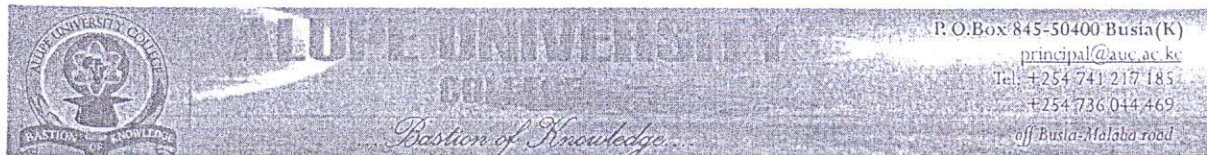


CHE 401



OFFICE OF THE DEPUTY PRINCIPAL
ACADEMICS, STUDENT AFFAIRS AND RESEARCH

UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

FOURTH YEAR FIRST SEMESTER REGULAR EXAMINATION

FOR THE DEGREE OF BACHELOR OF
EDUCATION SCIENCE

COURSE CODE: CHE 401

COURSE TITLE: INDUSTRIAL AND APPLIED
CHEMISTRY

DATE: 28TH JANUARY, 2022

TIME: 0900 – 1200 HRS

INSTRUCTION TO CANDIDATES

- SEE INSIDE

THIS PAPER CONSISTS OF PRINTED PAGES 2

PLEASE TURN OVER

REGULAR –MAIN EXAM

CHE 401: INDUSTRIAL AND APPLIED CHEMISTRY

STREAM: BED (Scie)

DURATION: 3 Hours

INSTRUCTIONS TO CANDIDATES

- i. Answer *ALL* questions.
- ii. Diagrams may be used whenever they serve to illustrate the answer.
- iii. Do not write on the question paper.

Question One

- a. List some of the manufacturing sub-sectors (4 marks)
- b. Describe various sources of raw materials for the chemical industry (8 marks)

Question Two

Describe 6 examples of unit processes in a chemical industry (12 marks)

Question Three

- a. What does ore dressing entail? (6 marks)
- b. Describe three metal extraction processes (6 marks)

Question Four

Describe 6 examples of unit operations in a chemical industry (12 marks)

Question Five

Describe the Hall-Heroult process of aluminum (12 marks)

Question Six

Describe how the NPK fertilizer is manufactured (4 marks)

List the major components of cement in terms of metal oxides and the respective raw materials from which they are derived (6 marks)
