



**KIBABII UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**2020/2021 ACADEMIC YEAR**

**SECOND YEAR FIRST SEMESTER**

**SUPPLEMENTARY / SPECIAL EXAMINATION**

**FOR THE DEGREE OF EDUCATION IN EARLY CHILDHOOD**

**COURSE CODE: ECD 221**

**COURSE TITLE: SCIENCE AND MATHEMATICS FOR EARLY CHILDHOOD  
EDUCATION**

**DATE: 11-01-2022**

**TIME: 8.00-10.00AM**

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**INSTRUCTIONS TO CANDIDATES**

Answer Question One and Any other TWO (2) Questions

TIME: 2 Hours

This Paper Consists of 2 Printed Pages. Please Turn Over.





### Question One

- e) Explain the importance of science and mathematics in life (5marks)
- f) Discuss Piagets theory of cognitive development with respect to Early Childhood development (10 marks)
- g) Explain any five objectives of teaching science and mathematics in Early Childhood Education (5 marks)
- c) Develop five activities for introducing number writing to pre-school children (10marks)
- d) Explain the implication of piaget's Theory for teaching Science and mathematics in Early Childhood Education (5marks)

### Question Two

- c) Discuss five points to consider when developing and buying teaching and learning materials for Science and Mathematics activities. (10marks)
- d) Explain five importance of exploration in young children (10marks)

### Question Three

- c) Explain five mathematical activities that a teacher would use to teach the concept of temperature in pre-school children (10marks)
- d) Describe the skills and concepts that children need to acquire through science and mathematics activities in pre-school (10marks)

### Question Four

- c) Explain factors that a pre-school teacher should take into consideration when providing mathematical experiences to young children (10marks)
- d) Citing relevant examples discuss characteristics within the children that make science learning a natural activity. (10marks)

### Question five

- c) Describe any five activities that promote development of science skills. (10marks)
- d) Discuss five methods and approaches of teaching science activities in Early Childhood (10marks)