

W1-2-60-1-6

**JOMO KENYATTA UNIVERSITY**

**OF**

**AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2016/2017**

**YEAR III SPECIAL/SUPPLIMENTARY EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN MEDICAL MICROBIOLOGY**

**MMB 2378: INTRODUCTION TO BACTERIAL SYSTEMATICS**

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

**INSTRUCTIONS: ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS**

**QUESTION ONE (30 MARKS)**

1. State the purpose of classification of bacteria. [6 marks]
2. Describe the terms;
3. Classification [2 marks]
4. Nomenclature [2 marks]
5. Identification [2 marks]
6. Explain various morphological identification of bacteria. [6 marks]
7. Citing a relevant bacterial examples, outline a taxonomic tree ranking of bacteria. [6 marks]
8. Explain the functions of bioinformatics in Bacterial systematics. [6 marks]

**QUESTION TWO (20 MARKS)**

Discuss natural and artificial classification

**QUESTION TWO (20 MARKS)**

Discuss numerical taxonomy highlighting the merits and demerits.

**QUESTION FOUR (30 MARKS)**

Discuss the various serological techniques in identification and characterization of bacteria.