

MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS 2019/2020 ACADEMIC YEAR THIRD YEAR FIRST SEMESTER

SCHOOL OF EDUCATION BACHELOR OF EDUCATION

COURSE CODE: ECI 3116

COURSE TITLE: METHODS OF TEACHING

MATHEMATICS

DATE: 13TH **DECEMBER, 2019** TIME: 1100 - 1300HRS

INSTRUCTIONS TO CANDIDATES

Answer Question ONE and any other TWO questions

Question one (30mks)

- 1) a) State four reasons why a lesson plan is essential in mathematics (4mks)
 - b) Outline any four reasons that lead to the abolition of "Traditional mathematics Curriculum" in Kenya. (8mks)
 - c) Explain the three stages in the teaching of mathematical concepts according to Bruner. (6mks)
 - d) State six behavior's used by teachers in varying the stimulus in a mathematical lesson. (6mks)
 - e) Give six reasons why we teach maths. (6mks)

Question TWO (20 mks)

- a) (i) Explain Gagne's contribution in the teaching and learning of mathematics (6mks)
- (ii) State two advantages of his contribution in the teaching of mathematics (4mks)
- (iii) Describe three main components of instructions objective giving one example in each case (10mks)

Question THREE

3 Compare and contrast the work of two psychologists Jean Piaget and Jerome Bruner as they apply to teaching and learning of mathematics. (20mks)

Question FOUR

4 The Kenya mathematics curriculum has been changed several times since independence. Discuss any two curriculums and why they were abolished. (20mks)

Question FIVE

- 5 a) Differentiate between mathematics and mathematics education. (4mks)
 - b) Prepare a one week scheme of work for form 1 mathematics on the topic "linear equations" Sub topics; Simultaneous equations in one unknown simultaneous linear equations and formulation and solution of linear equations in one and two unknown from given real life situations. (8mks)
 - c) Prepare a lesson plan for the sub topic "Simultaneous equations" include all aspects of an effective lesson plan. (8mks)