

REGULAR UNIVERSITY EXAMINATIONS 2018/2019 ACADEMIC YEAR

SCHOOL OF EDUCATION BACHELOR OF EDUCATION

COURSE CODE: CIM 311

COURSE TITLE: SPECIAL METHODS IN MATHEMATICS

DATE: 26/04/2019 TIME: 1430 - 1630

HRS

INSTRUCTIONS TO CANDIDATES

Answer question ONE and any other TWO questions

QUESTION ONE

(a) What considerations do you take into account when choosing a teaching method in mathematics instruction?

(5 Marks)

- (b) "Mathematics education is an important component in the overall development of all the youth in this country". Justify this statement. (10Marks)
- (c) Critically examine five (5) effects of "textbook teaching".

(5 Marks)

(d) Examine the evolution of secondary school mathematics since 1963.

(10 Marks)

OUESTION 2

(a) Discuss the five (5) reasons why mathematics should be taught to all the youth of this country.

(10 Marks)

(b) Identify and discuss five (5) factors which you could consider when developing a quality scheme of work.

(10 Marks)

QUESTION 3

(a) (i) What is supervised practice?

(1

Marks)

(ii) Explain the advantages of using supervised practice in the teaching and learning of mathematics.

(3 Marks)

(b) Examine the characteristics of instructional objective

(10 Marks)

(c) Objectives may be classified according to the primary learning outcomes that take place, typically into domains or categories. Explain the three categories. (7 Marks)

QUESTION FOUR

(20

Marks)

(a) Explain the rationale for the introduction of calculator use at secondary school level of education in Kenya. (2 Marks)

- (b) Discuss the two broad categories of methods of instruction in mathematics. (**8 Marks**)
- (c) Suggested areas that may require a practical approach in secondary school mathematics. (4 Marks)
- (d) Discuss the use of mathematics textbook in a mathematics classroom. **(6 Marks)**

QUESTION FIVE

(20)

- (a) What challenges do students face when using calculators in solving mathematical problems? (3 Marks)
- (b) i) What is "Textbook Teaching"? (2 Marks)
 - ii) Critically examine five (5) effects of "textbook teaching".

(5 Marks)

(c) Examine any five (5) emerging issues in mathematics education (10 Marks)

END