



# 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 II**

**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**

- a) Distinguish;
- i) Anthrophillic and Zoophilic fungi
  - ii) Balanitis and Onychomycosis (6 marks)
- b) Outline the six forms of tineas exhibited in man (6 marks)
- c) Explain fungi as
- (i) Antibiotic producers [3 marks]
  - (ii) Biocontrol agents [3 marks]
- d) Outline FIVE factors that may pre-dispose an individual to infection by fungi that are not by nature pathogenic to man (5mrks)
- e) Outline the role of sexual spores in the classification of fungi. (4mrks)
- f) Explain the pathogenicity of any four deep (systemic) mycoses in humans, naming the causative, agents, (8 marks)

## **Question TWO**

Discuss the methods used in storage and maintenance of fungal cultures. (20 marks)

## **Question THREE**

List the toxins and symptoms associated with the ingestion by animals and humans of foodstuffs contaminated with the following filamentous fungi;

i) *Aspergillus flavus* (8 marks)

ii) *Penicillium spp.* (6 marks)

iii) *Claviceps purpurea* (6 marks)

## **Question FOUR**

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

## **Question FIVE**

Describe the precautions that can be taken to reduce mycotoxications (20 marks)