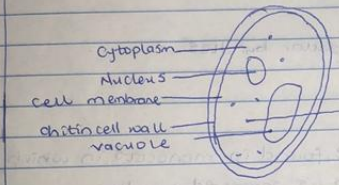
UMOREN QUEEN FREDRICK
19/MHS01/422
BIOLOGY ASSIGNMENT

1. Fungi influence the well-being of human populations on a large scale because they are part of the nutrient cycle in ecosystems. As animal pathogens, fungi help to control the population of damaging pests. These fungi are very specific to the insects they attack, and do not infect animals or plants. Some fungi e.g Mushrooms also serve as human food. Fungi also act as agents of fermentation in the production of bread, cheese, alcoholic beverages and numerous other food preparations.

2.



Cell structure of Yeast

3. - Plasmogamy: The fusion of two protoplasts (the contents of the two cells), brings together two compatible haploid nuclei. At this point, two nuclear types are present in the same cell, but the nuclei have not yet fused.
- Karyogamy: results in the fusion of these haploid nuclei and the formation of a diploid nucleus. The cell formed by Karyogamy is called the zygote. The dikaryotic state that results from plasmogamy is often a prominent condition in fungi and may be prolonged after several generations. In the lower fungi, Karyogamy usually follows plasmogamy almost immediately. In the more evolved fungi, however, Karyogamy is seperated from plasmogamy.
- Meiosis: Once Karyogamy has occured, meiosis generally follows and restores the haploid phase. The haploid nuclei that result

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from meiosis are generally incorporated in spores called meiospores

4. Two adaptations ~~made~~ the move from water to land possible for Bryophytes: a waxy cuticle and gametangia. The waxy cuticle helps to protect the plant's tissue from drying out and the gametangia provides further protection against drying out specifically for the plant's gametes.

5 a. Eustles: These are steles typical of dicotyledonous plants that consists of vascular bundles of xylem and phloem strands with parenchymal cells between the bundles.

b. Actostele: A type of eustele, found in monocots, in which the vascular tissue in the stem exists as scattered bundles.

c. Siphonostele: A stele consisting of a core of pith surrounded by concentric layers of xylem and phloem

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

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Spores → Gametophyte → Antheridium → Embryo → Adult gametoph