

NAMES: MURDIA BINELUM EMILIA
 MATRIKULATION NUMBER: 11111111245
 COURSE CODE: BIO 102
 ASSIGNMENT

1. IMPORTANCE OF FUNGI
 - a) Fungi are important to the entire terrestrial ecosystem in material cycling and to man.
 - b) Fungi are responsible for the mediation of decay of organic matter.
 - c) Fungi eg yeast are important in food industry
 - d) Some species eg *Penicillium notatum* produce important antibiotics.

2. DIAGRAM OF THE CELL STRUCTURE OF A UNICELLULAR FUNGUS (YEAST)

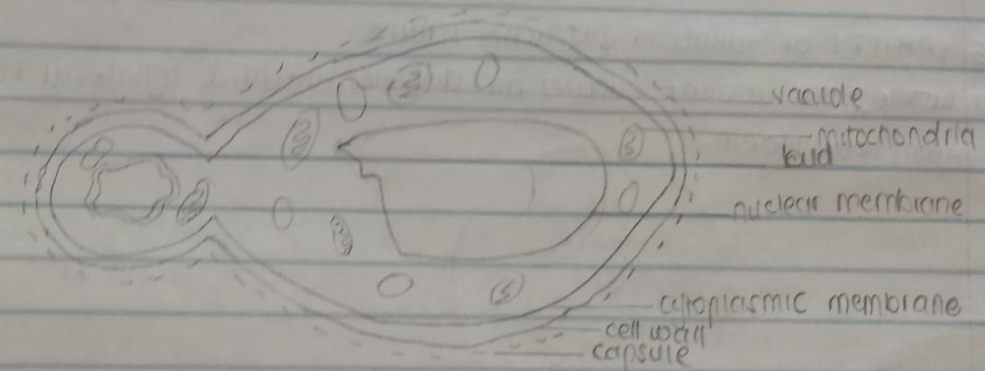


DIAGRAM OF THE STRUCTURE OF YEAST (A UNICELLULAR FUNGUS).

3. SEXUAL REPRODUCTION IN A TYPICAL FILAMENTOUS FUNGI (*RHIZOPUS STOLONIFERA*)

Sexual reproduction occurs when two mating types of hyphae grow in the same medium. Chemical interactions in the 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 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

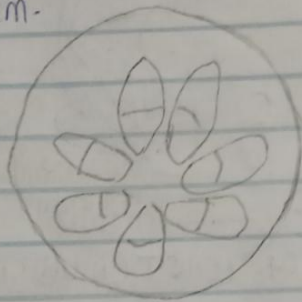
fruiting which at maturity liberates the haploid spores.

4 ADAPTATION OF BRYOPHYTES TO THEIR ENVIRONMENT

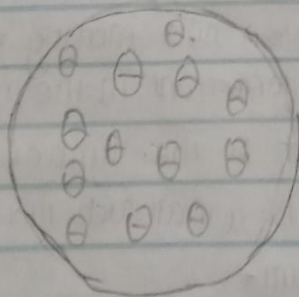
- They have definite structures for water and nutrient absorption from the soil.
- The aerial portion being exposed to the atmosphere demands some modifications that prevents excessive loss of water through the body surface.
- Some other modifications that permit elimination of excess water from the plant body and not only exchange of gases between the internal parts of the plant and the atmosphere therefore openings are available on the aerial parts of the plant.

5 VARIETY OF FORMS IN VASCULAR PLANTS

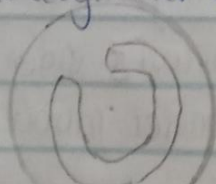
- Eustele:** The vascular bundles are discrete, concentric collateral bundles of xylem and phloem.



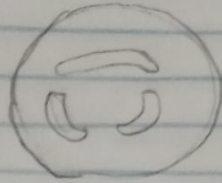
- Atactostele:** A type of eustele, found in monocots, in which the vascular tissues in the stem exist as scattered bundles.



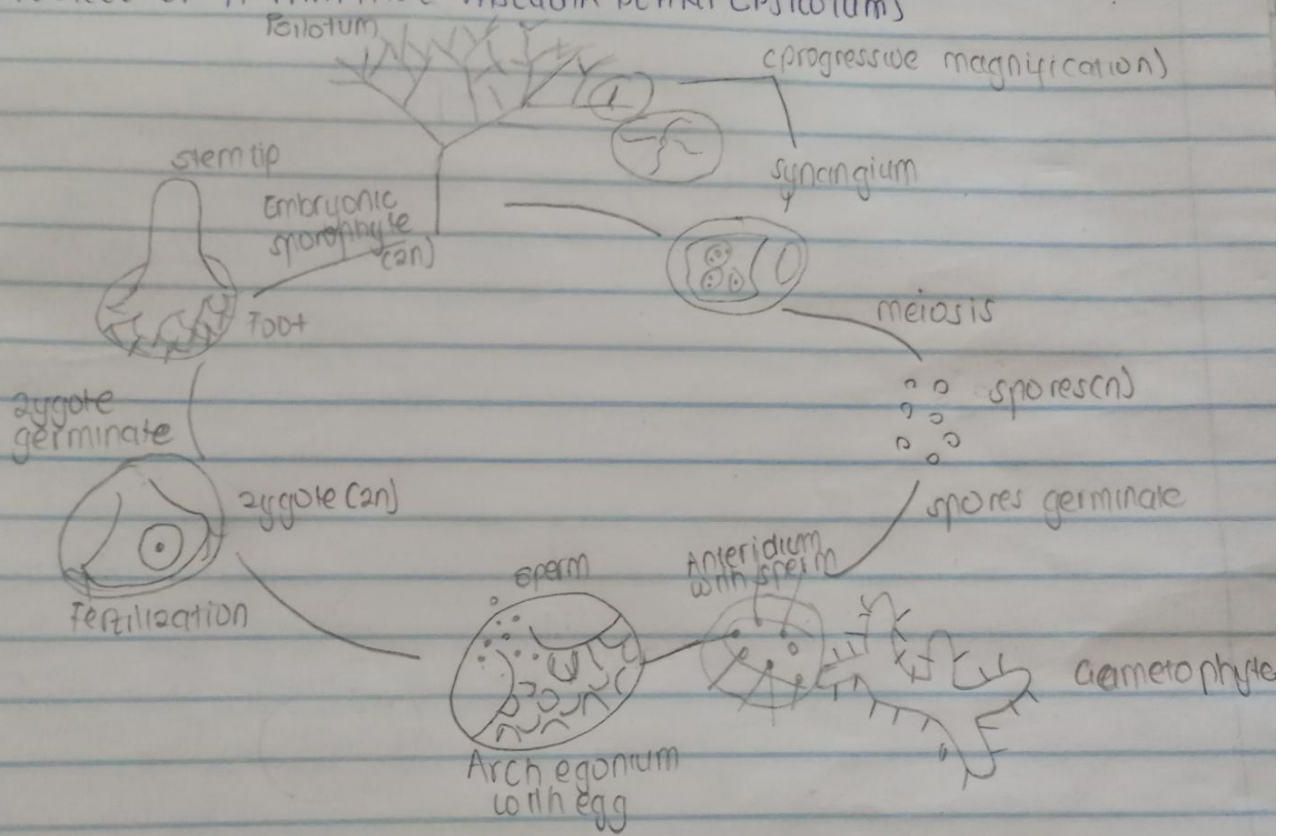
- Siphonostele:** The stele is a cylinder enclosing a parenchymatous pith.



4) **Dictyostele:** A stele in which the vascular cylinder is broken up with a longitudinal series or network of vascular strands around a central pith.



6) **LIFECYCLE OF A PRIMITIVE VASCULAR PLANT (PSILOTUM)**



LIFE CYCLE OF PSILOTUM.