



MACHAKOS UNIVERSITY

University Examinations 2016/2017

SCHOOL OF EDUCATION

DEPARTMENT OF COMMUNICATION TECHNOLOGY

APRIL SESSION EXAMINATION FOR DIPLOMA IN EDUCATION

ECT 0209: TEACHING METHODS-BIOLOGY

DATE: SCHOOLBASED

TIME:

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.**

(20 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)