

TECHNICAL UNIVERSITY OF MOMBASA

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.

Question ONE

- 1a) Diagram the following fungal structures
 - i) Chlamydospore
 - 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)