



OFFICE OF THE DEPUTY PRINCIPAL
ACADEMICS, RESEARCH AND STUDENT AFFAIRS

UNIVERSITY EXAMINATIONS

2020/2021 ACADEMIC YEAR

THIRD YEAR FIRST SEMESTER REGULAR
EXAMINATION

FOR THE DEGREE OF BACHELOR OF EDUCATION

COURSE CODE: CIM 312

COURSE TITLE: MATHEMATICS EDUCATION II

DATE: 12TH MARCH, 2021

TIME: 9.00AM-12.00NOON

INSTRUCTION TO CANDIDATES

- SEE INSIDE

THIS PAPER CONSISTS OF 3 PRINTED PAGES

PLEASE TURN OVER

CIM 312: MATHEMATICS EDUCATION II

STREAM: BED (Arts)

DURATION: 3 HOURS

INSTRUCTIONS TO CANDIDATES

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

Question One

- a) Outline FOUR key ideas in teaching problem solving in mathematics (4 marks)
- b) Explain THREE roles of the text book in class (3 Marks)
- c) Outline FIVE ways of improving use of chalkboard in teaching and learning of mathematics (5 Marks)
- d) Explain FIVE reasons for testing learners (5 Marks)
- e) Demonstrate that a number raised to zero is one (3 Marks)
- f) Demonstrate how to develop number concept using a number line (5 Marks)
- g) Explain FIVE importance of analysis and interpretation of test results of students in mathematics (5 Marks)

Question Two

- a) Discuss FIVE ways of raising mathematics literacy in Kenya (10 Marks)
- b) Explain FIVE uses of mathematical modeling (10 Marks)

Question Three

- a) Explain FIVE different ways of providing resources for teaching mathematics in schools (5 Marks)
- b) Explain SIX Characteristics of a Good Teaching Chart (6 marks)
- c) Explain FIVE uses of chalkboard (5 marks)
- d) Explain FOUR challenges facing the future of mathematics education (4 Marks)

Question Four

- a) Discuss how ERICSSON'S MACIC formula improves the teaching of mathematics (10 Marks)
- b) Explain FIVE roles of a model in the class room (5 Marks)

c) Explain FIVE qualities of a good mathematics text book

(5 Marks)

Question Five

Prepare a 1-hour test to administer to form one term one students. It should include table of specification and marking scheme (20 Marks)
