

W1-2-60-1-6

**JOMO KENYATTA UNIVERSITY**

**OF**

**AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2020/2021**

**YEAR IV SEMESTER II SPECIAL/ SUPPLIMENTARY EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN MICROBIOLOGY/ BIOTECHNOLOGY**

**SBT 2455: ANALYTICAL MICROBIOLOGY**

**DATE: MAY 2021 TIME: 2HOURS**

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

**QUESTION ONE (30 MARKS)**

1. Define the following terms;
2. Bio essays [1 mark]
3. Indicator species [1 mark]
4. Microbial criteria [1 mark]
5. Briefly describe the control of microbial criteria. [6 Marks]
6. Outline the significancy microbial water analysis. [6 marks]
7. State SIX characteristics of indicator organisms. [6 marks]
8. Describe pre-clinial trial of pharmaceutical [6 marks]
9. State THREE techniques for quality and quantity analysis. [8 marks]

**QUESTION TWO (20 MARKS)**

Discuss methods of microbial examination

**QUESTION THREE (20 MARKS)**

Discuss how a microbial contamination can be indentified along sewerage lines.

**QUESTION FOUR (20 MARKS)**

Discuss the environmental activity bio essays.