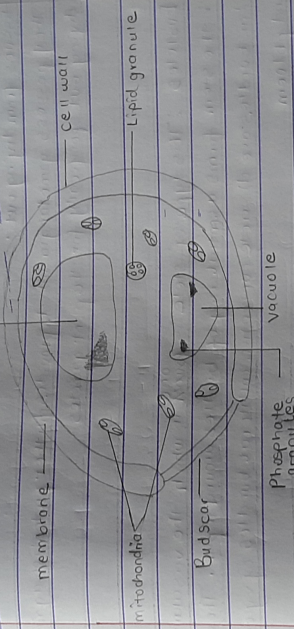


NAME: VICTORIA - OPUTA FIDENCE DRABOO
 DEPT: MEDICINE AND SURGERY
 MATRIC NO: 191111MHS011433
 COURSE CODE: BIO 102

Assignment:

1. Fungi are important to man for the following reasons:
 - i) They are important in food industry like bakeries and yogurt making factories.
 - ii) Mushrooms are eaten by many human societies.
 - iii) They are responsible for the mediation of the decay of organic matter.
 - iv) Some fungi are parasites to some certain horrible obnoxious pests.

2. Cell structure of a unicellular fungus:



2. Sexual reproduction in a filamentous fungi like Rhizopus stolonifer undergoes the following steps:
 - i) First, two mating types of hyphae grow in the same medium
 - ii) A chemical interaction between them causes growth perpendicular to the hyphae in opposite directions, so they can meet with one another.
 - iii) The growths are the delimited by a wall just so the nuclei are isolated in differentiated sex organs called gametangia. Spores are formed in these gametangia.
 - iv) The gametangia fuse in a process called plasmogamy and together they form a zygote which may undergo dormancy for a period.
 - v) The nuclei in the zygote fuse in twos and undergo meiosis.

independently, it then moves onto germinating under favourable conditions so as to liberate topical spores at maturity through the production of a fruiting.

v) In summary, sexual reproduction in fungi consists of three stages, plasmogamy, karyogamy, and meiosis.

4. Bryophytes are able to survive in their habitat via the following.

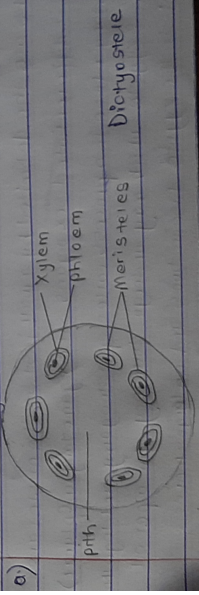
- i. They have definite structures for water and nutrient absorption from the soil.
- ii. They possess a waxy cuticle which helps to protect the plants from drying out.
- iii. They possess gametangia which provides further protection against drying out specifically for the plant gametes.

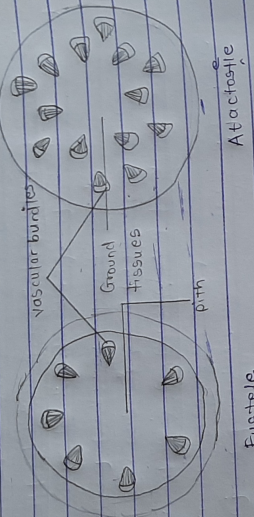
5. A) Eustele: This type of stele is found in which the vascular tissue in the stem forms a central ring of bundles around a pith. The vascular bundles are discrete collateral bundles of xylem and phloem.

B) Atactostele: A type of stele found in monocots, in which the vascular tissue in the stem exists as scattered bundles.

C) Dictyo stele: A type of stele in which the vascular cylinder is broken up into a longitudinal series or network of vascular strands around a pith.

Diagrammatic illustrations of the different steles





Life cycle of a primitive vascular plant (Psilotum)

