



# TECHNICAL UNIVERSITY OF MOMBASA

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FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF PURE & APPLIED SCIENCES

**UNIVERSITY EXAMINATION FOR:**

**INDUSTRIAL MICROBIOLOGY AND BIOTECHNOLOGY (BIMB)**

**YEAR II SEMESTER II**

**AAB 4204: MYCOLOGY PAPER I**

**END OF SEMESTER EXAMINATION**

**SERIES: APRIL 2016**

**TIME: 2 HOURS**

**DATE:** Pick Date Select Month Pick Year

## Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of Choose No questions. Attempt Choose instruction.

**Do not write on the question paper.**

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## **Question ONE**

1a) Diagram the following fungal structures

i) Chlamyospore

ii) Pseudohyphae

(4mks)

b) Describe three forms of candidiasis that are common among females

(3 marks)

c) Explain the economic importance of mycorrhiza fungi

(4marks)

d). Name and describe briefly the etiological agent(s), for the diseases listed below:

i. tinea pedis

ii. cryptococcosis

iii. pityriasis versicolor

(6marks)

e) Thermal dimorphism is a phenomenon that occurs in many true pathogenic fungi.

i) Describe dimorphism giving two examples of fungi that exhibit this property

(2 marks)

- ii) What function does this adaptation probably serve in nature and/or in the host? (2 marks)
- f) Describe how hairs plucked from a patient's head can be used to help identify the etiologic agent of a mycosis (4 marks)
- g) List FOUR products of fungal origin and the specific fungi involved in each. (4marks)

### **Question TWO**

Using relevant examples, describe the clinical classification of fungal infections (20 marks)

### **Question THREE**

Aflatoxin poisoning is a common problem in eastern central Kenya.

- a) Outline the conditions that favor mycotoxin elaboration by fungi (10 marks)
- b) Prescribe measure that can be put in place to prevent aflatoxicoses (10 marks)

### **Question FOUR**

Cases of fungal infection are generally on the increase in the world today'. Discuss (20 marks)

### **Question FIVE**

Describe the signs and symptoms produced by infection of plants by fungi (20 marks)