



MACHAKOS UNIVERSITY

University Examinations 2019/2020

SCHOOL OF EDUCATION

DEPARTMENT OF EARLY CHILDHOOD EDUCATION
THIRD YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF EDUCATION

ECT 305: CHEMISTRY SUBJECT METHODS

DATE:

TIME:

INSTRUCTIONS: Answer Question One and Any Other Two

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Explain how you would introduce Chemistry for a form one class so as to stimulate their interest in careers related to the subject. (INCLUDE strategies and resources). (10 marks)
- b) Explain the steps in the **Experimental** method of teaching of Chemistry; You may make reference to a named practical. (12 marks)
- c) Discuss any **four values** of science promoted through Chemistry. (8 marks)

QUESTION TWO (20 MARKS)

Prepare an 80-minute Lesson Plan for practical lesson on **Test for Anions**.

Include: **Chloride ions, Nitrate ions, Sulphate ions, Sulphite ions**.

QUESTION THREE (20 MARKS)

Discuss how Chemistry contributes **to any two** of the following:

- i) The Medical professions.
- ii) Technology and Industrial Development.
- iii) Informed Citizenship

QUESTION FOUR (20 MARKS)

Explain the significance of **one** of the following approaches to the teaching of Chemistry:

- i) The Project Method
- ii) The Meta-Cognitive approach
- iii) The Process-Skills approach
- iv) The Demonstration Method

QUESTION FIVE (20 MARKS)

Write briefly about **the skills tested in one of the following areas** of chemistry practical

- i) Qualitative analysis (10 marks)
- ii) Rate of reaction (4 marks)
- iii) Volumetric analysis. (6 marks)