BADMUS TOLUWANI AMINAT 19/MHS01/116 MBBS

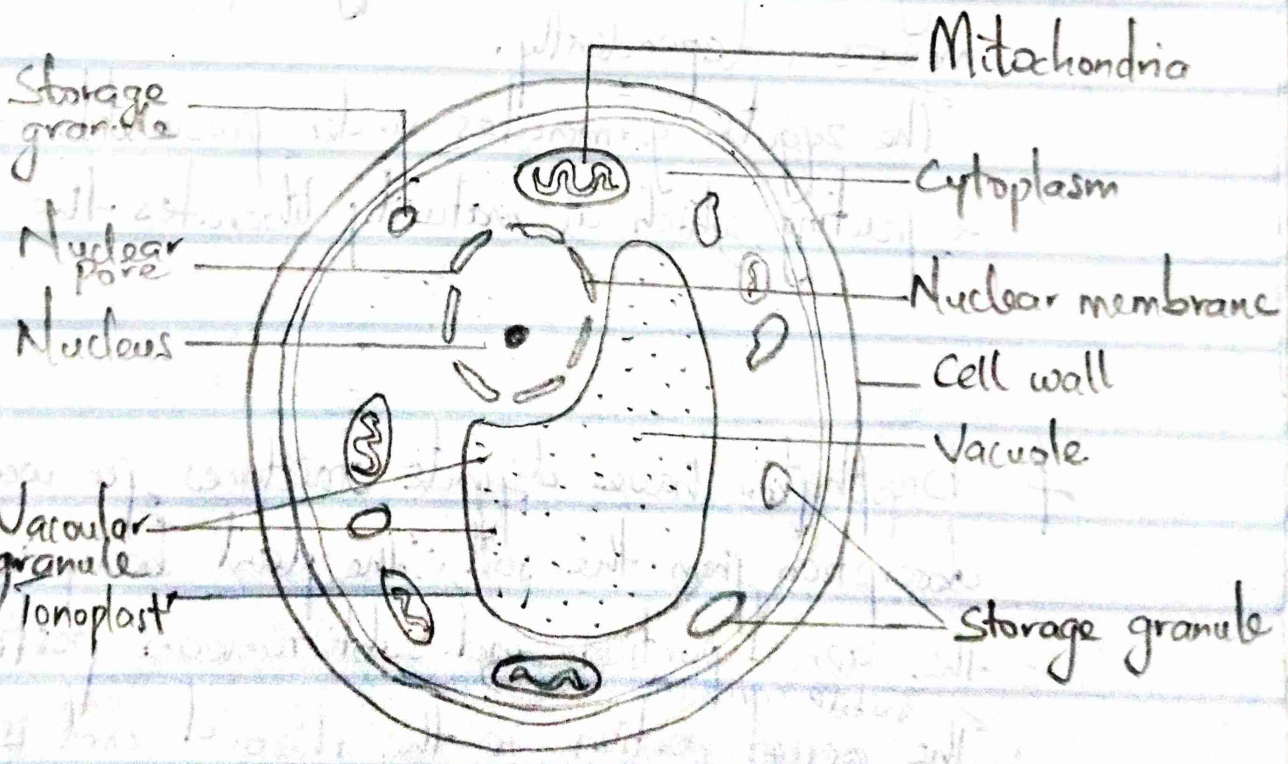
1 Fungi are important to mankind in the following ways:-

a Fungi are responsible for the mediation of decay of organic matter. This action prevents the earth's surface from getting clogged up with dead matters with all various elements locked up in them.

b Fungi eg yeast are important in the food industry.

c Penicillium which is derived from fungi is used as an antibiotic.

2 Brewer's yeast is one of the best known example of a unicellular form of fungi:- Bread yeast [Saccharomyces cerevisiae]



CELL STRUCTURE OF Saccharomyces cerevisiae

3 SEXUAL REPRODUCTION IN RHIZOPUS STOLONIFER [filamentous fungi]

Sexual reproduction in Rhizopus stoloniger occurs when two mating types of hyphae grow in the same medium. Chemical interactions in the two mating types of hyphae induces growths perpendicular to the hyphae in opposite directions. These growths are delimited by a wall such that the many nuclei are isolated in what is called a gametangium. Two gamentangia fuse [plasmogamy] and a zygote is formed which may undergo prolonged dormancy or resting stage. The nuclei in the zygote fuse in two's and undergo meiosis independently.

The zygote germinates under favourable conditions to produce a fruiting which at maturity liberates the haploid spores.

4 Bryophytes have definite structures for water and nutrient absorption from the soil. The plant body is divided into the aerial portion and subterranean portion.

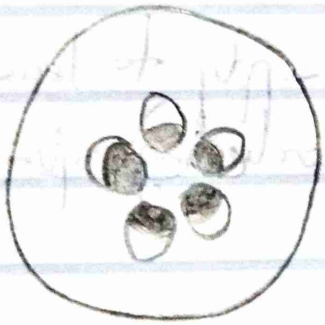
The subterranean portion is the rhizoid and is not a true root

The aerial portion being exposed to the atmosphere prevents excessive loss of water through the body surface.

iii They have a waxy cuticle that prevents the body, the zygote and the embryo from drying out.

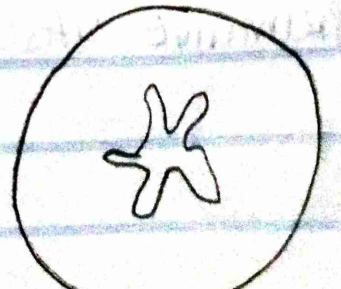
iv They possess gametangia that keeps the plants gametes from drying out.

5a Eusteles :- This is a kind of vascular organisation which occurs in herbaceous dicotyledonous plants whereby the vascular bundles are discrete, concentric collateral bundles of xylem and phloem.



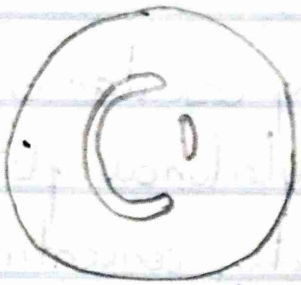
Eustele

5 Atactostele :- This is common in grasses and many monocotyledonous plants, the vascular bundles are scattered.



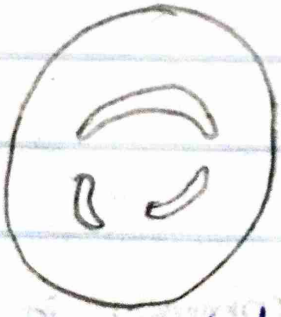
Actinostele

c Siphonostele :- This is found in stems of ferns and higher vascular plants, the stele is a cylinder enclosing a pharanchymatous pith.



Solenostele

d Dictyostele :- The vascular supply to leaves is associated with leaf gaps and the conducting cylinder is a dissected one



Dictyostele

6 LIFE CYCLE OF A PRIMITIVE VASCULAR PLANT ie Psilotum

Life cycle of Psilotum