



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL  
OF HEALTH SCIENCES**

**UNIVERSITY EXAMINATION FOR MASTER'S IN PUBLIC HEALTH AND MASTER OF  
BIOMEDICAL SCIENCES (MEDICAL ENTOMOLOGY)**

**1<sup>st</sup> YEAR 2<sup>nd</sup> SEMESTER 2023/2024 ACADEMIC YEAR**

**MAIN/KISUMU**

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**COURSE CODE: HMB 5115**

**COURSE TITLE: LABORATORY & HEALTHCARE SYSTEM MANAGEMENT**

**DATE:**

**TIME: 9.00-12.00 NOON**

**TIME: 3 HOURS**

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**Instructions:**

1. Answer question 1 (compulsory) and any other THREE.
2. Each question carries 15 marks



Registration No.....

**Question 1 is compulsory and any other 3 questions. Each question carries 15 marks.**

**Question 2:** Discuss how each of the following functions may influence the performance of clinical Laboratory management and performance.

- a. Team management
- b. *ISO* certification
- c. Strategic planning
- d. Staffing and scheduling
- e. Risk management plan

**Question 2:** Quality management is a crucial component of ensuring standards are observed in laboratories.

- a. Discuss potential challenges associated with setting up laboratory quality management system.
- b. Discuss the “total testing process” concept and the relevant indicators for assessing performance.

**Question 3:** Planning is an essential aspect for achieving an organized emergency preparedness and management program to forestall service disruption. Identify the key elements of emergency planning and discuss how they might be implemented

**Question 4:** Discuss **five** (5) factors that you would consider prior to the acquisition of new laboratory equipment or implementation of new procedures, based on the following subtitles.

**Question 5:** Write short notes on the following concepts with regard to laboratory practice *[provide definition and their importance in each case]*.

- a. Laboratory system financing *[3marks]*
- b. Maximum Allowable Error. *[3marks]*
- c. Turn-around time. *[3marks]*
- d. Health systems management *[3marks]*
- e. ‘DECIDE’ decision-making model *[3marks]*