



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF PURE & APPLIED SCIENCES

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN SCIENCE LABORATORY TECHNOLOGY

: ACH 2111: BIOMEDICAL TECHNIQUES-MICROBIOLOGY

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: SEPTEMBER 2018

TIME: 2HOURS

DATE: Pick Date Sep 2018

Instructions to Candidates

You should have the following for this examination

Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

Question ONE

- a) What is a microscope (1mk)
- b) Name two types of electron microscopes (2mks)
- c) Discuss resolution as used in microscopy (5mks)
- d) Differentiate between light and electron microscope (6mks)
- e) Discuss the following terms as used in microscopy (8mks)
 - i. Dehydration:
 - ii. Embedding:
 - iii. Staining:
 - iv. Mounting:
- f) Using relevant examples give the four forms of coccoid aggregations (8mks)

Question TWO

Discuss modes of bacterial transmission (15mks)

Question THREE

- a) What do you understand by the term sensitivity (6mks)
- b) Why is sensitivity analysis done (4mks)
- c) Describe the procedure for sensitivity analysis (5mks)

Question FOUR

Discuss sterilization techniques (15mks)

Question FIVE

Discuss bacterial virulence (15mks)