



KISII UNIVERSITY

UNIVERSITY EXAMINATIONS

**THIRD YEAR EXAMINATION FOR THE AWARD OF THE DEGREE OF
BACHELOR OF SCIENCE LABORATORY SCIENCE TECHNOLOGY
SECOND SEMESTER 2021/2022
(FEBRUARY-JUNE, 2022)**

BSLT 336: CELL CULTURE

STREAM: Y3 S2

TIME: 2 HOURS

DAY: FRIDAY, 9:00 AM – 11:00 AM

DATE: 20/05/2022

INSTRUCTIONS:

- 1. Do not write anything on this question paper.***
- 2. Answer all questions in section A and any TWO in section B.***

SECTION A (40 Marks)

1. Give a brief description of the history of cell culture. (5marks)
2. Summarize morphology of cells in culture. (4 marks)
3. Briefly explain the growth phases associated with normal cells. (4 marks)
4. Briefly describe types of culture. (5marks)
5. Give differences between a primary and secondary cell culture. (7marks)
6. Survey the fundamental bioprocess variables associated with cell cultures. (5 marks)
7. Outline the applications of Animal Tissue Culture. (6 marks)
8. State the advantages of indirect ELISA (4marks)

SECTION B (30 Marks)

9. Discuss significance of cell culture. (15 marks)
10. Compare and contrast between animal cell culture and plant tissue culture. (15marks)
11. Discuss various crop modification techniques. (15 marks)