

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR  
OF SCIENCE IN BOTANY

**BOTA 233: MYCOLOGY**

**STREAMS: BSC (BOTA)**

**TIME: 2 HOURS**

**DAY/DATE: WEDNESDAY 15/04/2020**

**2.30 P.M. – 4.30 P.M.**

**INSTRUCTIONS:**

- Answer all questions in section A and any TWO in section B
- Do not write anything on the question paper
- Use illustrations where appropriate to enhance your answer

**SECTION A (30 MARKS)**

1. Define the following terms as applied in mycology [5 marks]
  - (a) Haustorium
  - (b) Mycorrhizal fungus
  - (c) Dimorphism
  - (d) Rhizoids
  - (e) Fungi imperfecti
2. Differentiate between Eucarpi and holocarpithallus [2 marks]
3. Outline various characteristics of fungi [5 marks]
4. Give four instances that may result to heterokaryosis in fungi [5 marks]
5. Describe briefly different types of ascocarps [4 marks]
6. Outline steps involved in recombinant DNA technology in fungi [5 marks]
7. Using illustrations, describe the structure of appressorium [4 marks]

**SECTION B (40 MARKS)**

8. (a) Discuss different types of opportunistic mycoses [10 marks]  
(b) Outline intervention methods that can be used to control and prevent fungal infections [10 marks]
9. (a) Discuss various methods that fungi employ to bring the compatible nuclei together for fusion [10 marks]  
(b) Give an account on the sequence of events in a complete parasexual cycle in fungi [10 marks]
10. Discuss the economic importance of fungi in the environment [20 marks]
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