



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF EDUCATION, HUMANITIES AND SOCIAL SCIENCES

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION
IN EARLY CHILDHOOD EDUCATION**

2ND YEAR 2ND SEMESTER 2024/2025 ACADEMIC YEAR

COURSE CODE: EEC 3221

COURSE TITLE: MATHEMATICS ACTIVITIES IN EARLY CHILDHOOD EDUCATION

EXAM VENUE: NURSERY

DATE: 14/4/25

EXAM SESSION: 9-11.00 AM

TIME: 2 HOURS

INSTRUCTIONS:

- 1. Answer Question ONE (COMPULSORY) and ANY other 2 question**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

QUESTION ONE

1 (a) Define the following concepts as used in mathematics activities (5 marks)

- i. Cultural considerations
- ii. Anecdotal records
- iii. Peer assessments
- iv. Developmentally Appropriate Goals
- v. Symmetry

- b) State any five theories of teaching mathematics in Early Childhood (5 Marks)
- c) Highlight nine areas within the scope of mathematics in ECE (9 marks)
- d) List three activities you will utilize when tackling patterns and relationship (3 Mks)
- e) State three strategies for teaching mathematics in Early Childhood Education (3 marks)
- f) Explain how you can apply any two theories when teaching mathematics in ECE (2Mks)
- g) Identify three types of evaluation you will apply in mathematics in ECE (3 Marks)

QUESTION TWO

- a) Discuss any five strategies for effective evaluation in mathematic activities (10 Marks)
- b) Elaborate any five issues in teaching mathematics in ECE (10 Marks)

QUESTION THREE

- a) Discuss any five considerations for institutional planning for teaching mathematics in ECE (10 Marks)
- b) Explain any five components of ECE mathematics curriculum in Kenya (10 Marks)

(10 Marks)

QUESTION FOUR

- a) Explain any five strategies in teaching mathematics in Early Childhood Education (10 Marks)
- b) Discuss any five skills you will instill in children while teaching mathematics in ECE (10 Marks)

QUESTION FIVE

- a) Elaborate any five concepts that are essential in Early Childhood mathematics (10 Marks)
- b) Discuss any five objectives of teaching mathematics in Early Childhood Education (10 Marks)