

CIM 721J



OFFICE OF THE DEPUTY PRINCIPAL
ACADEMICS, RESEARCH AND STUDENT AFFAIRS

UNIVERSITY EXAMINATIONS

2019/2020 ACADEMIC YEAR

SECOND YEAR SECOND SEMESTER REGULAR EXAMINATION

FOR THE POSTGRADUATE DIPLOMA IN
EDUCATION

COURSE CODE: CIM 721J

COURSE TITLE: CHEMISTRY EDUCATION

DATE: 29TH OCTOBER, 2020

TIME: 9:00 AM- 12:00 PM

INSTRUCTION TO CANDIDATES

- SEE INSIDE

THIS PAPER CONSISTS OF THREE PRINTED PAGES

PLEASE TURN OVER

REGULAR: MAIN EXAM

CIM 721J: CHEMISTRY EDUCATION

STREAM: PGDE

DURATION: 3 Hours

INSTRUCTIONS TO CANDIDATES

- i. Answer question *ONE* and any other *TWO* questions
- ii. Do not write on the question paper

Question One (20 Marks)

- a) Explain five importance of instructional objectives in the teaching of chemistry. (5 Marks)
- b) Explain five reasons why it is necessary to have assessment in chemistry education. (3 Marks)
- c) Distinguish between formative evaluation and summative evaluation in chemistry teaching. (6 Marks)
- d) Describe four functions of a preparation room in a chemistry laboratory. (3 Marks)

Question Two (20 Marks)

- a) Discuss five factors to consider when choosing a teaching strategy for chemistry lesson citing relevant examples. (10 Marks)
- b) A teacher should use a teaching method that is effective. Describe and explain FIVE characteristics of heuristics methods of teaching. (10 Marks)

Question Three (20 Marks)

- a) Explain five benefits of inquiry based learning in chemistry. (10 Marks)
- b) Describe the elements of the 5E instructional model (10 Marks)

Question Four (20 Marks)

- a) Describe the steps you would follow in planning and implementing a teacher demonstration on the sub-topic 'laboratory preparation of chlorine' (12 Marks)
- b) Discuss FOUR advantages of writing and using a scheme of work. (8 Marks)

Question Five (20 Marks)

- a) Explain the need for improvised apparatus. (10 Marks)
- b) Discuss Five advantages of using low cost materials during improvisations. (10 Marks)
