

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

## JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

**UNIVERSITY EXAMINATIONS 2018/2019**

**SPECIAL/SUPPLEMENTARY EXAMINATIONS FOR THE DEGREE OF MASTER OF SCIENCE IN FOOD SCIENCE AND TECHNOLOGY/FOOD SCIENCE AND NUTRITION**

**AFS 3121: ADVANCED FOOD MICROBIOLOGY AND SAFETY**

**DATE: JUNE 2019 TIME: 3 HOURS**

INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS

1. Discuss microbiological risk assessment (25 marks)
2. Using specific examples, discuss the strategies used in identification and characterization of useful food industrial strains.
3. Discuss diversity of microbial metabolism demonstrating its significance to food and nutrition discipline (25 marks)
4. Citing specific examples discuss food-borne bacterial pathogeneirs (25 marks)

5a) Discuss occurrence of mycotoxinsin named food value chain (15 marks)

b) Discuss Pre-and Post-harvest strategies adapted to control mycotoxins (10 marks)

1. Discuss challenges encountered in microbial food safety and control in developing countries (25 marks)