



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION FIRST YEAR SECOND SEMESTER EXAM FOR
CERTIFICATE IN COMMUNITY HEALTH AND DEVELOPMENT
SPECIAL EXAMINATIONS NOV. 2020**

HCD 1121: Basic Microbiology

EXAM VENUE: **STREAM: (Cert. in Comm Hlth & Dev)**

DATE: **EXAM SESSION:**

TIME: 1.30 HOURS

Instructions:

- 1. Answer all the questions in Section A and 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

1. State and explain two characteristics of a cell (3 marks)
2. Identify any six organelles found in eukaryotic cells (3 marks)
3. State and explain any 2 conditions favouring the survival of microorganisms (3 marks)
4. Enumerate any 3 agents used in the control of bacteria (3 marks)
5. Outline 3 effects produced by antimicrobial agents (3marks)
6. Name with examples 3 groups of antimicrobial agents in common use (3marks)
7. Differentiate between Eukaryotes and Prokaryotes (3 marks)
8. Distinguish anabolism and catabolism (3 marks)
9. Describe with examples the morphological classification of bacteria (3 marks)
10. Highlight the ecological relationships that exist in microorganisms (3 marks)

SECTION B

11. With a clear illustration, describe the process of growth of microorganisms(15 marks)
12. Discuss the various areas microorganisms are applied positively by humans(15 marks)
13. Discuss the different methods of sterilization including their relative advantage(15 marks)
14. Discuss the different methods of controlling growth of microorganisms, giving examples in each (15 marks)