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(Knowledge for Development)

KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR**

SECOND YEAR FIRST SEMESTER

MAIN EXAMINATIONS

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

COURSE CODE: SZL 211

COURSE TITLE: FUNDAMENTALS CELL BIOLOGY

DATE: 4TH FEBRUARY 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)