



AMREF INTERNATIONAL UNIVERSITY

SCHOOL OF PUBLIC HEALTH

SCHOOL OF MEDICAL SCIENCES

DEPARTMENT OF COMMUNITY HEALTH

DEPARTMENT OF HEALTH SYSTEMS

DEPARTMENT OF NURSING AND MIDWIFERY

DEPARTMENT OF REHABILITATIVE MEDICINE

**BSC: PHYSIOTHERAPY, NURSING, COMMUNITY HEALTH PRACTICE,
HEALTH SYSTEM MANAGEMENT AND DEVELOPMENT**

AIU 113: INFORMATION COMMUNICATION TECHNOLOGY

DATE: 30th November 2022

TIME: TWO HOURS

START: 4.00 PM

FINISH: 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. No movement is allowed during the examination
5. Any aspect of cheating detected during and or after the exam administration will lead to the nullification of your exam.
6. Do Not write anything on the question paper -use the back of your booklet for rough work if need be

SECTION A: SHORT ANSWER QUESTIONS (30 MARKS)

1. Outline the categories of hardware devices necessary for a computer to run (5 Marks)
2. Outline the components of an Information System (4 Marks)
3. Highlight the two main types of communication methods (4 Marks)
4. Outline four threats to information technology. (4 Marks)
5. Explain how computers can be used as a tool for public health specifically in relation to global warming (4 Marks)
6. Outline an Operating System as pertains to a computing device. (5 Marks)
7. If you cannot judge the reliability of Information on the Internet at times does this mean the Internet is not ideal for use in the medical field, explain your choice? (4 Marks)

SECTION B: LONG ANSWER QUESTIONS (40 MARKS)

8. You are part of the team that is tasked with separating conjoined twins in a hospital. Explain how and why you would use information and communication technology to ensure the best possible outcome of the separation surgery? (20 Marks)
9. Triage is the process of determining the severity of a patient's condition. Patients with the most severe emergencies receive immediate treatment. That is why some patients may receive medical care before you, even if they arrived at the Medical Facility after you. When you arrive at the Medical Facility, medical personnel determine the reason for your visit. A registered nurse will take your medical history and perform a brief examination of your symptoms. You have been tasked to assist with coming up with a way of using IT to improve the triage process. What would you recommend to be done? (20 Marks)
10. Define an Electronic Medical record and how it relates to an Electronic Health Record and a Hospital Information System. What are some of the risks associated with using computers to store and transmit medical information? In your view do the risks associated with privacy outweigh the advantages provided by medical informatics, justify your answer? (20 Marks)