KISII UNIVERSITY

**SECOND YEAR EXAMINATION FOR THE AWARD OF THE
DEGREE OF BACHELOR OF EDUCATION (ECDE)
FIRST SEMESTER, 2022/2023
(SEPTEMBER-DECEMBER, 2022)**

ECDE 214: MATHEMATICS FOR ECDE

STREAM: Y2 S1   **TIME: 2 HOURS**

DAY: FRIDAY, 12:00 – 2:00 P.M.   **DATE: 23/12/2022**

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INSTRUCTIONS
1. *Do not write anything on this question paper.*
2. *Answer Question ONE [Compulsory] and any other TWO Questions.*

QUESTION ONE

    a. Briefly explain the following term.
  i. Mathematics.   (2marks)
  ii. Numerals.   (2marks)
 iii. Capacity.   (2marks)
    b. Analyze three contributions of Jerome Brunner to the teaching of integrated mathematics. (6marks).
    c. Outline the nature and scope of pre-primary mathematics. (6marks).
    d. Describe what a teacher should do when preparing mathematics activities for pre-primary learners. (5marks).
    e. Briefly discuss five objectives of teaching mathematics activities to pre-primary learners. (5marks).
    f. Explain two roles of a teacher in a mathematics lesson. (2marks

QUESTION TWO.
    a. Critically analyze five importance of referring to theories when teaching mathematics. (15marks

b. Compare and contrast Piaget's and Bruner's theory in relation to the teaching and learning mathematical concepts and skills. (15marks

Question three.
a. With clear examples elaborate categories of activities included in classification. (15marks).

b. Compose five ways in which the Kenyan government can help teachers to overcome challenges of teaching mathematics. (15marks)

Question four
a. With illustrations analyze five activities that children can do when teaching number work. (15marks).
b. Discuss five factors a teacher should consider when choosing teaching methods.

Question five
Describe how a teacher can use the following activities to enhance acquisition of mathematical skills and concepts:
i). Emptying and filling. (6 marks).
ii). Sorting and grouping. (6 marks)
iii). Matching and pairing. (6marks)
iv). Ordering and sequencing. (6 marks)
v). Modelling. (6 marks)