**UNIVERSITY OF KABIANGA**

**UNIVERSITY EXAMINATIONS**

**2014/2015 ACADEMIC YEAR**

**SUPPLEMENTARY/SPECIAL EXAMINATION**

**THIRD YEAR FIRST SEMESTER EXAMINATION**

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

**COURSE CODE: MIC 311**

**COURSE TITLE: MICROBIOLOGY OF DOMESTIC WATER AND SEWAGE.**

**DATE: 26/8/2015**

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

**INSTRUCTIONS TO CANDIDATES:**

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

Illustrate your answers with suitable diagrams where necessary.

**SECTION A; (28 MARKS)**

1. Describe the following terms; (4 marks)

 a. Plankton

 b. Lotic

 c. Benthos

 d. Trophicity

2. What is waste water? (2 marks)

3. Outline the conditions that must be met by bacteria to serve as sanitary indicators. (6 marks)

4. Define the term saprobic and outline the different saprobic zones. (4 marks)

5. Using examples, outline the four subclasses of protozoa found in water habitat. (4 marks)

6. Briefly describe self-purification of surface waters. (4 marks)

7. List down **four** waterborne bacterial infections and the causal organism. (4 marks)

**SECTION B; (42 MARKS)**

8. Discuss abiotic factors limiting growth of microorganisms in water. (14 marks)

9. Discuss the bacteriological analysis of water. (14 marks)

10. Discuss the methods of sewage treatment. (14 marks)

11. Discuss the types of sewage. (14 marks)