



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)