

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF EDUCATION
IN EARLY CHILDHOOD EDUCATION AND DEVELOPMENT**

ECDE 133: MATHEMATICS FOR ECDE

STREAMS:

TIME: 2 HOURS

DAY/DATE: TUESDAY 23/03/2021

8.30 A.M – 10.30 A.M

INSTRUCTIONS:

Answer question one and any other two questions

Do not write on the question paper

1. (a) Distinguish the following terms. [6 marks]
 - (i) Numbers
 - (ii) Numerals
 - (iii) Number value
- (b) Identify three characteristics denoting the nature of mathematics. [6 marks]
- (c) Describe three categories of number classification relevant for young children. [6 marks]
- (d) Outline six objectives of teaching mathematics in pre-school. [6 marks]
- (e) Using illustrations, describe three computation skills. [6 marks]
2. (a) Describe five ways how parents can assist children develop positive attitudes towards mathematics. [10 marks]
- (b) Explain with examples the implications of piaget's theory of cognitive development to the learning and teaching of mathematics. [10 marks]

3 (a) Justify why geometry should be included in pre-school mathematics activities. [10 marks]

(b) Discuss five factors that hinder acquisition of mathematical skills among children. [10 marks]

4. (a) Analyze six factors to consider when preparing mathematics activities for children. [12 marks]

(b) Describe four main principles guiding the counting process for young children. [8 marks]
