



## **SCHOOL OF EDUCATION**

**AUGUST - DECEMBER 2019 END OF SEMESTER EXAMINATION  
HOLIDAY-BASED PROGRAMME**

**EXAMINATION FOR BACHELOR OF EDUCATION (ECDE)  
REC 203: MATHEMATICS ACTIVITIES**

**INSTRUCTOR: LUCY NGODE**

**DATE:** \_\_\_\_\_

**TIME: 2 HOURS**

### **GENERAL INSTRUCTIONS:**

**Students are NOT permitted to write on the examination paper during reading time.**

**This is a closed book examination. Text books/reference books/notes are not permitted.**

### **SPECIAL INSTRUCTIONS:**

- 1. Write your ADMISSION NUMBER clearly on the cover of the answer booklet(s).**
- 2. Answer Question ONE and ANY OTHER TWO questions.**
- 3. Questions in all sections should be answered in answer booklet(s).**
- 4. Marks allocated to each question are shown at the end of the question.**
- 5. PLEASE start the answer to EACH question on a NEW PAGE.**
- 6. Indicate the number of the questions answered on the cover of the answer booklet(s) in the order you answered them.**
- 7. Write your answers in paragraph form unless stated otherwise.**
- 8. Keep your phone(s) SWITCHED OFF at the front of the examination room.**
- 9. Keep ALL bags and caps at the front of the examination room and do not refer to any unauthorized material before or during the course of the examination.**
- 10. You are only allowed to leave the examination room 30 minutes to the end of the Examination.**

**QUESTION ONE: COMPULSORY (20 MARKS)**

- a) Explain the mathematical experience that children have before they join Pre School. (4 marks)
- b) Justify the statement that “children learn mathematics best through using concrete objects. (4 marks)
- c) Examine FOUR factors to consider when preparing mathematics activities for young children. (12 marks)

**QUESTION TWO**

Examine the implications of Piaget’s theory of cognitive development to the learning and teaching of mathematics activities. Cite relevant examples. (20 marks)

**QUESTION THREE**

- a) Explain FOUR principles of teaching mathematics in ECDE. (8 marks)
- b) Analyze factors that hinder practice and review of mathematics activities among children. (12 marks)

**QUESTION FOUR**

You have been invited to talk to ECDE teachers on the effective techniques of teaching mathematics. Examine FIVE points you would include in your speech. (20 marks)

**QUESTION FIVE**

- a) Distinguish between formal and informal assessment. (4 marks)
- b) Explain 3 reasons why observation is the most widely used method of evaluation in preschool learning environment. (6 marks)
- c) Analyze how an ECDE teacher can use sorting and grouping activities to enhance acquisition of mathematical skills and concepts. (10 marks)