



(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS 2015/2016 ACADEMIC YEAR

SECOND YEAR SECOND SEMESTER MAIN EXAMINATION

**FOR THE DEGREE OF BACHELOR OF EDUCATION SCIENCE
AGRICULTURE A BIOTECHNOLOGY, AND BIORESOURCE**

COURSE CODE: ESM 221

COURSE TITLE: BIOLOGICAL TECHNIQUES

DATE: 3rd May 2016

TIME: 9:00 – 11:00 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



KIBUCO observes ZERO tolerance to examination cheating

- 1a. Explain what constitutes a validly published botanical name (3mks)
 - 1b. Explain how plant biomass is determined in the laboratory (4mks)
 - 1c. Explain how to estimate chlorophyll content in a plant leaf (4mks)
 - 1d. Describe the various labels that can be found on a pressed botanical specimen (3mks)
 - 1e. Differentiate the various type specimens.(5mks)
 - 1f. Briefly describe the history of information collection in animal sampling (7mks)
 - 1g. Distinguish between Radio-telemetry and sampling (4 mks)
-
2. Describe the procedure of collection, preparation and preservation of Herbarium specimen (20mks)
 3. Discuss sterilisation and disinfection techniques (20 mks)
 4. Describe the ethical issues in animal sampling (20 mks)
 5. Discuss the techniques used to identify fauna for studies in the field (20mks)