



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE  
AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2012/2013**

**1<sup>ST</sup> YEAR 2<sup>ND</sup> SEMESTER EXAMINATIONS FOR DIPLOMA IN  
COMMUNITY HEALTH AND DEVELOPMENT**

**(KISUMU LEARNING CENTRE)**

**COURSE CODE: HDC 2121**

**COURSE TITLE BASIC MICROBIOLOGY**

**DATE: 15/4/2013**

**TIME: 11.00-12.30PM**

**DURATION: 1.5 HOURS**

**INSTRUCTIONS**

1. This paper contains TWO sections.
2. Answer ALL questions in section A (Compulsory) and ANY other Two questions in section B.
3. Write all answers in the booklet provided

**SECTION A: Answer All The 10 Questions. Each Question Is 3 Marks.**

1. List 3 cellular organelles and state their functions
2. Define the following terms:
  - a. Enriched Media
  - b. Active Transport
  - c. Endocytosis
3. State 3 common staining techniques used in microbiology.
4. Write short notes on Staphylococcus.
5. What is a carrier? What the different types of carriers?
6. List 6 different types of culture media
7. State 3 methods of sterilisation and give 2 examples of application of each of the methods.
8. Write short notes on fungi and give 2 examples.
9. Outline 3 differences between endotoxins and exotoxins
10. Define the term bacteriophage and state its significance.

**SECTION B: Answer ANY 2 Questions. Each Question Is 15 Marks.**

1. Discuss 3 products of bacterial growth.
2. Describe 5 interventions that can be employed in the control of diarrhoeal diseases in the community.
3. Discuss 5 environmental factors that are significant for bacterial growth.
4. Based on the mechanism of action, discuss 3 classes of antimicrobial agents giving examples