



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

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

1ST YEAR 2ND SEMESTER 2022/2023 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: HDC 2121

COURSE TITLE: BASIC MICROBIOLOGY

EXAM VENUE: STREAM: (Dip Comm Health & Dev)

DATE: EXAM SESSION:

TIME: 1 1/2.00 HOURS

Instructions:

- 1. Answer all the questions in Section A 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

1. Distinguish the following
 - a. Halophiles and Psychrophiles (2marks)
 - b. Anabolism and catabolism (2marks)
 - c. Resolution and magnification (2marks)
 - d. Prokaryotes and Eukaryotes (2marks)
2. Enumerate any 3 micronutrients used by microbial cells for growth (3 marks)
3. Highlight any 3 ecological relationships that exist in microorganisms (3 marks)
4. Outline the classification of fungi (3 marks)
5. State and explain 6 organisms that are affected by temperature (3 marks)
6. With examples, state the classification of viruses (4marks)
7. State with examples the morphological classification of bacteria (6 marks)

SECTION B

8. Discuss the characteristics of a microbial cell (15 marks)
9. Describe the classification of bacteria (15 marks)
10. With a clear illustration, describe the process of growth of microorganisms(15 marks)
11. Discuss any five ways in which microorganisms may be useful to man (15 marks)