



MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS 2018/2019 ACADEMIC YEAR THIRD YEAR SECOND SEMESTER

SCHOOL OF EDUCATION BACHELOR OF EDUCATION

COURSE CODE: ECI 3118

**COURSE TITLE: SUBJECT METHODS IN
CHEMISTRY**

DATE: 17TH APRIL, 2019

TIME: 08.30 – 10.30AM

INSTRUCTIONS TO CANDIDATES

- i) Answer Question **ONE** and any other **two** questions
- ii) **Do not write on the question paper**

*This paper consists of **TWO** printed pages. Please turn over.*

QUESTION ONE

- a) Justify the inclusion Chemistry in the secondary school curriculum. **(10 marks)**
- b) Teaching and learning of Science is 'dynamic'. Discuss the teaching and learning of Chemistry as a branch of science in the light of this statement **(4 marks)**
- c) Explain the instances under which teacher demonstration should be used in Chemistry instruction. **(6 marks)**
- d) You have been posted for teaching practice in a school of your choice. Discuss any factors that can influence the choice of a teaching method you will use in teaching a Form One Chemistry class. **(5 marks)**
- e) Discuss the roles of Chemistry in the society **(5marks)**

QUESTION TWO

- a) Discuss the basic science process skills used in the teaching and learning of Chemistry in secondary schools **(10 marks)**
- b) Explain the domains of instructional objectives for Chemistry teaching giving relevant examples in each case **(10 marks)**

QUESTION THREE

- a) A scheme of work is one of the professional documents that a teacher should have when teaching Chemistry. Discuss the importance of this document **(10 marks)**
- b) Using the Maasai Mara University format, draw a lesson plan for teaching a lesson topic; 'Chemical properties of Acids' guided by the following objective. Objective: 'By the end of the lesson the learner should be able state simple chemical properties of acids' **(10 marks)**

QUESTION FOUR

- a) (i) Highlight key factors which a secondary school Chemistry teacher must take in consideration in order to carry out a successful teacher demonstration lesson. **(6 marks)**
(ii) Identify FOUR ways in which a Chemistry teacher can involve students in a teacher demonstration lesson **(4 marks)**
- b) Discuss the benefits of using computers in Chemistry instruction **(10 marks)**

QUESTION FIVE

- a) Although Class Experiment is a learner-centered method of instruction, the teacher plays a vital role in ensuring that the objectives of the experiment are achieved. Identify any FIVE roles of the teacher in a class experiment **(10 marks)**
- b) Discuss common Chemistry laboratory features that provides for the safety of its users **(10 marks)**

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