

NAME: CHAPMAN PAMELA CHIKAMSO

DEPARTMENT: MEDICINE AND SURGERY

MATRIC NO: 19/MHS01/126

COURSE: BIOLOGY 102

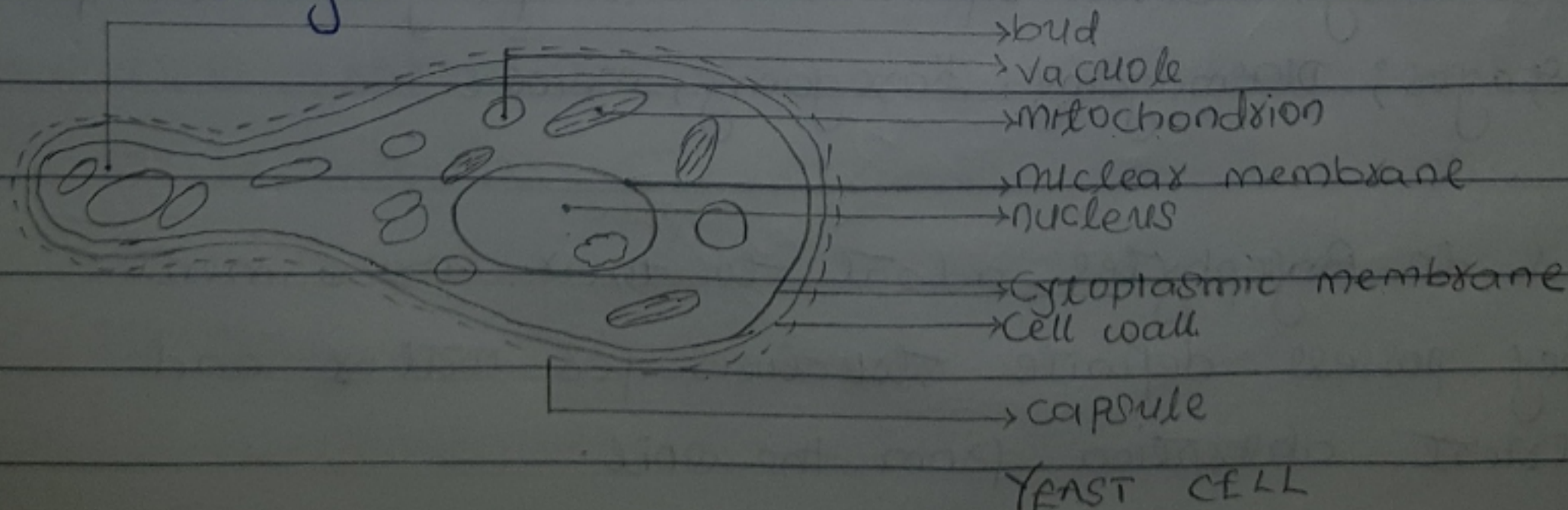
DATE: 9th MAY, 2020.

1. How are fungi important to mankind?

Fungi are important to man due to the following reasons;

- a. Much foods are eaten by man
- b. Yeast is important in food industries such as bakeries and yogurt factories.
- c. They are responsible for the mediation of the decay of dead organic matter.
- d. Some fungi are parasites to obnoxious pests of man.

2. Illustrate the ^{cell} structure of a unicellular fungi with a well labelled diagram.



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

- a. First, two mating types of hyphae grow in the same medium.
- b. A chemical interaction between them causes growth perpendicular to the hyphae in opposite directions, so they can meet with one another.
- c. The growths are delimited by a wall just so the nuclei are isolated in differentiated sex organs called gametangia.
- d. The gametangia fuse in a process plasmogamy and together they form a zygote which may undergo dormancy for a period of time.
- e. The nuclei in the zygote fuse in twos and undergoes meiosis, independently, it then moves on to germinating under favourable conditions so as to liberate haploid spores at maturity through the production of a fruiting body.
- f. In summary, sexual reproduction in fungi consists of three stages; plasmogamy, karyogamy, meiosis.

4. How do Bryophytes adapt to their environment.

- a. They possess definite structures for water and nutrient absorption from the soil.

b. They possess gametangia that keep the plants gametes from drying out.

c. They also possess a waxy cuticle that keeps them from drying out through the process called desiccation.

5. Describe with illustration the following terminologies

a) eusteleles b) atactostelele c) siphonostelele d) dictyostelele

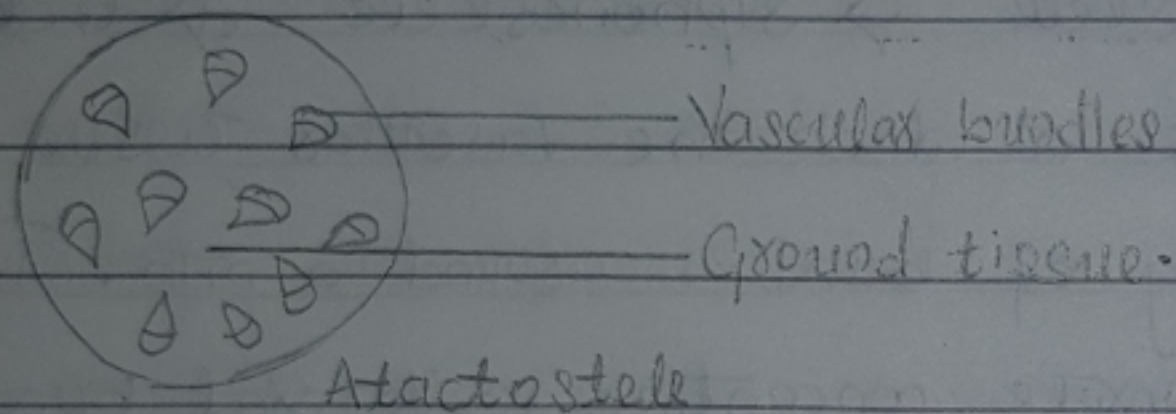
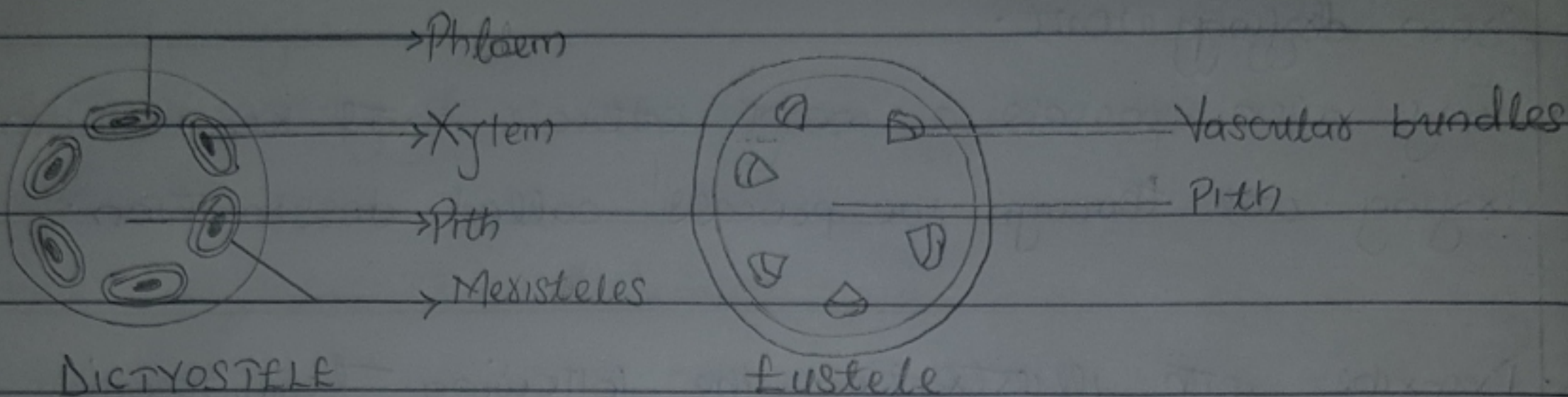
a. Eustelele: a type of stele in which the vascular tissue in the stem forms a central ring of bundles around a pith. The vascular bundles are discrete, concentric collateral bundles of xylem and phloem.

b. Atactostelele: A type of stele found in monocot, in which the vascular tissue in the stem exists as scattered bundles.

c. Siphonostelele: A ^{type of} stele consisting of a core of pith surrounded by concentric layers of xylem and phloem.

d. Dictyostelele: A type of stele in which the vascular cylinder is broken up into a longitudinal series or network of vascular strands around a pith.

Diagrammatic illustration of different types of steles:



B. Illustrate the life cycle of a primitive vascular plant.

