



(Knowledge for Development)

KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR**

FIRST YEAR FIRST SEMESTER

SPECIAL/SUPPLEMENTARY EXAMINATIONS

**FOR THE DEGREE OF BACHELOR OF SCIENCE
(BIORESOURCE CONSERVATION AND
MANAGEMENT)**

COURSE CODE: SZL 121

COURSE TITLE: CELL BIOLOGY

DATE: THURSDAY 30TH SEPTEMBER, 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: 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 cell membrane (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. Compare and contrast the prokaryotic and eukaryotic cells (20Marks)
3. Explain the major stages involved in the process of meiosis (20Marks)
4. Describe the cytoskeleton structures and their functions (20Marks)
5. Describe the process of cell signaling and transduction (20Marks)