(University of Choice)

MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)
UNIVERSITY EXAMINATIONS
THIRD YEAR FIRST SEMESTER 2019/2020 ACADEMIC YEAR
FOR THE DEGREE OF
BACHELOR OF EDUCATION
EARLY CHILDHOOD EDUCATION

COURSE CODE: ECD 303 (regular exam)
COURSE TITLE: METHODS OF TEACHING SCIENCE AND MATHEMATICS IN ECD

DATE: 24.01.2020   **TIME: 12.00-2.00PM**

INSTRUCTIONS TO CANDIDATES

Answer QUESTION ONE and any other TWO QUESTIONS

TIME: 2 HOURS

MMUST observes ZERO tolerance to examination cheating

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QUESTION ONE

a) By using appropriate examples define the following terms

      i.   Science (2mrks)

     ii.   Experiment (2mrks)

b) State four skills that a child can acquire through learning of science and mathematics (4mrks)

c) Describe five roles of play in the teaching of mathematics and science in ECD (5mrks)

d) Describe four methods you can use as an early child hood teacher to teach science and mathematics (4mrks)

e) Describe five challenges early childhood children go through when learning mathematics (5mrks)

f) State four activities an ECD teacher can employ to teach measurements in mathematics (4mrks)

g) State four skills ECD children can acquire during the learning of science and mathematics (4mrks)

Question two

a) Describe five objectives of teaching science and mathematics in ECD (10mrks)

b) Explain five characteristics of science and mathematics activities for young children (10marks)

Question three

a) With relevant examples discuss characteristics that make science a natural activity (10mrks)

b) Describe Piaget sensory stages of development in relation to science and mathematics (10mrks)

Question four

a) Describe five activities for introducing number writing to preschool children (10mrks)

b) Describe how you can use inquiry based method to teach early childhood science (10mrks)

Question five

a) Describe how a teacher can use natural environment to teach science and mathematics in ECD   (10mrks)

b) Describe five intervention measures for difficulties children encounter in the learning of science and mathematics (10mrks)