



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

UNIVERSITY EXAMINATION FOR THE DIPLOMA IN COMMUNITY HEALTH
DEVELOPMENT

1ST YEAR 2ND SEMESTER 2018/2019 ACADEMIC YEAR

KISII CAMPUS- PART TIME

COURSE CODE: HDC 2121

COURSE TITLE: BASIC MICROBIOLOGY

EXAM VENUE:

DATE:

TIME: 1hr 30Mins

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 role of microorganisms in the Environment and Genetic engineering (5 marks)
2. With the help of diagrams, elucidate the different shapes of bacteria (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. Discuss briefly how microorganisms can be transmitted (5 marks)

SECTION B; Answer any two Questions (30 Marks)

7a) Discuss the methods used in isolation a of pure culture (8 marks)

b) Explain the principle and process of differential staining (7 marks)

8 a) Discuss the structure and replication of a bacteriophage (8 marks)

b) Describe the ecological relationship of microorganisms (7 marks)

9a) Explain the types of microorganisms and tabulate their differences (8 marks)

b) Discuss the IMVC tests (7 marks)