



**KIBABII UNIVERSITY**

**2022/2023 ACADEMIC YEAR**

**2<sup>ND</sup> YEAR 2<sup>ND</sup> SEMESTER**

**SPECIAL/SUPPLEMENTARY EXAM**

**FOR THE DEGREE OF BACHELOR OF EDUCATION ARTS**

**COURSE CODE: ECD 221**

**COURSE TITLE: SCIENCE AND MATHEMATICS FOR ECDE.**

**DATE: 9/8/2023**

**TIME: 11.00AM-1.00PM**

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**INSTRUCTIONS TO CANDIDATES**

Answer Question One and Any Other TWO (2) Questions

Define.

- i. Science. (2 marks)
  - ii. Skill (2 marks)
  - iii. Numerals (2 marks)
  - iv. Volume. (2 marks)
  - v. Rote count. (2 marks)
- b. Discuss factors to consider when providing science and mathematical experience to young children (10marks)
- c. Identify five objectives of teaching Mathematics in ECDE. (5 marks)
- d. State five importance of learning science in early childhood education (5 marks)
2. a. An Educator Jean Piaget's theory of cognitive development, states that there are four stages of mental development. Identify them and explain each. (10 marks)
- b. State and explain four principles of counting (10 marks)
3. a. Identify seven scientific skills that can help learners in ECDE learn. (10 marks) b. With the help of examples identify the six importance of teaching mathematics and science in ECDE class. (10 marks)
4. a. Give seven factors to consider when designing and developing teaching and learning material (10marks)
- b. What are the seven characteristics of young children that make science a natural activity for them. (10 marks)
5. Develop and clearly describe five distinct activities that you can use to introduce the concept to a four year old learner. (20marks)