



NAME: UDOMBETH, NDANABASI BONIFACE
MATIC NO: 191415011411
DEPARTMENT: MBBS

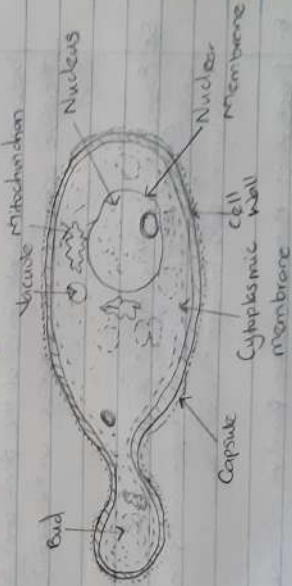
BIO 102

ASSIGNMENT

1. Importance of Fungi:

- a. Fungi are very important to the entire terrestrial ecosystem in material cycling and to man.
- b. Fungi are responsible for the mechanism of decay of organic matter.
- c. Without fungi and other microbes, 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.
- d. Fungi e.g yeast are important in food industry.
- e. Many fungi species mediate the spoilage of wood, food, clothes and paper.
- f. Many are plants pathogens causing blights and smuts in cereals.
- g. Some fungi are parasites to some certain horrible obnoxious pests.
- h. Medical and veterinary mycology deals with fungal diseases and infections in human beings and animals.

2.



THE STRUCTURE OF YEAST (A UNICELLULAR FUNGUS)

3. Sexual Reproduction in Rhizopus Stolonifer

Sexual reproduction occurs when two mating types of hyphae grow in the same medium. Chemical interaction in the two mating types of hyphae induces gametes perpendicular to the

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 twos and undergo meiosis independently. The zygote germinates under favourable conditions to produce a fruiting which at maturity liberate the haploid spores.

4. Adaptation of Bryophytes to Environment

- They have definite structures for water and nutrient absorption from the soil, therefore the plant body is divided into two (an aerial part and a subterranean part). The subterranean part is the rhizoid and is not a true root as the case of land plants that are advanced.
- The aerial part being exposed to the atmosphere demands some modifications that prevent excessive loss of water through the body surface (i.e. desiccation).
- Some other modifications that permit 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 suitable on the aerial parts of the plant.

5a. Eustyles: - A stele typical of dicotyledonous plants that consists of discrete, concentric layers of xylem and phloem strands with parenchyma cells between the bundles.

b. Archistele: - A type of stele found in monocots in which the vascular tissue in the stem exists as scattered bundles.

c. Siphonostele: - A stele consisting of a core of pith surrounded by concentric layers of xylem and phloem.

