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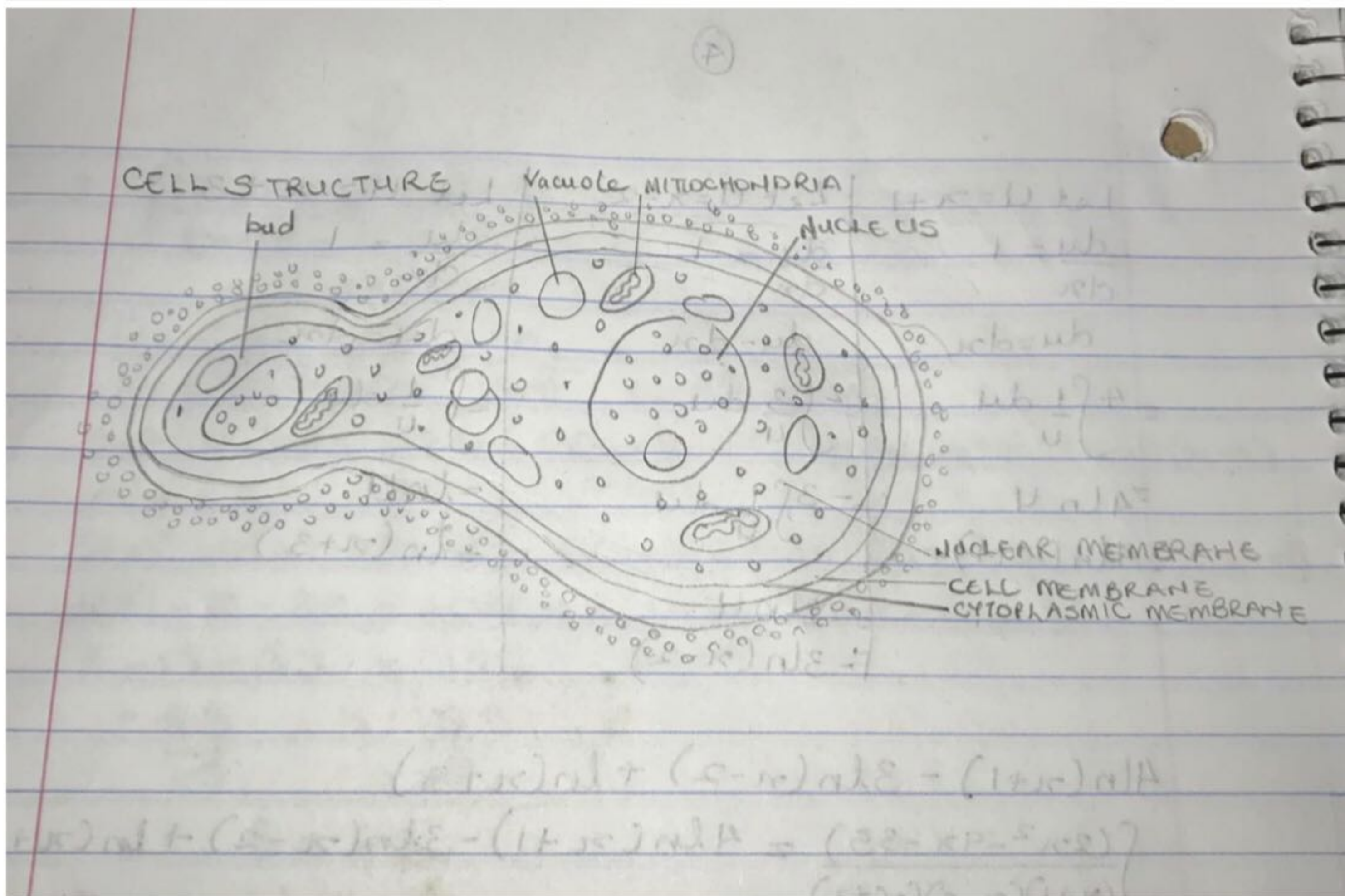
MBBS 19/MHS01/183

BIO 102 ASSIGNMENT

1. Importance of fungi to mankind;

- a) Fungi is responsible for the decay of organic matter.
- b) Fungi e.g mushrooms are eaten by human beings.
- c) Fungi e.g penicillium notatum are used to produce antibiotics.
- d) Medical and veterinary mycology deal with fungal diseases in humans and animals.
- e) It gives way to important biological control agents.

2. The cell structure of a unicellular fungus;



3. The sexual reproduction of a typical filamentous form of a fungus such as the *Rhizopus stolonifera* occurs when two types of mating hyphae grow in the same medium then the chemical interaction in the hyphae's induces growths perpendicular to the hyphae in opposite directions. These growths are delimited by a wall such that many nuclei are isolated in a gametangium.

The two gametangia fuse to form a zygote which then undergoes prolonged dormancy or resting stage. The nuclei in the zygotes fuse in together and undergo meiosis independently. The zygote then germinates under favourable conditions to produce a fruit which at maturity liberates the haploid spores.

4. Adaptation of bryophytes to their environment;

- a) Possession of definite structures for water and nutrient absorption from the soil; their bodies are divided into two an

aerial portions and a subterranean portion.

- b) Possession of a waxy cuticle that keeps the plant from drying out due to the process known as desiccation.
 - c) Possession of gametangia that keeps the plants gametes from drying out.
5. a) Eusteles: this is a type of stele in herbaceous dicotyledonous plants in which the vascular bundles are discrete, concentric collateral bundles of xylem and phloem.
- b) Atactostele: this is a type of eustele which is found in monocots in which the vascular bundles are scattered.
- c) Siphonostele: a type of stele which consists of a core of pith surrounded by concentric layers of xylem and phloem.
- d) Dictyostele; a type of stele in which the vascular cylinder is broken up into a longitudinal series or network of vascular strands around a central pith.

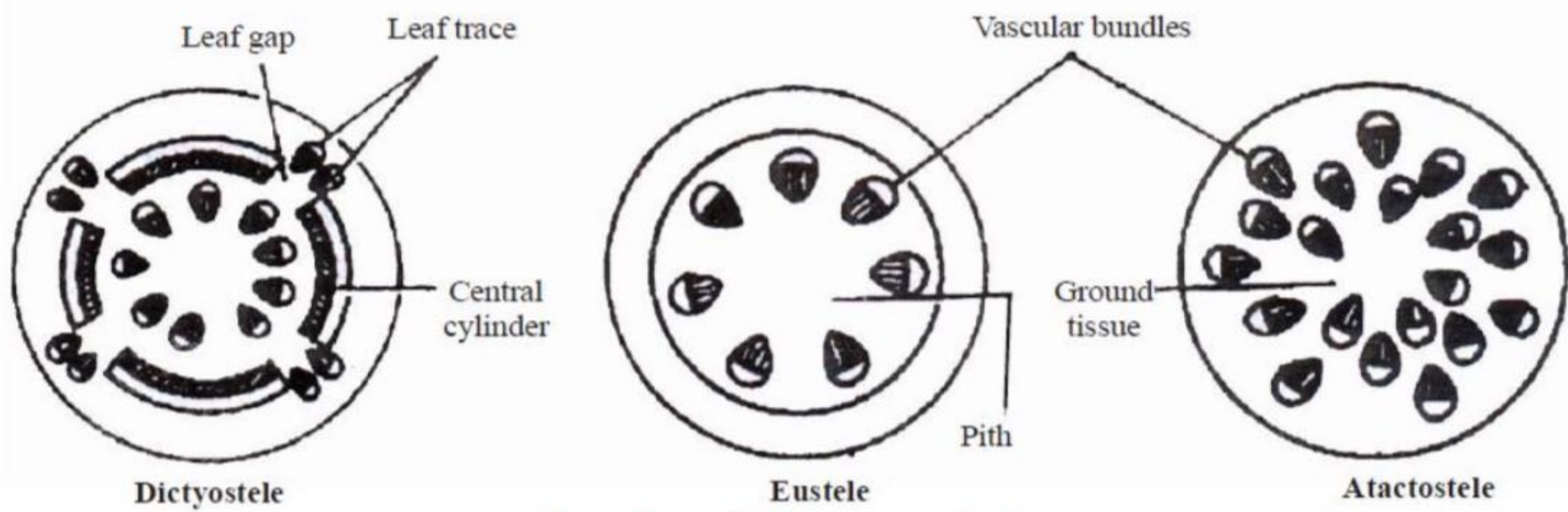


Fig. : T. S. of different types of stele

6) The lifecycle of a primitive vascular plant;

