



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF HEALTH SCIENCES

**UNIVERSITY EXAMINATION FOR THE TVET DIPLOMA IN HEALTH
RECORDS AND INFORMATION MANAGEMENT
1ST YEAR 2ND SEMESTER 2023/2024 ACADEMIC YEAR**

MAIN CAMPUS

COURSE CODE: HDR 2124

COURSE TITLE: MEDICAL INSTRUMENTS

EXAM VENUE: STREAM:(TVET DIP HEALTH RECORDS)

DATE: EXAM SESSION:

TIME: 2 HOURS

Instructions:

- 1. Answer all questions in section A and any other 2 questions in Section B.**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

Section A: Answer all questions (30 marks)

1. Discuss the use of these medical instruments (2 marks each)
 - a) Ophthalmoscope
 - b) Thermocuagulator
 - c) Defibrillation
 - d) Stethoscope
 - e) Linear accelerator
 - f) Pulse oximeters
 - g) Retractors
2. List 4 instruments used in cancer screening (2 marks)
3. Outline the working principle of a centrifuge (4 marks)
4. Describe briefly the medical instruments decontamination methods (3 marks)
5. Describe the disadvantages of computed tomography to X-Ray (2 marks)
6. What are the factors that influence the design and application of a medical instrumentation system? (3 marks)
7. What are the three basic function of instrumentation (2 marks)

Section B: Choose any two questions (20 marks)

1. Discuss the principles, operation, care and safety of an Autoclave (20 marks)
3. Discuss some of the current innovations and developments in medical instrumentation (20 marks)
4. Discuss the FIVE equipments used in medical imaging (20 marks)
4. Discuss the equipments used in cancer managements (20 marks)