



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY
SCHOOL OF BIOLOGICAL, PHYSICAL, MATHEMATICS AND ACTUARIAL
SCIENCES**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
EDUCATION SCIENCE AND BACHELOR OF SCIENCE WITH IT
4thYEAR 1st SEMESTER 2022/2023 ACADEMIC YEAR**

MAIN CAMPUS - REGULAR

COURSE CODE: SBB1417
COURSE TITLE: ADVANCED MYCOLOGY
EXAM VENUE: ZOO LAB STREAM: (BSC)
DATE: 9/12/2022 EXAM SESSION: 15.00-17.00PM
TIME: 2 HOURS

Instructions:

- 1. Answer ALL questions in Section A and Any two questions in Section B**
 - 2. Candidates are advised not to write on question paper**
 - 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**
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SECTION A: SHORT ANSWER QUESTIONS(30 MARKS)

1. Outline the general mode of fungal nutrition (3 marks)
2. Explain three types of fungal zoospores (3 marks)
3. Define the following terms
 - i) Amerospores (1 mark)
 - ii) Hyaline (1 mark)
 - iii) Anisokont (1 mark)
4. Use a diagram to show the vertical section of a basidiospore (3 marks)
5. Describe three forms of planogametic copulation (3 marks)
6. Explain two kinds of blastic development of the conidium initial (3 marks)
7. List the sequence of events in the parasexual cycle of fungi (3 marks)
8. Describe the processes that may lead to heterokaryosis in fungi (3 marks)
9. What are the benefits derived by the algal partner in a lichen association (3 marks)
10. Distinguish between exploitation and antibiosis in parasitic fungi (3 marks)
11. Outline the procedure for maintaining dried fungal cultures for future use (3 marks)
12. Explain the process of development of asci (3 marks)

SECTION B: ESSAY QUESTIONS (40 MARKS)

13. Describe the techniques of soil sampling for fungal isolation (20 marks)
14. Discuss the procedure for cultivation of one type of specialty mushroom (20 marks)
13. Discuss the life patterns and classification of lichens (20 marks)
14. Describe the morphology and dispersal mechanisms of five types of fungal spores (20 marks)