



(Knowledge for Development)

KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR**

SECOND YEAR FIRST SEMESTER

SPECIAL/SUPPLEMENTARY EXAMINATIONS

**FOR THE DEGREE OF BACHELOR OF AGRICULTURE EDUCATION
AND EXTENSION**

COURSE CODE: SZL211

COURSE TITLE: FUNDAMENTALS CELL BIOLOGY

DATE: 25TH JULY 2022

TIME: 8.00 -10.00 AM

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: 2 Hours

This paper consists of 2 printed pages. Please Turn Over



KIBU observes ZERO tolerance-to examination cheating

1.

- a) Distinguish between resolution and magnification (2Marks)
- b) Give two common characteristics of chloroplast and mitochondria (2Marks)
- c) Define the term cytokinesis (2Marks)
- d) State three functions of the Golgi apparatus (3Marks)
- e) List three major events in the history of cell biology (3Marks)
- f) What role do ribosomes play in the cell (2Marks)
- g) Describe the structure and of nucleolus. (3Marks)
- h) Briefly describe the gap junction (2Marks)
- i) Describe the process of exocytosis (3Marks)
- j) Outline the processes that occur in a cell during interphase (4Marks)
- k) Describe anaphase of mitosis (4Marks)

- 2. Describe various cell junctions in terms of structure and function (20Marks)
- 3. Explain the major stages involved in the process of meiosis (20Marks)
- 4. Describe the cell cycle and explain what happens during each part (20 Marks)
- 5. Describe the process of cell signaling and transduction (20Marks)