CHUKA   **UNIVERSITY**

UNIVERSITY EXAMINATIONS
IGEMBE

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF EDUCATION (ECDE)

ECDE 133: MATHEMATICS ACTIVITIES FOR ECDE

STREAMS:BED(ECDE) PART TIME   **TIME: 2 HOURS**

DAY/DATE: WEDNESDAY 4/12/2019   **2.30 P.M – 4.30 P.M**

INSTRUCTIONS
Answer question one in section A is compulsory
Answer and any other two questions in section B
Do not write on the question paper

1.   Explain the meaning of the following terms;

(a) (i) Assimilation   [2 marks]

(ii) Accommodation   [2 marks]

(b) (i) State and explain four basic mathematics operations.   [4 marks]

(ii) Differentiate between mathematical operation and mathematical expression.

[4 marks]

(c) Explain the three learning experiences through which children acquire mathematical skills and concepts.   [6 marks]

(d) According to Brunner, young children undergo three stages of development. Cite and explain these stages.   [6 marks]

(e) Briefly explain at least six mathematical activities that can be used by an ECD professional to integrate skills in all mathematical key components in order to build a solid foundation for mathematics.   [6 marks]

SECTION B

2.   (a) Discuss briefly the nature of mathematics for early childhood.   [10 marks]

     (b) Explain the significance of mathematics in life.   [10marks]

3.   (a) Discuss the implication of piaget theory in regard to the stages of cognitive

     development in ECDE mathematics instructions.   [10 marks]

     (b)(i) Explain at least five goals of mathematical instructions in ECDE.   [5 marks]

     (ii) Discuss major achievements a preschool learner makes at intuitive thought stage (4-7

     years).   [5 marks]

4.   (a) State and explain three groups of classification giving at least three examples of

     activities involved in each case.   [10 marks]

     (b) Discuss computational activities that can be introduced at preschool level in addition

     and subtraction.   [10 marks]