



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR DEGREE
2ND YEAR 1ST SEMESTER 2018/2019 ACADEMIC YEAR
KISUMU CAMPUS

COURSE CODE: **SBI 3211**

COURSE TITLE: **BASIC MICROBIOLOGY**

EXAM VENUE: **STREAM: BSc Community Health & Development/BSc Public Health**

DATE: **EXAM SESSION:**

TIME: **2.00 HOURS**

Instructions:

- 1. Answer ALL Questions in Section A and ANY 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 (Total 30 marks)

- a. Briefly describe an experiment which was used to discredit the theory of spontaneous generation (5mks)
- b. State FIVE properties of a prokaryotic cell (5mks)
- c. Write short notes on types of heat used in sterilization process (5mks)
- d. Draw and label the structure of a bacterio-phage (5mks)
- e. State FIVE factors that affect microbial growth (5mks)
- f. Briefly discuss the roles of dyes and other chemicals used in Grams Staining (5mks)

Section B: Answer ANY TWO Questions (Total 40 marks)

QUESTION TWO

With the aid of growth curve, explain the differences in curves resulting from the growth of Bacterial population. (20 mks)

QUESTION THREE

Discuss in detail the acid fast staining technique. (20 mks)

QUESTION FOUR

Discuss in detail different types of culture media (20 mks)

QUESTION FIVE

Explain in detail FIVE methods of controlling microorganisms (20 mks)