

MACHAKOS UNIVERSITY 2020 EXAMINATIONS

ECT304: TEACHING METHODS-BIOLOGY

- Q1. (A) Explain any two (2) reasons as to why Biology is important for Career Development. (4 marks).
- (B) Describe how the **Project Method** can be applied to the teaching of **Adaptation of plants to their habitat**. (12 marks).
- (C) Prepare an 80-minute Lesson Plan on the topic **Food Tests**. Include the Test for: **Starch, Reducing Sugars, Proteins**. (14 marks).
- Q2. Outline the steps you would follow in planning for a Biology Practical on **the use of the Dichotomous Key**. Consider the following organisms; **COCKROACH, TORTOISE, EARTHWORM, GRASSHOPPER, HOUSE FLY, BEE**. (20 marks).
- Q3. (A) Explain how Biology has contributed to the fight against diseases. (8 marks).
- (B) Choose a topic from the Biology Syllabus for Secondary Schools and describe how you would teach it using the Discussion Method. (12 marks).
- Q4. Explain the significance of each of the following components of a Lesson Plan: (20 marks).
- (i) The Objectives.
 - (ii) The Timing of each step.
 - (iii) The Learning Activities.
 - (iv) The Teaching Resources.
 - (v) The Remarks.
- Q5. Write a brief essay on **one** of the following topics: (20 marks).
- (i) Values of science.
 - (ii) Women Scientists in Biology.
 - (iii) The use of ICT in teaching Biology.
 - (iv) Assessment of procedures in Biology..