



AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF PUBLIC HEALTH
DEPARTMENT OF COMMUNITY HEALTH
BACHELOR OF SCIENCE IN COMMUNITY HEALTH
END OF SEPTEMBER -DECEMBER TRIMESTER EXAMINATIONS 2022

CHP 124: Medical Microbiology

Date: 5th December 2022

Time: 2 hours

Start: 4.00 PM

Stop: 6.00 PM

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)
3. All questions in Section A are compulsory and Answer any TWO questions in Section B
4. Do not write on the question paper. Use the back of the answer booklet for any rough work

SECTION A: Short Answer Questions (SAQs)

Answer all Questions (30 Marks)

1. a) Describe Koch's postulates as a proof of germ theory of disease. (6 marks)
b) Explain two characteristics used in classification of bacteria (4 Marks)
2. a) Describe Gram staining technique used in classification of bacteria (5 Marks)
b) Describe bacterial cell flagella arrangement (5 marks).
3. a) Giving examples, Describe **four** types of culture media (4 marks).
b) illustrate bacterial growth phases using the bacteria growth curve (6 marks).

SECTION B: LONG ANSWER QUESTIONS (40 marks)

4. a) Discuss the immune system in human (16 marks)
b) Highlight the medical success in knowledge of the immune system (4 marks)
5. a) Describe four methods of bacteriological analysis of water sample (8 marks)
b) Discuss the interpretation of results of water sample (4 marks)
c) Discuss four Sources of food contamination and give examples where applicable (8 marks)
6. Discuss three methods of sterilization giving examples where necessary (20 marks)