



KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

FIRST YEAR EXAMINATION FOR THE AWARD OF THE DEGREE OF
BACHELOR OF SCIENCE IN BIOCHEMISTRY
SECOND SEMESTER 2021/2022
(FEBRUARY-JUNE, 2022)

BIOC 122: LABORATORY BIOTECHNIQUES I

STREAM: Y1 S2

TIME: 2 HOURS

DAY: FRIDAY, 12:00 PM – 2:00 PM

DATE: 27/05/2022

INSTRUCTIONS:

- 1. Do not write anything on this question paper.***
- 2. Answer Section A (Compulsory) and any other TWO Questions in section B.***

SECTION A: ANSWER ALL QUESTIONS (40 MARKS)

1. Write short notes on personal protective gears. [8marks]
2. Sharing of information is important to the public. Discuss briefly some of the ways readily available for researchers can use to achieve this. [8 marks]
3. Explain the principle, components and steps in thin layer chromatography. [8 marks]
4. Describe some of the factors which affect resolution during gel electrophoresis. [8 marks]
5. Discuss stain and staining methods in microscopy. [8 marks]

SECTION B: ANSWER ANY TWO QUESTIONS (30 MARKS)

1. In detail, discuss the different levels of laboratories. [15 marks]
2. With an illustration, describe how you can separate a protein from a crude extract by using gel filtration column chromatography. [15 marks]
3. Give a comparative account between light and electron microscopy. [15 marks]