

(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND **TECHNOLOGY (MMUST)**

UNIVERSITY EXAMINATIONS 2022/2023 ACADEMIC YEAR

SECOND YEAR SECOND SEMESTER EXAMINATIONS MAIN EXAM

FOR THE BACHELOR OF EDUCATION DEGREE (EARLY CHILDHOOD EDUCATION)

COURSE CODE:

ECD 204

COURSE TITLE: SCIENCE AND MATHEMATICS IN ECDE

DATE: 27TH APRIL 2023

TIME: 12:00 - 2:00 PM

INSTRUCTIONS TO CANDIDATES

Answer Question One and any other Two questions

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

SECTION ONE 1. a) Explain the importance of technology in teaching young learners science and mathematics (5 marks) b) Briefly explain the four types of inquiry-based learning (IBL) in young children. (4 marks) c) Explain five objectives of teaching science and mathematics in ECD centers (5 marks) d) State Six characteristics of a good science and mathematics teacher (6 marks) e) Explain Five qualities of a science and mathematics activities for young children (5 marks) f) Describe Five methods and approaches used in teaching science and mathematics in ECD centers (5 marks) **SECTION TWO** 2. a) Science is an appropriate activity for young children. Discuss (10 marks)

b) Describe the characteristics of chil- centered learning approach

(10 marks)

- 3. a) State and explain Six benefits of inquiry based learning (IBL) in science and Mathematics. (12 marks)
 - b) Describe any **Five** factors considered while choosing appropriate t/l resources for young children (8 marks
- 4. a) Explain Five roles of science and mathematics in child growth and Development (15 marks)
 - b) List Five skills of science and mathematics for young children

(5 marks)

- 5.a) Briefly explain what is meant by implementation of science and mathematics in preschool (4 marks)
- b) Explain formal and informal science and mathematics experiences for young children

(16 marks)