

**W1-2-60-1-6**

## JOMO KENYATTA UNIVERSITY

**OF**

**AGRICULTURE AND TECHNOLOGY**

# University Examinations 2016/2017

**YEAR 2 SEMESTER 1 SPECIAL/SUPPLEMENTARY EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN MEDICAL MICROBIOLOGY**

**MMB 2305: MYCOLOGY**

**DATE: SEPTEMBER 2017 TIME: 2 HOURS**

**INSTRUCTIONS: ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS**

**QUESTION ONE (30 MARKS)**

a) Using illustrations, describe microscopic features of zygomycetes

(6 marks)

b) Compare direct plating and open plating methods of isolating fungi

(6 marks)

c) Distinguish between the following;

i) Aminata and Pleurotus mushrooms (3 marks)

ii) Phototactic and phototrophic fungal responses with regard to significance (3 marks)

d) i) Briefly explain mechanism of oxygen poisoning in fungi (4 marks)

ii) Distinguish halophillic and alkalophillic fungi (2 marks)

e) Compare sexual and asexual reproduction in ascomycetes (6 marks)

QUESTION TWO (20 MARKS)

a) Discuss opportunistic fungal mycoses in humans (10 marks)

b) Discuss various fungal metabolites in relation to human health

(10 marks)

QUESTION THREE (20 MARKS)

Discuss fungi according to colony features.

QUESTION FOUR (20 MARKS)

a) Discuss fruiting bodies in Basidiomycetes and Ascomycetes (12 marks)

b) Discuss parasexualism and evolution in fungi (8 marks)