



(Knowledge for Development)

KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR**

THIRD YEAR FIRST SEMESTER

MAIN EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF EDUCATION SCIENCE

COURSE CODE: SBL 311

COURSE TITLE: CELL BIOLOGY

DATE: Thursday 15th July, 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) State the functions of Golgi apparatus (2Marks)
 - b) Write short notes on photophosphorylation. (2Marks)
 - c) What are microfilaments? (2Marks)
 - d) Define the term active transport (2Marks)
 - e) Give the structural difference between lysosome and ribosome (2Marks)
 - f) State the functions of centriole (2Marks)
 - g) Define the term cell cycle (2Marks)
 - h) What is Phagocytosis? (2Marks)
 - i) Differentiate between simple and facilitated diffusion. (2Marks)
 - j) Briefly describe necrosis (3Marks)
 - k) State three principles of the cell theory (3Marks)
 - l) Write short notes on Rough Endoplasmic Reticulum (3Marks)
 - m) Describe passive transport with one example (3Marks)
2. Briefly explain the structure and functions of the cell membrane (20Marks)
3. Differentiate between prokaryotic and eukaryotic cells in terms of structure (20Marks)
4. Describe various cell junctions in terms of structure and function (20Marks)
5. Describe the various stages involved in the process of meiosis (20Marks)