



**MASENO UNIVERSITY**  
**UNIVERSITY EXAMINATIONS 2016/2017**

**SECOND YEAR FIRST SEMESTER EXAMINATION FOR DEGREE  
OF BACHELOR OF EDUCATION IN EARLY CHILDHOOD  
EDUCATION WITH INFORMATION TECHNOLOGY**

**MAIN CAMPUS**

**ECE 201: MATHEMATICS ACTIVITIES**

Date: 8<sup>th</sup> December 2016

Time: 12.00 - 3.00pm

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**INSTRUCTIONS:**

- Answer Question ONE and any other THREE.



### QUESTION ONE

a Define the following terms as used in mathematics :

i Number. (2 marks)

ii Mathematics operations. (2 marks)

iii Volume. (2 marks)

b Discuss any **five** objectives of teaching mathematics to pre school children (10 marks)

c Outline any **four** branches of mathematics. (4 marks)

d Discuss any **five** ways on how you can help children to understand the concept of time during mathematics activities. (5 marks)

### QUESTION TWO

a Describe any **five** activities for rote counting (5 marks)

b Discuss any **five** factors to be considered when providing mathematical experiences to young children. (10 marks)

### QUESTION THREE

Discuss with relevant examples the principles of teaching mathematics.

(15 marks)

#### QUESTION FOUR

- a Explain any **four** benefits of mathematics in life. (8 marks)
- b Describe any **seven** activities that a teacher would involve the pre school children in in order to acquire number recognition. (7 marks)

#### QUESTION FIVE

- a Discuss any **five** levels of nature of mathematics in ECDE (5 marks)
- b Explain any **five** ways how you can help a child to understand the concept of division in mathematics activities. (10 marks)

#### QUESTION SIX

- Discuss any **five** implications of Piaget and Brunner's Theory on the teaching and learning of mathematics. (15 marks)