



(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS 2021 /2022 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER MAIN EXAMINATION

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

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

DATE: 2ND FEBRUARY 2022

TIME: 2.00 -4.00 PM

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) Compare and contrast Phase Contrast Microscopy (PCM) and Differential Interference Microscopy (DICM) (5 marks)
- (ii) As a Biosafety Officer, explain the steps required to perform a Biological Risk Assessment in the laboratory (5 marks)
- (iii) Outline the effects of uncontrolled fires (5 marks)
- (iv) Identify and explain the organizations that perform External Quality Assessment (EQA) (5 marks)
- (v) Why is First Aid important? (5 marks)
- (vi) Write short notes on
- (a) Good Laboratory Practice (GLP)
 - (b) Standard Operating Procedure (SOP) (5 marks)
- Q2 Discuss the importance of laboratories in teaching, research, agriculture, medicine and public health. (20 marks)
- Q3 Discuss the impact of advancement of science and Technology on ethics and morals. (20 marks)
- Q4 Enumerate the quality management system model essentials in diagnostic, teaching and research laboratories. (20 marks)
- Q5 Describe and classify the main waste categories based on legislation and policy guidelines . (20 marks)