



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya.
Tel: +254 (0)799529958, +254 (0)799529959, +254 (0)712524293
Website: www.must.ac.ke Email: info@must.ac.ke

UNIVERSITY EXAMINATIONS 2024/2025

FIRST YEAR, FIRST SEMESTER EXAMINATION FOR POST GRADUATE DIPLOMA OF
EDUCATION

ECG 4153: METHODS OF TEACHING CHEMISTRY

DATE: JANUARY 2025

TIME: 3 HOURS

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

QUESTION ONE (24 MARKS)

- a) What are some key principles of effective teaching methods in Chemistry? (6 Marks)
- b) How do technology-based teaching methods enhance the learning experiences of students in a Chemistry class? (6 Marks)
- c) Explore the concept of differentiated instruction in teaching chemistry. How can educators adapt teaching strategies to accommodate diverse learning needs and abilities in the classroom? (6 Marks)
- d) What role do assessment methods play in teaching effectiveness? (6 Marks)

QUESTION TWO – (12 MARKS)

In a classroom situation, the learner is the teacher's audience. Discuss three characteristics/ factors of a student that may pose a challenge to you as chemistry teacher during a practical experiment lesson.

QUESTION THREE - 12 MARKS)

Evaluate the teaching aids you may use when teaching “Solvay Process”

QUESTION FOUR – (12 MARKS)

Picking a topic in the Chemistry syllabus, illustrate how you would teach using **project method**.

QUESTION FIVE – (12 MARKS)

As a teacher, you are required to prepare and maintain several professional documents in your practice. Among them are the schemes of work, lesson plans, records of work, and progress reports. Using the Secondary School content, develop a 40-minute lesson plan for a form 2 class.