

CHUKA



UNIVERSITY

SUPPLEMENTARY/ SPECIAL EXAMINATIONS

**EXAMINATION FOR THE AWARD OF
DIPLOMA IN EARLY CHILDHOOD DEVELOPMENT EDUCATION**

ECDE 0235: MATHEMATICS ACTIVITIES

STREAMS: DIP (ECDE)

TIME: 2 HOURS

DAY/DATE: FRIDAY 04/12/2020

2.30 PM – 4.30 PM

INSTRUCTIONS:

- **Answer Question One and any other Two Questions.**
 - **Do not write on this question paper.**
1. (a) Define the following terms;
 - i. Numerals
 - ii. Rote counting
 - iii. Mathematics
 - iv. Classification
 - v. Competence. (5marks)
 - (b) Outline seven core competences in the competence -based curriculum. (7marks)
 - (c) Justify the role of planning for mathematics activities in ECDE. (5marks)
 - (d) State the role of an ECDE teacher in teaching and learning of mathematics activities. (5marks)
 - (e) Describe Brunner's theory in teaching ECDE mathematics. (8marks)
2. (a) Using relevant examples, explain five principles of teaching mathematics in ECDE. (10marks)
 - (b) Discuss the relevance of mathematics in the lives of children. (10marks)

3. (a) Using the strand and sub-strand of your choice in mathematics activities for PP11, prepare the following documents;
- i. Schemes of work for one week
 - ii. Lesson plan for one lesson. (14marks)
- (b) Outline six considerations to make when selecting materials for use during mathematics activities in ECDE. (6marks)
4. (a) Describe Piaget's theory and its implication in the teaching and learning of mathematics in ECDE. (14marks)
- (b) Explain the nature and scope of mathematics for ECDE. (6marks)
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