



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF HEALTH SCIENCES**

**UNIVERSITY EXAMINATION FOR THE DIPLOMA IN COMMUNITY HEALTH**  
**DEVELOPMENT**

**1<sup>ST</sup> YEAR 2<sup>ND</sup> SEMESTER 2018/2019 ACADEMIC YEAR**

**KISII CAMPUS- PART TIME**

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**COURSE CODE: HDC 2121**

**COURSE TITLE: BASIC MICROBIOLOGY**

**EXAM VENUE:**

**DATE:**

**TIME: 1hr 30Mins**

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**Instructions:**

1. Answer all questions in Section A (Compulsory) and ANY other 2 questions in Section B
2. Candidates are advised not to write on the question paper.
3. Candidates must hand in their answer booklets to the invigilator while in the examination room.

**SECTION A; Answer all questions in this section (30 Marks)**

1. Explain the applied branches of microbiology (5 marks)
2. Draw a well labeled diagram of a prokaryote and a eukaryote (5 marks)
3. Explain the process of culture medium preparation (5 marks)
4. Outline the physical and chemical methods of sterilization (5 marks)
5. Explain the mode of action of chemotherapeutic agents (5 marks)
6. Explain the nutrition requirements for microbial growth (5 marks)

**SECTION B; Answer any two Questions (30 Marks)**

- 7a) Discuss the methods used in isolation a of pure culture (8 marks)
- b) Discuss the IMVC tests (7 marks)
  
- 8 a) Discuss the structure and replication of a bacteriophage (8 marks)
- b) Describe the ecological relationship of microorganisms (7 marks)
  
- 9a) Describe microbial growth measurements (8 marks)
- b) Explain the principle and process of Acid fast staining technique (7 marks)