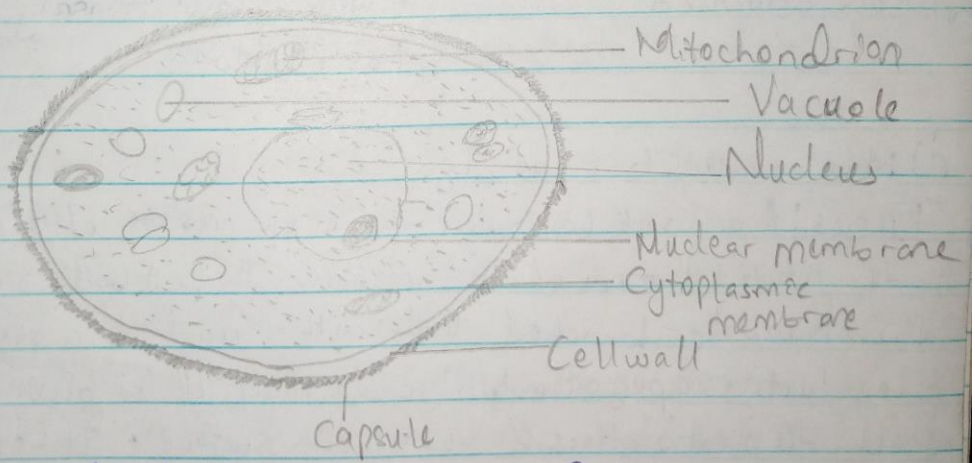
NdONDAY- JERUMEH TBUEBUE
19/MHS01/246
M.H.S M.B.B.S 100LVL
BIO 102 assignment

1) i) Fungi eg yeast are important in food industry.
ii) Mushrooms are eaten by many human societies
iii) Species eg Penicillium notatum produce important antibiotics.
iv) Many fungi species mediate the spoilage of wood, food, clothes and paper.

2) DIAGRAM OF THE STRUCTURE OF Saccharomyces cerevisiae (YEAST)



3) Sexual reproduction of Rhizopus Stolonifer.
This occurs when two mating types of hyphal grow in the same medium. Chemical interaction in the two mating types of hyphae ~~inch~~ induces growths perpendicular

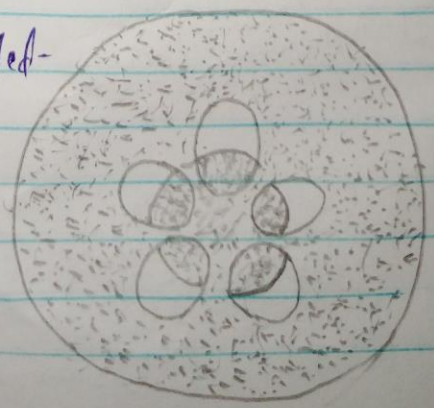
to the hyphae in opposite directions. These growth are demarcated by a wall such that many nuclei are isolated in what is called a gametangium. The two gametangia fuse (plasmogamy) and a zygote is formed which may undergo prolonged dormancy or resting stage. The nuclei in the zygotes fuse in twos and undergo meiosis independently. The zygote germinates under favourable condition to produce a fruiting which at maturity liberates the haploid spores

4) 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).

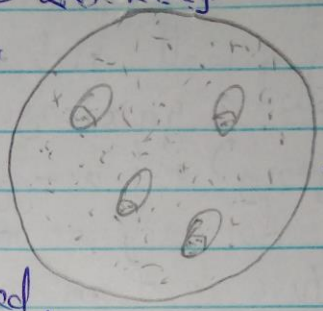
b) The aerial portion being exposed to the atmosphere demands some modifications that prevents excessive loss of water through the body surface.

c) Some other modifications permit elimination of excess water from the plant body therefore openings are available on the aerial parts of the plant.

5a) Eustele: These are in herbaceous dicotyledonous plants in which the vascular bundles are discrete, concentric collateral bundles of xylem and phloem.



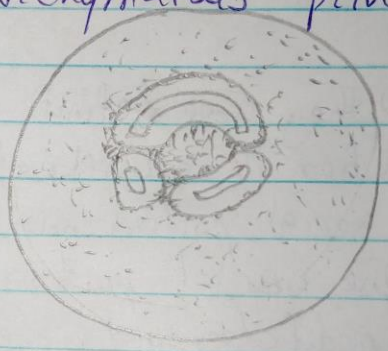
5b) Atactostele! These are in grasses and many monocotyledonous plants. The vascular bundles are scattered.



- Atactostele

5c) Siphonostele! In more advanced vascular systems eg stems of ferns and higher vascular plants, the stele is a cylinder enclosing a parenchymatous pith.

5d) Dictyostele: In siphonosteles, vascular supply to leaves is associated with leaf gaps and the conducting cylinder is a dissected one.



6) LIFE CYCLE OF PSILOTUM.