

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

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2019/2020**

**FOURTH YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE MEDICAL MICROBIOLOGY**

**MMB 2404: MICROBIAL FOOD TOXICOLOGY**

**DATE: DECEMBER, 2019 TIME: 2 HOURS**

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

**QUESTION ONE: 30 MARKS**

a. Briefly explain the importance of food safety measures and standards in a given country. (6 marks)

b. Briefly discuss epidemiology of aflatoxin food poisoning in Kenya.

(6 marks)

c. Distinguish between the following:-

 i. Food additive and food allergen. (2 marks)

 ii. Food infection and food poisoning. (2 marks)

 iii. Bacillus cereus type I and type II infection. (2 marks)

d. Compare ELISA and chromatographical methods for determination of mycotoxins in foods. (6 marks)

e. Briefly explain the usage rationale and dangers of pesticides in foods. (6 marks)

**QUESTION TWO: 20 MARKS**

Discuss the application and significance of HACCP in daily industry.

**QUESTION THREE: 20 MARKS**

Discuss the measures you would undertake in the event of a suspected food

poisoning in an orphanage home that the company you work as a food

laboratory manager had donated foods.

**QUESTION FOUR: 20 MARKS**

Discuss food production hazards in coltage-based industries.