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DEPARTMENT: MBBS.

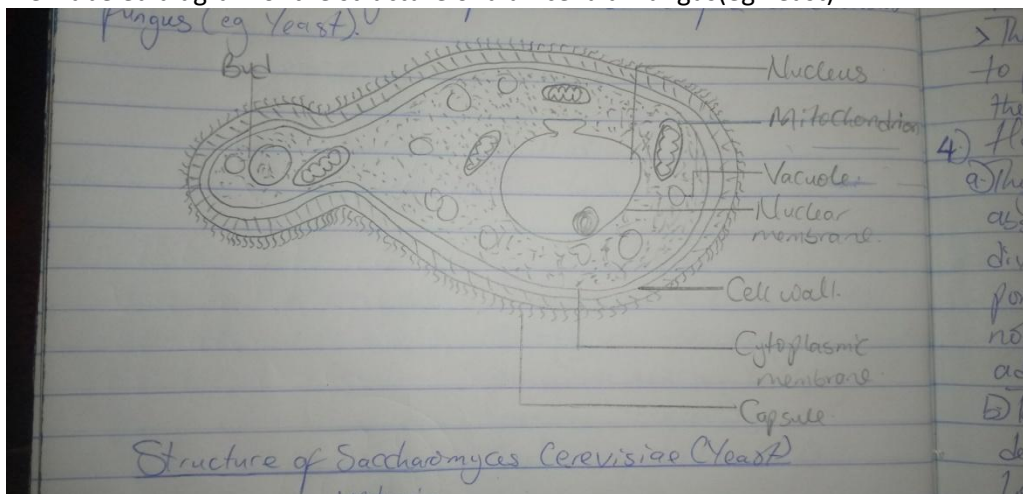
MATRIC NO: 19/MHS01/365.

COURSE: BIO 102.

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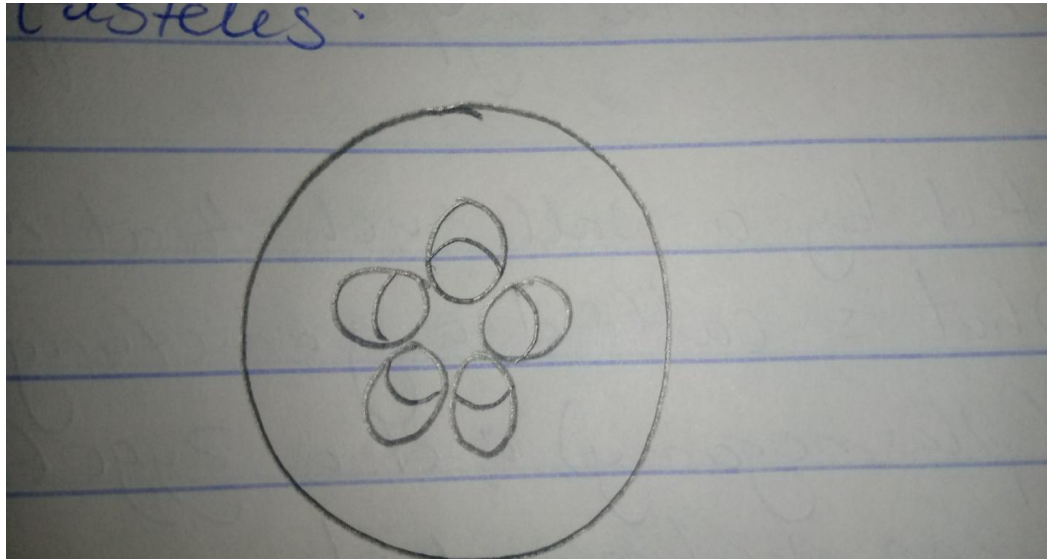
ASSIGNMENT.

1. How are Fungi important to mankind?
 - A. Fungi are responsible for the mediation of decay of organic matter to avoid clogging of the environment with dead matter and to aid material cycling.
 - B. Fungi (eg Yeast) are important in the food industry[Mushrooms are taken as food in many human societies].
 - C. Many species of fungi mediate the spoilage of wood, food, clothes and even paper.
 - D. Some species of Fungi are parasites to some certain horrible obnoxious pests eg houseflies etc, hence, make up important biological control agents in regard to such pests.
2. Well labeled diagram of the structure of a unicellular fungus(eg Yeast).



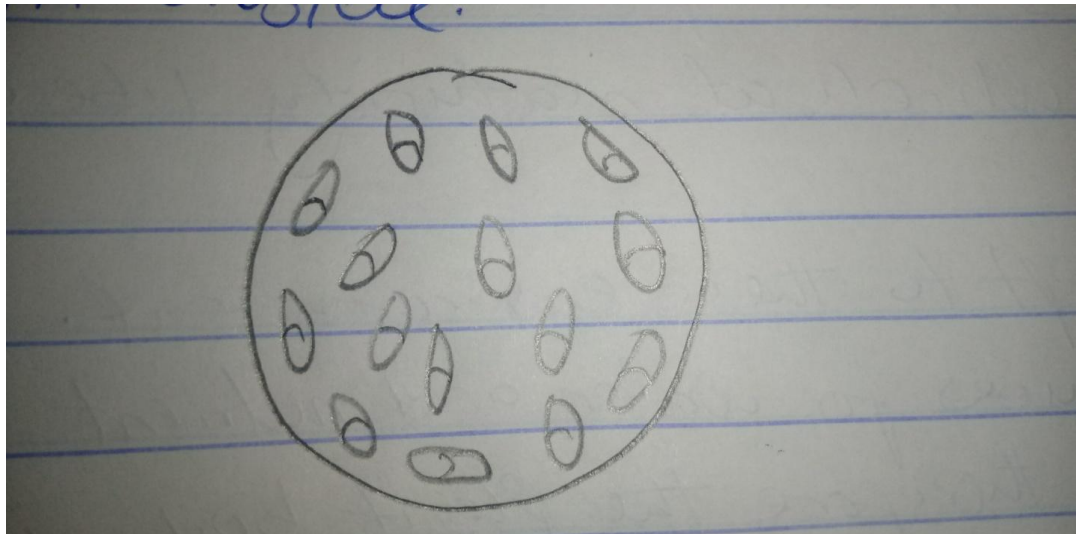
3. Sexual reproduction of a filamentous form of Fungi (Rhizopus stolonifer).
 - It occurs when two mating types of hyphae grow in the same medium.
 - Chemical interaction in the two mating types of hyphae induces growth perpendicular to the hyphae in opposite directions.
 - These growths are delimited 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 zygote fuse in two and undergo meiosis independently.
 - The zygote germinates under favourable conditions to produce a fruiting which at maturity liberates the haploid spores.
4. How Bryophytes adapt to their environment.

- 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). The subterranean portion is the rhizoid and is not a true root as the case of land plants that are advanced.
 - B. The aerial portion being exposed to the atmosphere demands some modifications that prevents excessive loss of water through the body surface (ie desiccation); and
 - C. 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. Describe with illustrations:
- A. Eusteles.



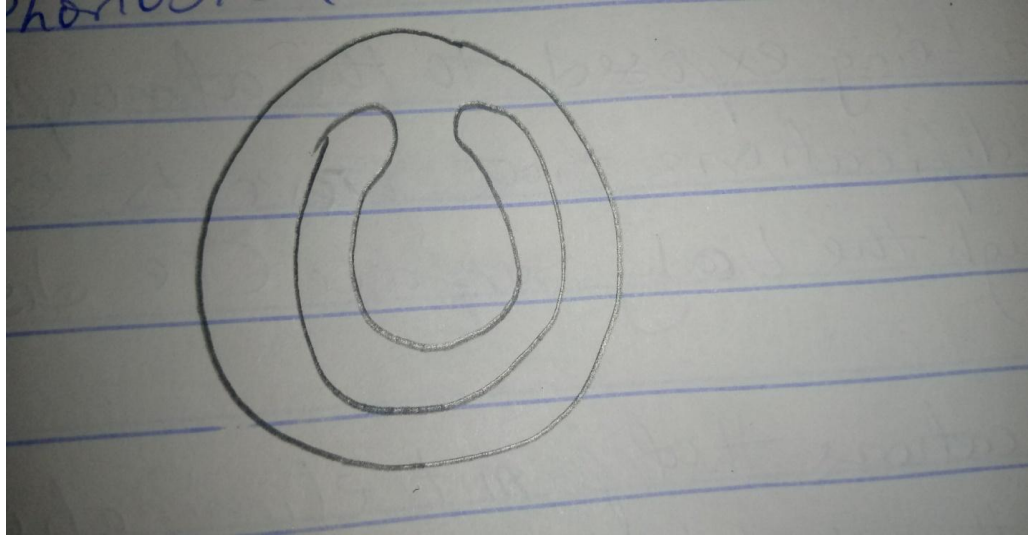
A type of siphonostele, in which the vascular tissue in the stem forms a central ring of bundles around a pith.

- B. Atactostele.



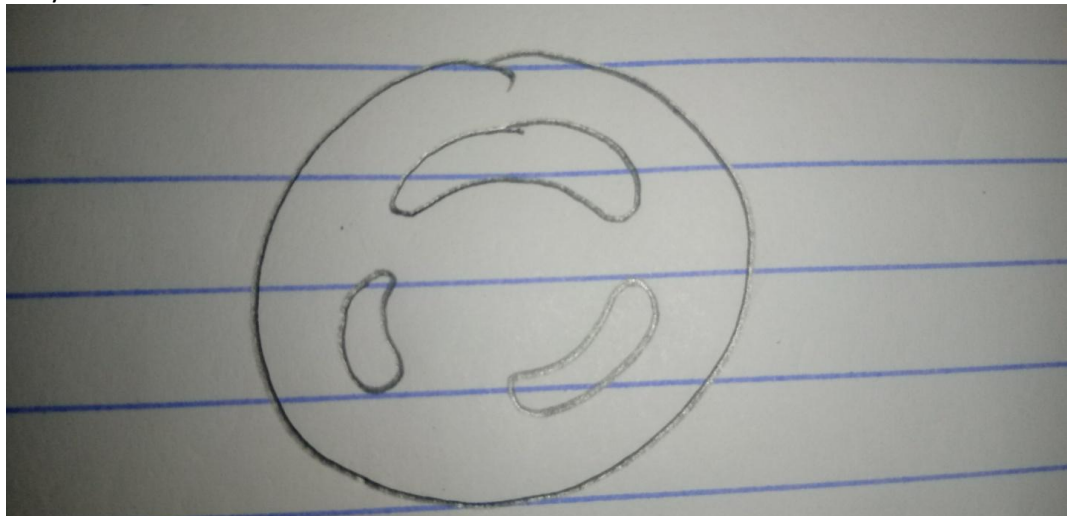
A type of eustele, found in monocots in which the vascular tissue in the stem exists as scattered bundles.

- C. Siphonostele.



A stele consisting of a core of pith surrounded by concentric layers of xylem and phloem.

D. 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 in many ferns).

6. Life cycle of a primitive vascular plant.

