

MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS 2022/2023 ACADEMIC YEAR THIRD YEAR FIRST SEMESTER

SCHOOL OF EDUCATION BACHELOR OF EDUCATION ARTS

COURSE CODE: ECI 3118

COURSE TITLE: SUBJECT METHODS IN CHEMISTRY

DATE: 13TH DECEMBER, 2022 TIME: 1430-1630 HRS

INSTRUCTIONS TO CANDIDATES

Answer Question ONE and any other TWO questions

QUESTION ONE

- a) Science is a dynamic process .Discuss the characteristics of a dynamic process. (10 mks)
- b) Improvisation in chemistry is important because of the scarcity of materials and teaching resources. Discuss at least **five** content areas /topics in secondary school chemistry where a teacher would go for improvisation.

(10 mks)

QUESTION TWO

- a) In the design for a chemistry laboratory safety consideration is very important. Discuss **five** key components of a chemistry laboratory that address safety. (10 mks)
- b) Discuss five advantages of using practical work in the teaching of chemistry. (5 mks)

QUESTION THREE

- a) State and explain **five** circumstances under which a teacher would choose a demonstration in place of a class experiment. (5 mks)
- b) State **three** advantages of using lecture as a method of instruction. In Chemistry. (3 mks)
- c) Discuss at least **seven** scientific process skills that a student gains when project work is used as an approach in learning. (7 mks)

QUESTION FOUR

a) Chemistry content is loaded with some abstract concepts that students find difficult to understand. Outline at least **five** best practices that a professional teacher can utilize to make Chemistry simpler and easier to conceptualize.

(5 mks)

b) What are the benefits/importance of chemistry to the society and the student? (10 mks)

QUESTION FIVE

- a) Discuss five characteristics of an instructional objective. (5 mks)
- b) Explain the importance of preparing and using a scheme of work in Chemistry. (4 mks)
- c) Give three examples of audio visual aids used in Chemistry and their advantages. (6mks)

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