



UNIVERSITY EXAMINATIONS

2ND SEMESTER 2023/2024 ACADEMIC YEAR

**THIRD YEAR EXAMINATION FOR THE DEGREE
OF BACHELOR OF EDUCATION (ARTS/SCIENCE,
BSC. AGED)**

EDCI 331: CHEMISTRY SUBJECT METHODS

STREAM: R

TIME: 2 HRS

DAY: MONDAY (8.30-10.30AM)

DATE: 8/4/24

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

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SO.**



INSTRUCTIONS: Answer question **ONE** and any other **TWO** questions

QUESTION ONE (30 MARKS)

- a) Human resources are important in the teaching of chemistry subject. Explain the importance of any **THREE** human resources you can use in a lesson. **(6 marks)**
- b) One of the major hindrances in the learning of chemistry is misconceptions students hold about most chemistry concepts. Explain the **TWO** main types of misconceptions held by students using suitable examples. **(4 marks)**
- c) Inquiry based learning is a teaching methodology in Chemistry. Explain the **FOUR** levels of inquiry based learning. **(8marks)**
- d) Give **TWO** importance of writing a record of work. **(2 marks)**
- f) You have been posted to teach chemistry subject in a school at your home area. There are 4 lessons in a week, lesson 1 & 2 are singles while lesson 3 & 4 is a double lesson. Write a 2 week scheme of work for a Form one class on the topic Air and Combustion. **(10 marks)**

QUESTION TWO (20 MARKS)

- a) Students who are trained in Scientific Method are expected to solve problems in any situation they encounter. Explain the **SIX** steps of this process **(6 marks)**
- b) Explain the **FIVE** major considerations a teacher requires to put in mind when writing a scheme of work. **(10 marks)**
- c) Discuss **FOUR** positive contribution of chemistry to the society. **(4 marks)**

QUESTION THREE (20 MARKS)

- a) Describe the **THREE** main groups of instructional objectives. **(6 marks)**
- b) Discuss **FIVE** reasons why many teachers of chemistry do not use Class experiment method . **(5 marks)**
- c) Discuss **FIVE** problems which may arise in during teaching if a teacher fails to prepare a scheme of work. **(5 marks)**

- d)) Outline **FOUR** reasons why proper storage and arrangement of apparatus and chemicals in the laboratory is key in the teaching and learning of chemistry. **(4 marks)**

QUESTION FOUR (20 MARKS)

- a) Illustrate by giving examples **FIVE** functions of instructional objectives in teaching of Chemistry. **(5 marks)**
- b) Discuss **FOUR** learning activities appropriate to the achievement of the stated objectives **(4 marks)**
- c) Explain **FOUR** characteristics of a good test. **(8 Marks)**
- d) Consider the subtopic “STRUCTURE OF THE ATOM”, Write **THREE** instructional objectives to achieve in a 40-minutes lesson. **(3 marks)**

QUESTION FIVE (20 MARKS)

- a) Articulate **FOUR** advantages of using laboratory as a resource in teaching chemistry. **(8 marks)**
- b) Construct a 40- mins lesson plan on the subtopic physical properties of oxygen gas clearly showing all the required details **(8 marks)**
- a) Name four reasons for slow development of Chemistry before 1800AD. **(4 marks)**

