



*(Knowledge for Development)*

# **KIBABII UNIVERSITY**

## **UNIVERSITY EXAMINATIONS 2020/2021 ACADEMIC YEAR**

### **FIRST YEAR FIRST SEMESTER MAIN EXAMINATION**

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL  
EDUCATION AND EXTENSION, BIOLOGY AND BIORESOURCE  
CONSERVATION**

**COURSE CODE:** SBL 100/SBL 112  
**COURSE TITLE:** LABORATORY PRACTICE, BIOSAFETY AND  
BIOETHICS

**DATE:** 22<sup>ND</sup> February, 2021.      **TIME:** 8:00 -10:00 a.m.

---

#### **INSTRUCTIONS TO CANDIDATES**

Answer Question one (1) and any other two (2) Questions. Question one is compulsory and carries 30 marks, the other Questions carry 20 marks each.

TIME: 3 Hours

This paper consists of 2 printed pages. Please Turn Over   
KIBU observes ZERO tolerance to examination cheating

- Q1 (i) Write short notes on
- a) Non-hazardous/solid wastes
  - b) Hazardous wastes (5 marks)
- (ii) State and explain the aims of First Aid (5 marks)
- (iii) Distinguish between
- a) Cabinet and suit laboratory
  - b) Open and closed laboratories
  - c) Bioethics and Research ethics
  - d) Physical and Ergonomic hazards
  - e) Quality control and Quality assurance (5 marks)
- (iv) Explain the essential requirements of a Biological and Agricultural Sciences laboratory. (5 marks)
- (v) Compare and contrast Biosafety Level 2 (BSL2) and Biosafety Level 3 (BSL3) laboratories. (5 marks)
- (vi) State the factors addressed by Quality Management System (5 marks)
- Q2 You have been appointed as a Laboratory Manager and charged with the responsibility to prepare a Standard Operating Procedure (SOP) for conducting a fire drill. Explain the process you would take to prepare the SOP. (20 marks)
- Q3 Explain the role of International Institutions and Organisations involved in quality assessment and accreditation of laboratories. (20 marks)
- Q4 Discuss the major laboratory rules that must be observed in Agricultural and Biological Sciences laboratories (20 mark)
- Q5 Discuss Good Laboratory Practices (GLP). (20 marks)