

1. IMPORTANCE OF FUNGI TO MAN INCLUDE

(a) FUNGI AS FOOD;

- I. Most fungi are used indirectly and directly as food. these include mushrooms, morels, truffles, puffball, yeast etc.

(b) FUNGI FUNCTION IN RECYCLING OF ELEMENT

- I. Fungi contribute effectively to the decay of complex compound of plants and animals in the soil to simpler forms. this simple form is absorbed by plants. this role is played by saprophytic fungi.

(c) AGRICULTURE

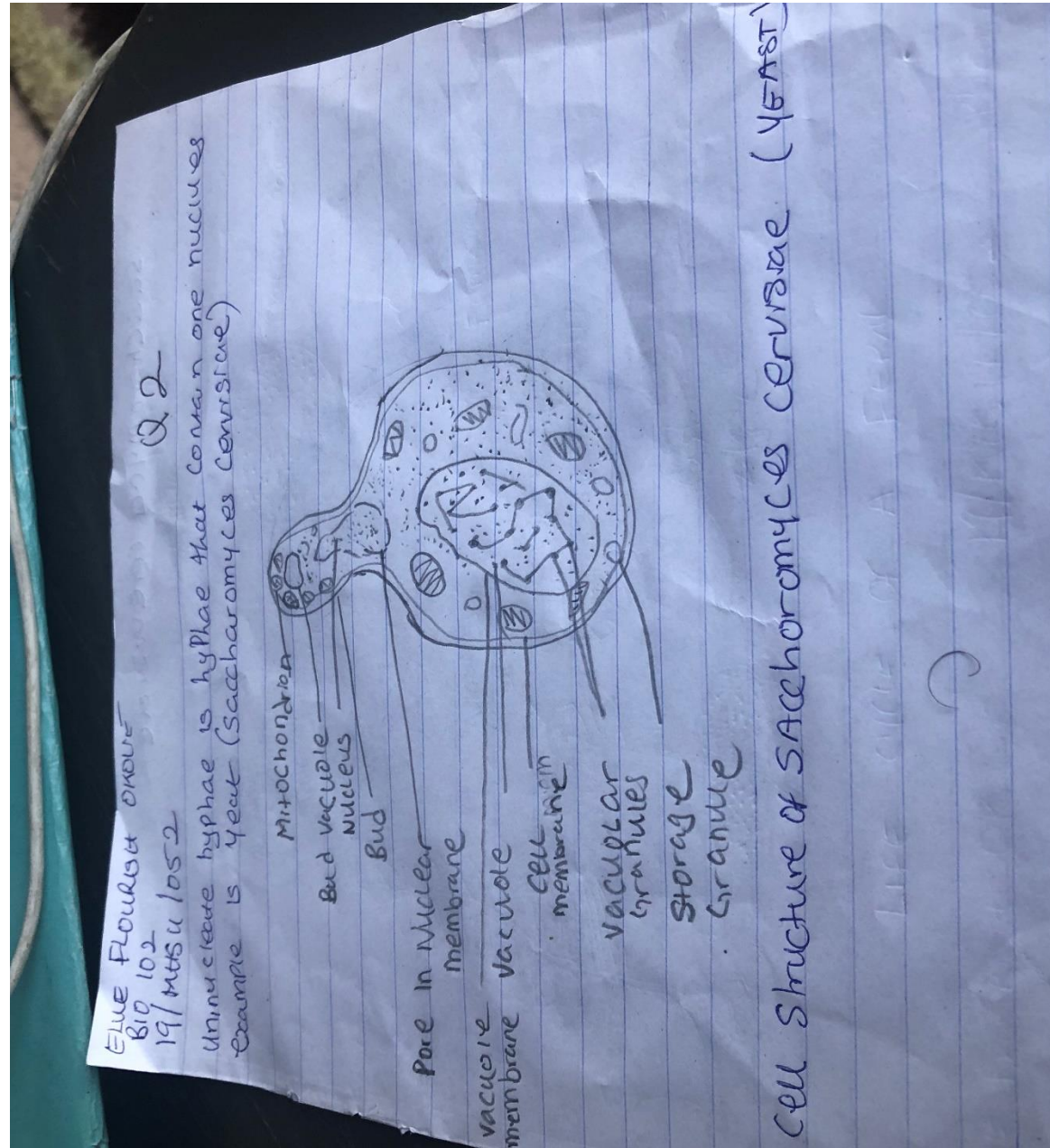
The help to increase agriculture production

Dark humus layer; this is important in maintaining the humus component of the soil thereby increasing the soil fertility

D MEDICINE

The role of fungi in medicine was first discovered by Alexander Fleming in 1929 when he discovered accidentally that fungus *Penicillium notatum* is able to kill several species of BACTERIA in humans. This led to the production of antibiotics Penicillin.

2.



3. MUCOR; the body of Mucor structurally consist of a whitish delicate cotton-like thread collectively known as mycelium. it is always branched (no septate or cross wall within the mycelium) that why is it known as a filamentous fungi

- i. The sexual reproduction occurs by conjugation method and this take place only during certain conditions. conjugation consists of fusion between two similar gametes.
- ii. During sexual reproduction two hypha borne of different fungi of opposite sex (+strain and -strain) come together. two short swollen protuberances called conjugation tube or gametes develop making contact at the tips

- iii. The protoplasmic content of each gametangium constitutes gametes. The two gametes are identical in all respects. The two gametes fuse together to form zygote
- iv. A promycelium grows from the zygote and supports the sporangium. The sporangium contains spores which may develop from mitotic division. The spores may be male(+) or female(-)

4. Bryophytes adapt for life on land. Their body is divided into an aerial portion and a subterranean portion.

The subterranean portion is made up of rhizoids which are not true roots as found in advanced land plants, but are used for absorbing water and mineral salts from the soil. The aerial portion called thallus does not have true stems and leaves. The thallus is usually modified to prevent excess loss of water through the body surface and also to permit exchange of gases between the internal part of the plants and the atmosphere.

In bryophytes there are three plant body types that are encountered these include;

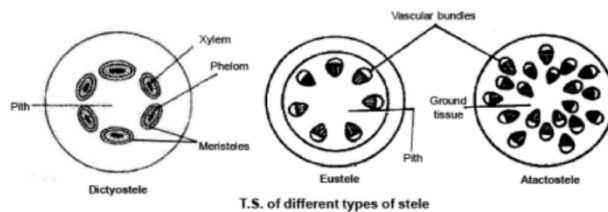
- i. the flattened and dichotomously branched thalli found in some liverworts
- ii. The prostrate leafy axes (false stem) found in the leafy liverwort and
- iii. the erect leafy axes found in mosses

5. A eustele; a type of stele in which the vascular bundles are discrete, concentric collateral bundles of xylem and phloem.

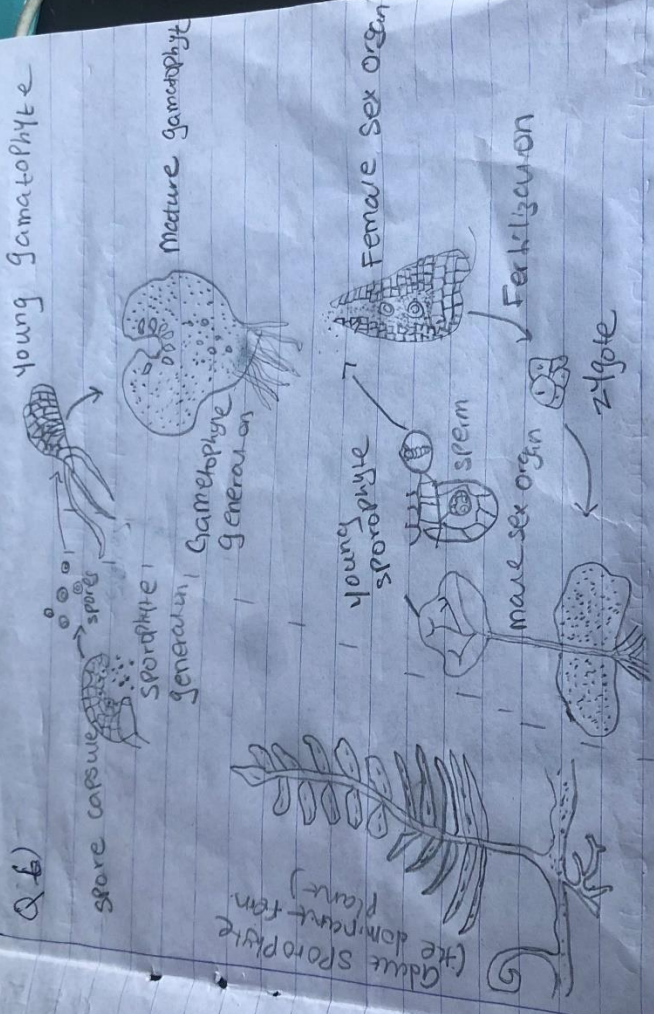
B. atactostele; a type of stele found in monocots, in which the vascular tissue in the stem exists as scattered bundles.

C. Dictyostele; a type of stele in which the vascular cylinder is broken up into a longitudinal series or network of vascular strands around the pith.

Diagrammatic illustrations of the different steles.



6.



LIFE CYCLE OF A FERN

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