NAME: EKPOLO EWOMAZINO ESTHER

MATRIC NO: 19/MHS02/045

DEPARTMENT: NURSING

COLLEGE: MHS

COURSE CODE: BIO102

1). How are fungi important to mankind

ANSWER

Fungi are important to man in the following way;

A They are pathogenic to some pest (e.g housefly, mosquitoes)

B Mushroom which is a fungi serves as a source of food

C unicellular fungi which is yeast is used for baking.

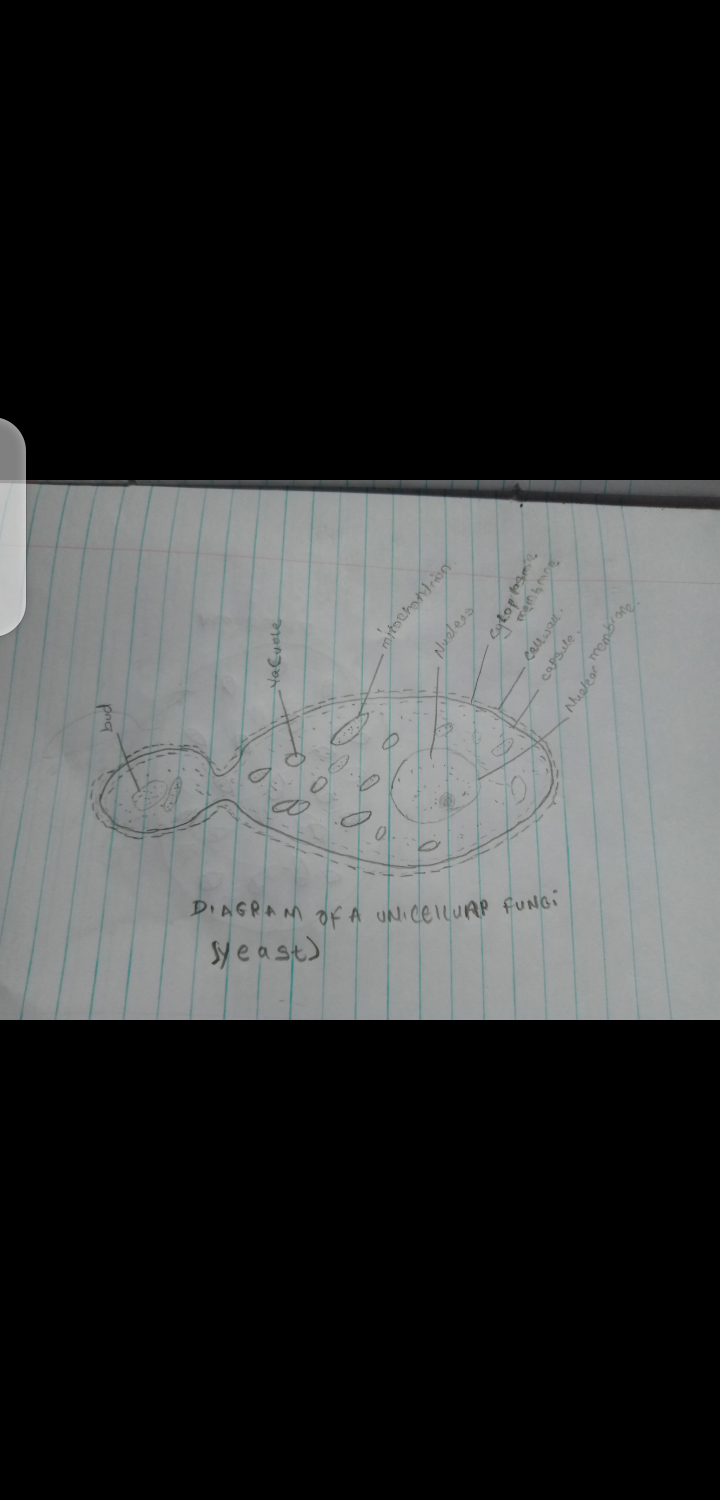
D It aid decomposition

E It is used in pharmaceuticals industry for the production of antibiotics e.g penicillium.

F It is used in the breweries industries for fragmentation.

2). Illustrate the cell structure of a unicellular fungus with a well labeled diagram

ANSWER



3 Outline the sexual reproduction in a typical filamentous form of fungi

ANSWER

A good example of the filamentous form of fungi is the Rhizopus stolonifer. It reproduce sexually when two mating type of hyphae induce growths perpendicular to the hyphae in opposite directions. These growths are delimited by a wall such that many nuclei are isolated in what is a called a gametangium.

The two gametangia fuse (plasmogamy) and undergo prolonged dormancy or resting stage. The nuclei in the zygote 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 How do bryophytes adapt to their environments

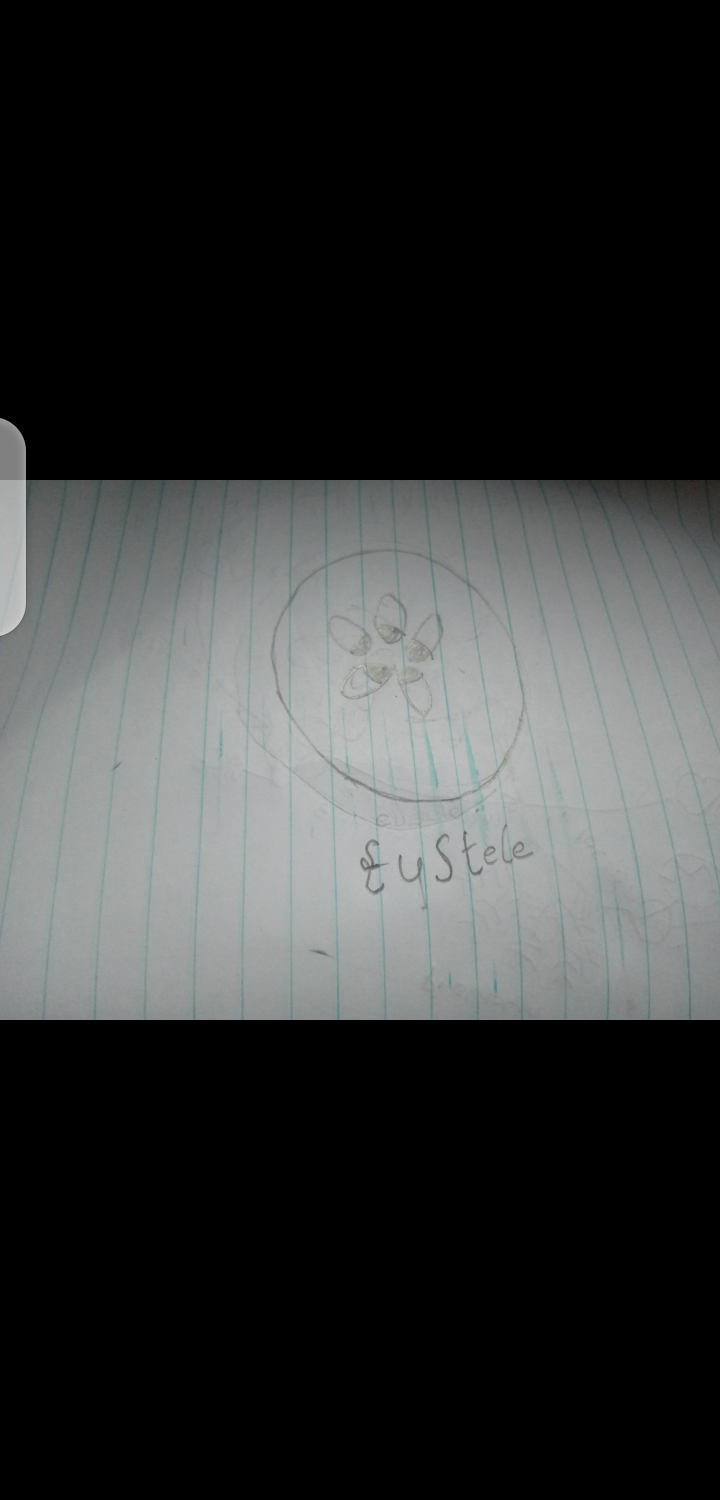
ANSWER

A they have definite structures for water and nutrient absorption for the soil. The plant body is divided into two. The substerranean portion (rhizoid) and the aerial portion.

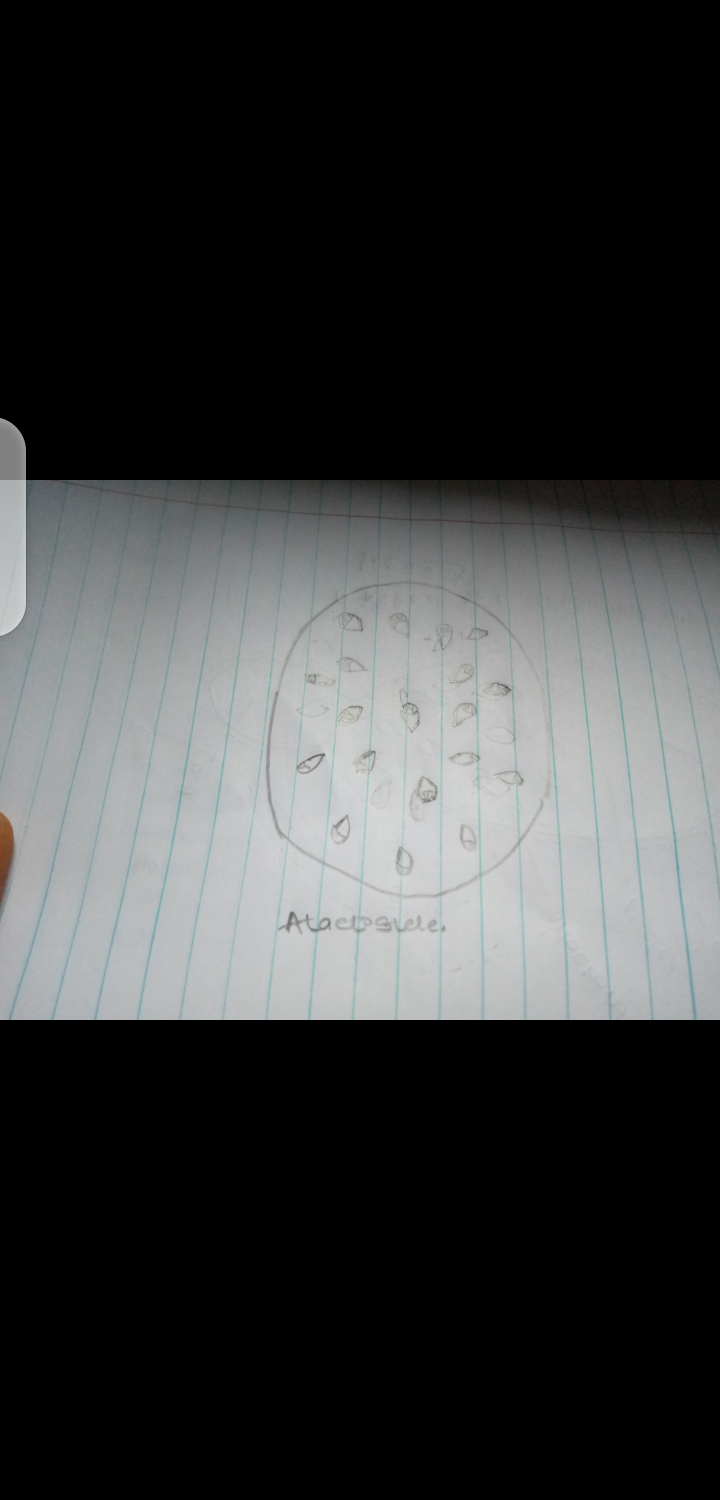
B the aerial portion possess some modification which reduces excessive loss of water via the body surface.

C the aerial has an opening that permit the elimination of excess water and the exchange of gasses between the internal part of plant and the atmosphere

5 Describe with illustration the following terminologies:

A Eusteles: it is a dicot plant consisting of the xylem and phloem vascular bundles with a parenchymal cell between the bundles.

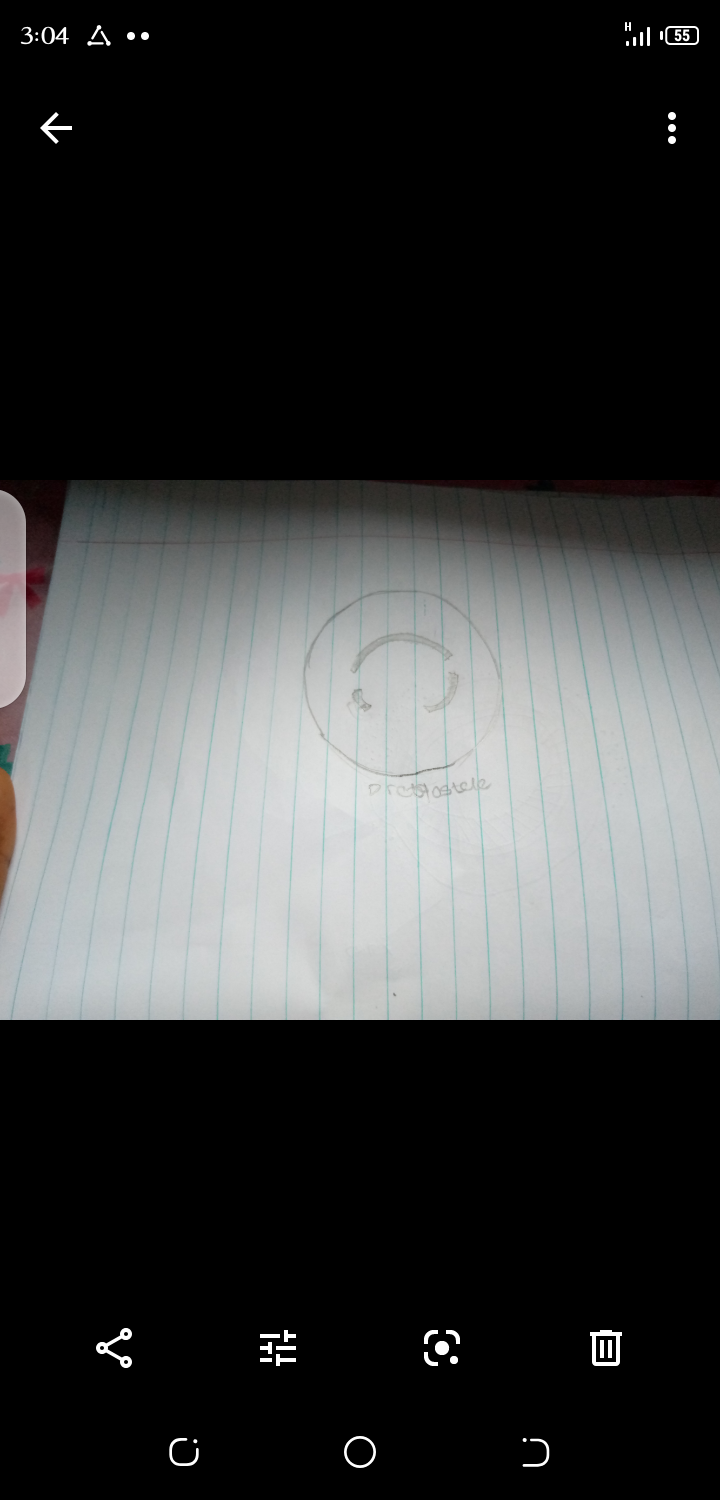
B Atactosteles: they are monocot plant in which the vascular bundles( xylem and phloem) are scattered.



C Siphonostele: it is steles consisting of the core pitch surrounded by consecutive llayer of xylem and phloem.



D dictyostele: it is a stele in which the vascular cylinder is broken up into longitudinal series of vascular strands a central pith.



6 Illustrate the life cycle of a primitive vascular plant.

ANSWER

A good example of a primitive vascular plant is psilotum. It life cycles start at the maturity stage. During this period the terminals cylindrical branches bear archegonia and the antheridria borne at the protuberance lower than the branches. Sperms having many flagella are released when antheridia then swim into the archegonia resulting to the production of a zygote.

