

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

**SCHOOL OF HEALTH SCIENCES
YEAR FIRST SEMESTER EXAMS**

HCD 3211: BASIC MICROBIOLOGY

SECTION A: Answer ALL questions in this section.

1. Differentiate between prokaryotic and eukaryotic cells (4 marks).
2. Define the following terms; (3 marks)
 - a. Zoonosis
 - b. Micro-organism
 - c. Incubation period
3. Briefly describe three methods that can be used to control the spread of human mycosis (3marks).
4. Giving examples, list four the economic importance of micro-organisms (4 marks).
5. Briefly describe any three ecological relationships that can be formed by microorganisms (3marks).
6. State the four Koch's postulates (4 marks).
7. Differentiate between definitive and intermediate host (3 marks).
8. Briefly describe the contribution of the following individuals to the field of microbiology (6 marks).
 - a) Edward Jenner
 - b) Anton von Leeuwenhoek
 - c) John Snow

Section B

Answer any TWO questions from this section (20 marks each)

1. Discuss the methods that are used for sterilization.
2. Discuss the various methods used for the control and prevention of parasitic infections.
3. Discuss the modes of action of antimicrobial agents.
4. Discuss;
 - a) The effects of environmental factors on microbial growth and survival.
 - b) The stages in a normal growth curve of bacteria.