



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY
SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN BIOLOGICAL SCIENCES
FOURTH YEAR FIRST SEMESTER 2018/2019 ACADEMIC YEAR
MAIN CAMPUS - REGULAR

COURSE CODE: SBI 3434
COURSE TITLE: ADVANCED MYCOLOGY
EXAM VENUE: STREAM: (BSC)
DATE: EXAM SESSION:
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. Distinguish between plasmodium and pseudo-plasmodium thalli in fungi (3 marks)
2. Explain the structural features of fungal cell walls (3 marks)
3. Define the following terms
 - i) Memnospore (1 mark)
 - ii) Somatogamy (1 mark)
 - iii) Anisokont (1 mark)
4. Use a diagram to show the vertical section of an ascospore (3 marks)
5. Distinguish between gametangial contact and gametangial copulation (3 marks)
6. State the difference between tretic and phialidic development of the conidium initial (3 marks)
7. List the sequence of events in the parasexual cycle of fungi (3 marks)
8. Illustrate the generalized internal structure of a basidiospore (3 marks)
9. What are the benefits derived by the algal partner in a lichen association (3 marks)
10. Distinguish between exploitation and antibiosis nutrition types in parasitic fungi (3 marks)

SECTION B: ESSAY QUESTIONS (40 MARKS)

11. Describe the methods for isolation and culture of soil-borne fungi (20 marks)
12. Discuss the sexual and asexual fruiting bodies in fungi (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)