**UNIVERSITY OF KABIANGA**

**UNIVERSITY EXAMINATIONS**

**2015/2016 ACADEMIC YEAR**

**SECOND YEAR SECOND SEMESTER EXAMINATION**

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

**COURSE CODE: MIC 210**

**COURSE TITLE: GENERAL MICROBIOLOGY**

**DATE: 8/4/2016**

**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**.

Illustrate answers with appropriate diagrams where necessary.

**SECTION A (28 MARKS)**

1. Define the following terms as used in microbiology:

 a. Coenocytic hyphae. (1 mark)

 b. Dimorphism. (1 mark)

 c. Capsid protein. (1 mark)

2. Write briefly on the importance of microbiology in the following fields giving examples:

 a. Public health. (2 marks)

 b. Industry. (2 marks)

3. Outline the contributions of the following scientists to microbiology.

 a. Sergei Winogradsky. (2 marks)

 b. Robert Koch. (4 marks)

4. Describe the differences between continuous culture technique and fed-batch culture technique giving an advantage of each. (4 marks)

5. a. Briefly explain any **two** importance of inclusion bodies in bacteria. (1 mark)

 b. Describe briefly any **two** inclusion bodies found in a bacterial cell. (2 marks)

6. Describe the general characteristics of rickettsia. (4 marks)

7. Describe the process of Gram staining giving its importance in microbiology. (4 marks)

**SECTION B (42 MARKS)**

8. Explain bacterial culture techniques and storage methods. (14 marks)

9. Discuss infection and control of common diseases. (14 marks)

10. Describe the methods of microbial control in microbiology. (14 marks)

11. Write notes on classification of fungi. (14 marks)