



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF PURE & APPLIED SCIENCES

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN LABORATORY TECHNOLOGY

AAB 2111: BIOMEDICAL TECHNIQUES – MICROBIOLOGY

SUPPLEMENTARY/SPECIAL EXAMINATION

SERIES: DEC 2024

TIME: 2HOURS

DATE: Pick Date Select Month Pick Year

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.

SECTION A:

Question ONE

- a) Define the following terms: (5 marks)
 - i. **Sterilization**
 - ii. **Disinfection**
 - iii. **Antisepsis**
 - iv. **Sanitization**
 - v. **Viruses**

- b) Outline the subdivisions of fungi (4 mks)
- c) Outline the basis of classification of viruses (5 mks)
- d) State **THREE** ways by which antibacterial agents exert their function (3 mks)
- e) State **THREE** main physical methods by which sterilization and disinfection is done (2 mks)
- f) Outline the bacterial growth phases (5 mks)
- g) State **SIX** types of disinfectants (6 mks)

SECTION B:

Question TWO

- a) List FIVE types of microscopes (5 mks)
- b) Discuss the General principles to be followed when collecting specimen for microscopy work (10 mks)

Question THREE

- a) Discuss the types of fixation technique used in microscopy (5 mks)
- b) Discuss at-least FIVE uses of Gram staining(10 mks)

Question FOUR

Differentiate between Eukaryotic celles and prokaryotic cells (15 mks)

Question FIVE

Draw a well labelled structure of a typical bacterial cell (15 mks)