



MACHAKOS UNIVERSITY

University Examinations 2016/2017

SCHOOL OF EDUCATION

DEPARTMENT OF COMMUNICATION TECHNOLOGY

SECOND YEAR SECOND SEMESTER EXAMINATION FOR DIPLOMA IN
EDUCATION

ECT 0209: TEACHING METHODS-BIOLOGY

DATE: 6/6/2017

TIME: 2:00 – 4:00 PM

INSTRUCTIONS

Answer Question One and Any Other Two Questions

1. a) Explain **two ways** of:
 - i. Introducing the topic: **The Structure of a flower.**
 - ii. Concluding a lesson on the topic: **Food Chains and Food Webs**(8 marks)
- b) Explain the use of the Vee-Diagram as a Metacognitive tool in Biology Teaching: You may make reference to a named practical. (12 marks)
- c) Discuss any **five** process-skills of Science promoted through Biology. (10 marks)
2. Prepare a 40 minute Lesson Plan for teaching a lesson on **Cell Organelles.** (20 marks)
3. Describe how you would teach a named topic in Biology with emphasis on the **three phases of a learning cycle.** (10 marks)
4. Explain the significance of each of the following methods of teaching Biology:
 - i The project method.
 - ii The discussion method.
 - iii The Teacher Demonstration.
 - iv The Field Trip. (20 marks)
5. Write briefly about the skills tested in the following areas of Biology Practical:
 - i. Biological Diagrams.
 - ii. Support and Movement.
 - iii. Construction of the Dichotomous Key. (20 marks)