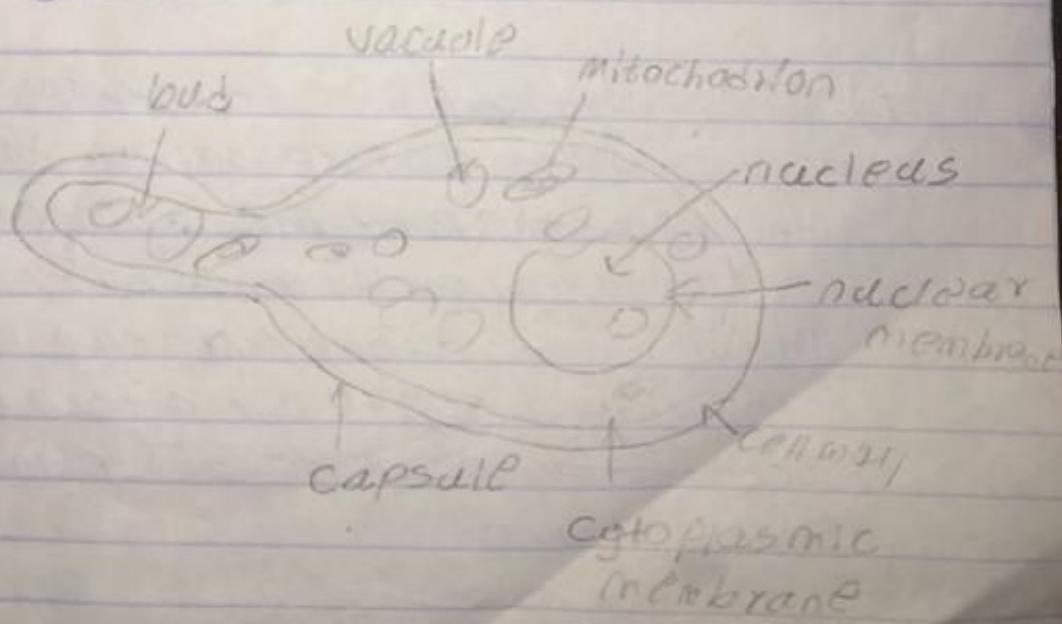


NAME: ALLOR NONSO STEPHEN
DEPARTMENT: MEDICINE AND SURGERY
MATRIC NO: 955 19/Mb501/087

- 2.) Fungi are very important to the entire terrestrial ecosystem in material cycling and to man.
- Fungi are responsible for the mediation of decay of organic matter.
 - Without fungi: microbes 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.
 - Fungi e.g yeast (*Saccharomyces cerevisiae*) are important in food industry.

2i) Page 17



The structure of *saccharomyces cerevisiae* (yeast) undergoing asexual reproduction (budding)

3.) Sexual Reproduction

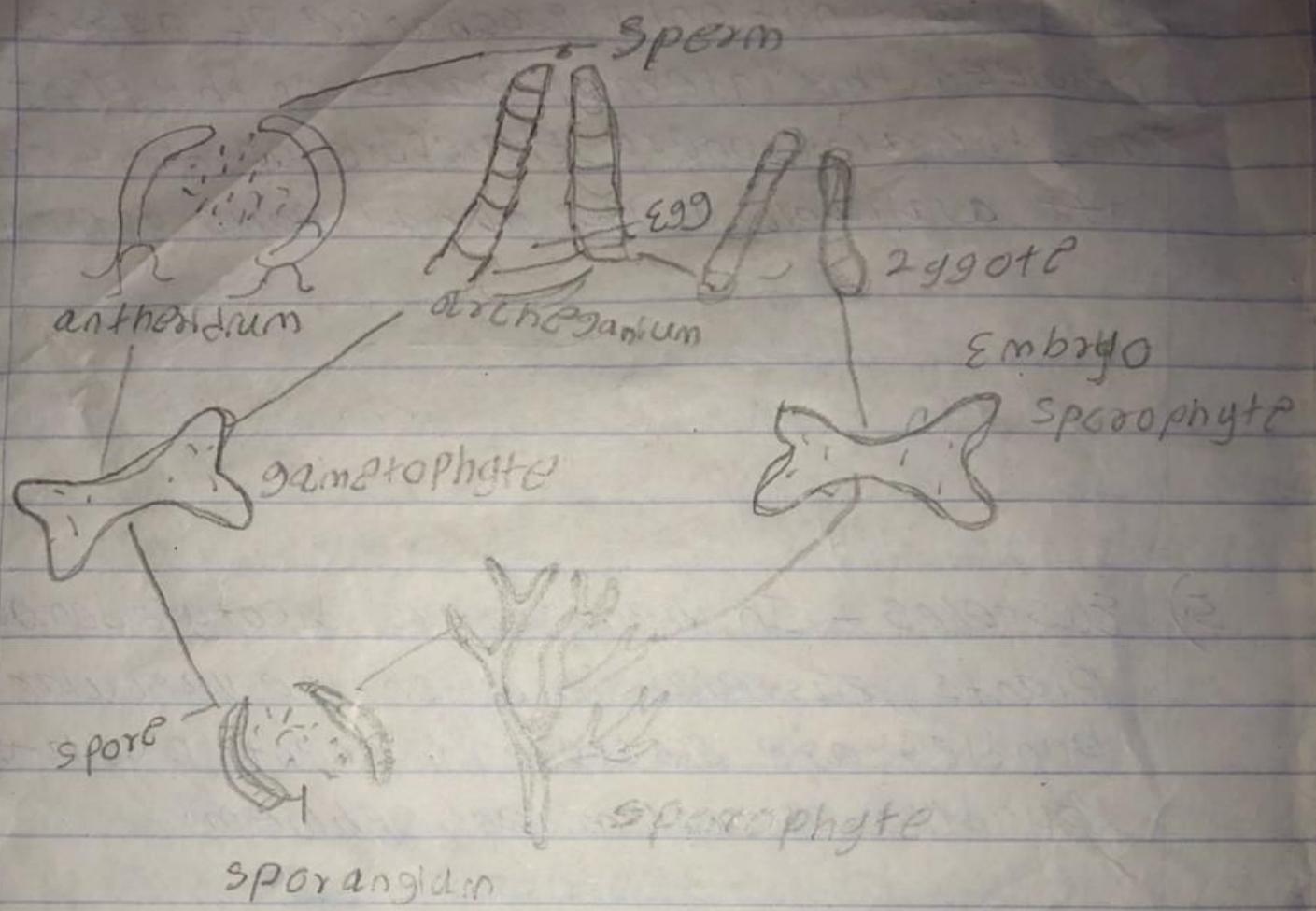
Occurs when two mating types of hyphae grow in the same medium. Chemical interactions in the two mating types of hyphae induces growth perpendicular to the hyphae in opposite directions. These growth are delimited by a wall such that many nuclei are isolated in what is called a gametangium.

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 liberates the haploid spores.

- 4.) 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). The subterranean portion is the rhizoid and is not a true root as the ~~aerial~~ case of land plants that are advanced.
 - b.) The aerial portion being exposed to the atmosphere demands some modifications that prevent's excessive loss of water through the body (like desiccation) and

- c) some other modifications that permits elimination of excess water from the plant body and not only exchange of gasses between the internal parts of the plant and the atmosphere therefore openings are also available on the aerial parts of the plants.
- 5) **Eustele** - In herbaceous dicotyledonous plants, eustoles in which the vascular bundles are discrete, concentric collateral bundles of xylem and phloem.
- **Actinostele** - In grasses and many monocotyledonous, they are scattered. The nature of vascular supply to leaves is also noteworthy element of the vascular system.
 - **Siphonostele** - In siphonosteles, vascular supply to leaves associated with leaf gaps and the conducting cylinder is a dissected one dictyostele.
 - **dictyostele** - a stele in which the vascular cylinder is broken up into a longitudinal series or network of vascular strands around a central pith (as many ferns)



A sketched life cycle of *Psilotum*