



**AMREF INTERNATIONAL UNIVERSITY**  
**SCHOOL OF PUBLIC HEALTH**  
**DEPARTMENT OF COMMUNITY HEALTH**  
**BACHELOR OF SCIENCE IN COMMUNITY HEALTH**  
**END OF SEMESTER EXAMINATION APRIL 2026**

**UNIT CODE: CHP 124 MICROBIOLOGY**

**DATE:** 13 April, 2026

**TIME:** TWO Hours **Start: 0900 Hrs** **Finish: 1100 Hrs**

**INSTRUCTIONS**

1. This exam is marked out of 70 marks
2. This Examination comprises TWO Sections

**Section A:** Compulsory Question (30 marks)

**Section B:** Long Answer Questions (40 marks)

## **SECTION A: COMPULSORY (30 Marks)**

### **Short Answer Questions**

1. State three reasons for the scientific study of microbes. (3 marks)
2. Outline four contributions of Louis Pasteur to microbiology. (4 marks)
3. Highlight three morphological characteristics of bacteria. (3 marks)
4. State four human samples used in laboratory diagnosis of viral infections. (4 marks)
5. Outline three criteria used in the classification of bacterial metabolism into nutritional groups. (3 marks)
6. Highlight four infection routes of fungal organisms in humans. (4 marks)
7. State three emerging viral infections and their prevention and control. (3 marks)
8. Identify three methods for isolation of a pure culture in a microbiological sample. (3 marks)
9. Identify three major factors contributing to antimicrobial resistance (AMR). (3 marks)

## **SECTION B**

### **ANSWER ANY TWO (2) QUESTIONS (40 Marks)**

#### **Long Answer Questions**

10. You have been asked to make a presentation about bacterial micro-organisms.
  - a. Describe the bacterial growth curve in a rich nutrient media (10 marks)
  - b. Outline the gram staining procedure in bacteria identification (10 marks)
11. Discuss fungal infections (Mycoses) and their manifestations in human beings (20 marks)
12. Viral infections have increasingly gained attention over the past few years globally.  
Discuss: -
  - a) Reproduction in viruses (15 marks)
  - b) Preventive strategies for viral infections. (5 marks)