**UNIVERSITY OF KABIANGA**

**UNIVERSITY EXAMINATIONS**

**2014/2015 ACADEMIC YEAR**

**SUPPLEMENTARY/SPECIAL EXAMINATION**

**SECOND YEAR SECOND SEMESTER EXAMINATION**

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN MICROBIOLOGY**

**COURSE CODE: MIC 210**

**COURSE TITLE: GENERAL MICROBIOLOGY**

**DATE: 25/8/2015**

**TIME: 2.00 P.M- 5.00 P.M**

**INSTRUCTIONS TO CANDIDATES:**

Answer **ALL** Questions in **section A** and any other **THREE** in **section B**.

**SECTION A (28 MARKS): ATTEMPT ALL QUESTIONS**

1. Most organisms are neutrophils. Explain. (2 marks)

2. Give a brief description of various shapes of found in bacteria. (5 marks)

3. Explain what aseptic technique means to a microbiologist. (2 marks)

4. a. What is a colony? (2 marks)

 b. Clearly provide advantages and disadvantages of streak method of inoculation. (4 marks)

5. State the functions of bacteria cell wall. (3 marks)

6. Using a table, explain the difference between prokaryotic and eukaryotic cells. (4 marks)

7. Explain basic technique necessary in isolation and culturing of microorganisms. (6 marks)

**SECTION B (42 MARKS): ANSWER ANY THREE QUESTIONS**

8. Illustrate the life cycle of lytic phage. (14 marks)

9. a. Explain the basis for virus classification. (6 marks)

 b. Draw and label a generic virus. (8 marks)

10. Describe in detail the structure and functions of plasma (cytoplasmic) membrane In a bacterium. (14 marks)

11. Discuss the physical factors influencing bacterial cultivation and growth. (14 marks)