



# THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

**A. M. E. C. E. A**

**MAIN EXAMINATION**

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**JANUARY – APRIL 2018 TRIMESTER**

**FACULTY OF EDUCATION**

**DEPARTMENT OF POSTGRADUATE STUDIES IN EDUCATION**

**PART TIME PROGRAMME**

**ED 313: SUBJECT METHODS: BIOLOGY**

**Date: APRIL 2018**

**Duration: 3 Hours**

**INSTRUCTIONS: Answer Question ONE and any other THREE Questions**

- Q1. a) Define the following as used in biology: **(4Marks)**  
i) Lamarck's Theory of evolution  
ii) Spontaneous generation
- b) State and explain any three factors considered when scheming for biology teaching. **(4Marks)**
- c) State any three advantages of using 'Field trips' for the teaching and learning of biology. **(3Marks)**
- d) Outline any 3 areas where biology has made contribution in society. **(3Marks)**
- e) List any 4 criteria used for selecting a method for teaching biology. **(4Marks)**
- f) Assume you are having a lesson in the laboratory of dissecting a rat. State any three learning objectives you can draw from this lesson. **(3Marks)**
- g) Differentiate between aims and specific objectives as used in the teaching of biology. **(4Marks)**

- Q2. Discuss the factors that influence the choice of type of experiments in the teaching of biology. **(15Marks)**
- Q3. Prepare a 40-minute lesson plan for a form one class with all the components of a biology theory lesson on '*characteristics of living organisms*'. **(15Marks)**
- Q4. Evaluate the factors that one should consider when designing a biology laboratory. **(15Marks)**
- Q5. Prepare a two weeks detailed form 2 scheme of work for the subtopic "nutrition in plants" bearing in mind you have three lessons per week. **(15Marks)**
- Q6. Explain how one can prepare his class and successfully teach a biology lesson using demonstration as his method of teaching. **(15Marks)**

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