



MACHAKOS UNIVERSITY

University Examinations 2017/2018

SCHOOL OF EDUCATION

DEPARTMENT OF COMMUNICATION TECHNOLOGY

THIRD YEAR SECOND SEMESTER EXAMINATION FOR
BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION
BACHELOR OF EDUCATION

ECT 304: TEACHING METHODS IN BIOLOGY

DATE: 20/12/2017

TIME: 2.00-4.00 PM

INSTRUCTIONS

Answer Question One and Any Other Two Questions

1.
 - a) Explain any two (2) reasons why Biology should be taught at Secondary School level. (4 marks)
 - b) Describe how the **three** phases of a learning cycle can be applied to the teaching of **Phototropism**. (12 marks)
 - c) Prepare a 40 minute Lesson Plan on the topic **pollination in flowering plants**. (14 marks)
2. Outline the key practical skills that are tested in a Biology Practical on **Food tests**. (20 marks)
3.
 - a) Explain **two** components of Biology as a Science. (8 marks)
 - b) Choose a topic from the Biology Syllabus for Secondary Schools and describe how you would teach it using a **project**. (12 marks)
4. Explain the steps involved in constructing a balanced test in Biology. (20 marks)
5. Write a brief essay on **one** of the following topics: (20 marks)
 - a) Biology and Medicine.
 - b) Metacognitive teaching.
 - c) Process-skills approach to teaching.
 - d) The use of ICT in teaching Biology.