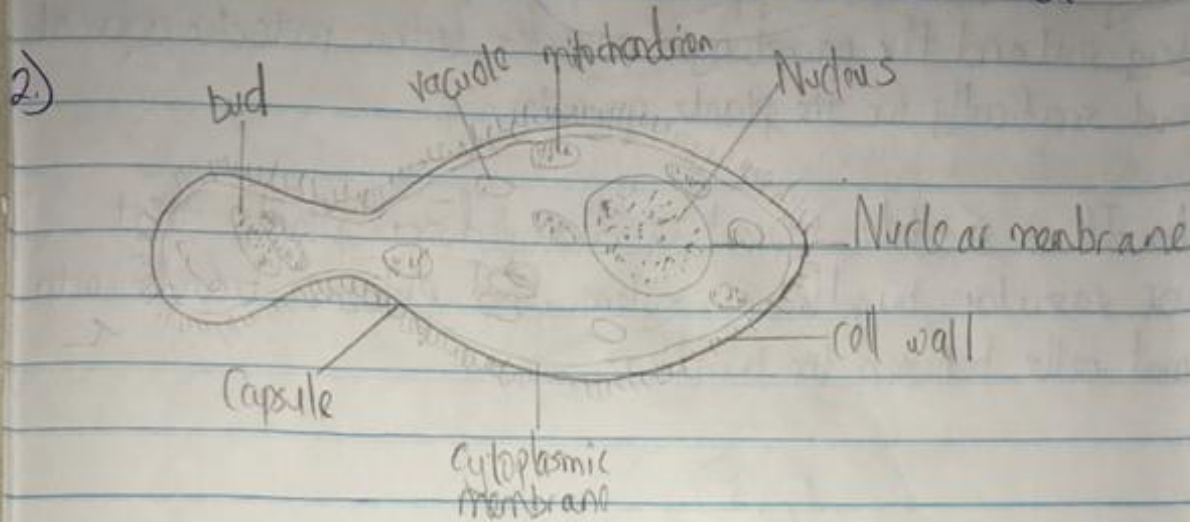


NAME: FASUYI OMOKOREDE OLUWATOYIN
MATRIC NUMBER: 19/MTS02/057

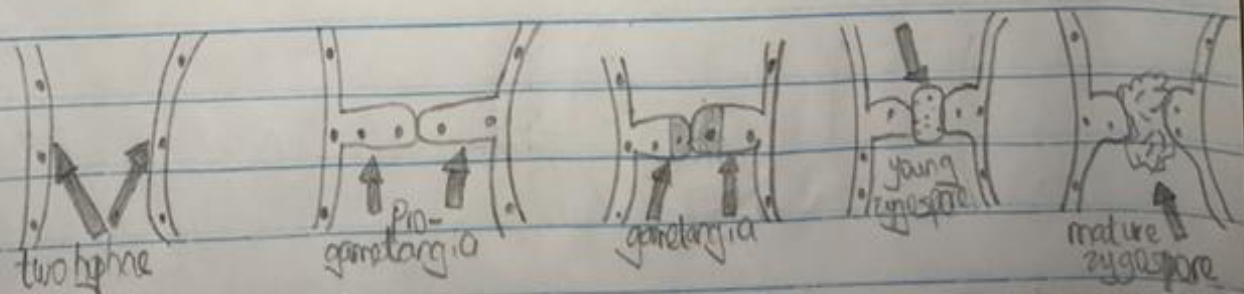
DEPARTMENT: NURSING

1) Fungi is important to mankind because they are a source of food for humans in the sense that fungi helps to break down plants fibers and allow the nutrient to be released into the soil.



3) Sexual reproduction in a typical filamentous form of fungi; namely (*Rhizopus stolonifer*) occurs when two mating types of hyphae grow in the same medium. Chemical interaction in the two mating types of hyphae produces 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 two gametangia fuse (plasmogamy) and a zygote is formed which may undergo prolonged dormancy or resting stage. The nuclei in the zygotes fuse in two and undergo meiosis independently. The zygote germinates under favourable conditions to produce a fruiting which at maturity liberates the haploid spores.

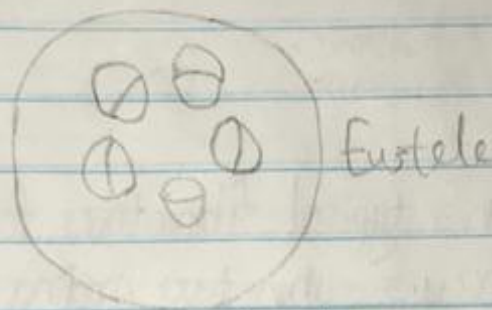


4) Bryophytes adapt to their environment in the following ways;
i) They have definite structures for water and nutrient absorption

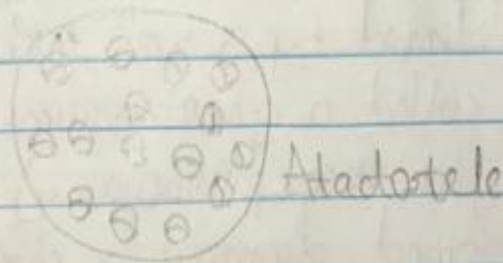
from the soil, therefore the plant body is divided into two (an aerial portion and a subterranean portion).

ii) The waxy cuticle in the bryophytes help to protect the plants tissue from drying out and the gametangia provides further protection against drying out specifically for the plants gametes.

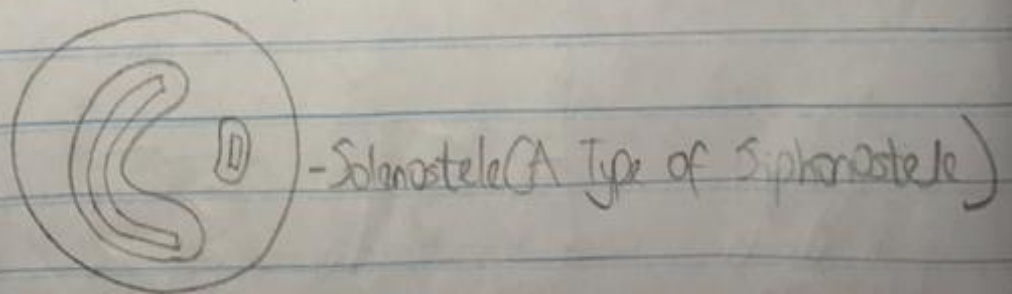
5a) Eustele - It is a stele typical of dicotyledonous plants that consists of vascular bundles of xylem and phloem strands with parenchymal cells between the bundles.



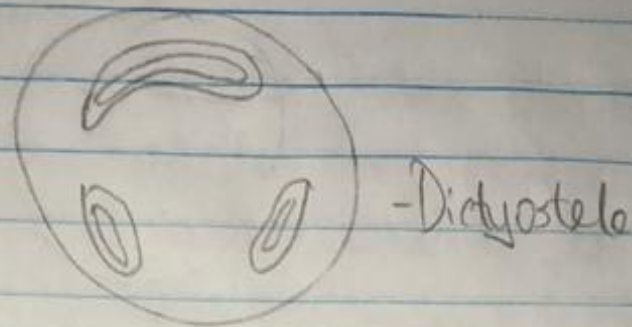
b) Atactostele is a type of eustele, found in monocots, in which the vascular tissue in the stem exists as scattered bundles.



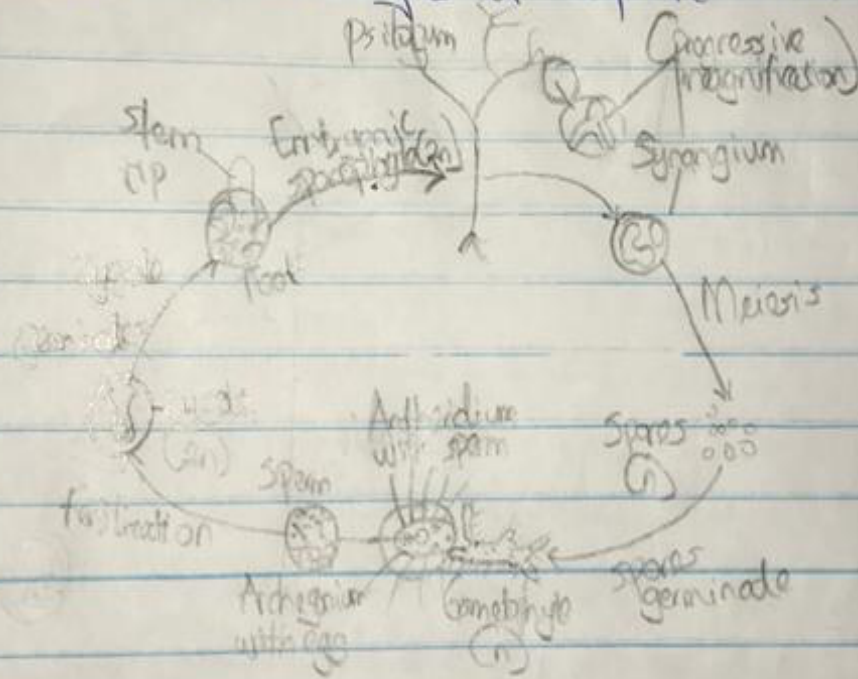
c) Siphonostele - It is a stele in which the vascular tissue is in the form of a cylinder surrounding the pith, as ~~the~~ in the stems of most ferns and other seedless vascular plants.



d) Dichostele - It is a stele in which the vascular cylinder is broken down into a longitudinal series or network of vascular strands around a central pith (as in many ferns).



6) Illustration of the life cycle of a primitive vascular plant.



~~Illustration of the~~ life cycle of Psilotum