MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER EXAMINATIONS

SPECIAL/SUPPLIMENTARY EXAM

FOR

THE DIPLOMA IN EDUCATION

(EARLY CHILDHOOD EDUCTAION)

COURSE CODE: EYE 021

COURSE TITLE: SCIENCE AND MATHEMATICS CURRICULUM

DATE: 25TH JULY 2022   **TIME: 11:00 AM – 1:00 PM**

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (1) AND ANY OTHER TWO (2) QUESTIONS

TIME: 2 HOURS

1) a) Define the following terms
      i) Sorting (2 marks)
      ii) Grouping (2 marks)
      iii) Rote counting (2 marks)
      iv) Science (2 marks)
      v) Sequencing (2 marks)
   b) Outline five (5) activities when teaching number sequencing (5 marks)
   c) State five (5) factors to consider when selecting materials for teaching science and mathematics activities. (5 marks)
   d) State and explain methods used in approaching filling and emptying in science activities. (10 marks)

2) a) Describe five (5) characteristics of an effective science teacher. (10 marks)
   b) Explain methods a science teacher can use to arouse and sustain the children's interest in learning science. (10 marks)

3) a) State and explain the importance of learning mathematics and science in an ECDE class. (10 marks)
   b) Discuss methods and activities of teaching science and mathematics skills in an ECDE class. (10 marks)

4) a) Illustrate five (5) objectives of matching and pairing activities in young children. (10 marks)
   b) With examples, explain activities a teacher can carry out in class on matching and pairing. (10 marks)

5) a) With examples, explain activities that arouse the development of science skills in children. (10 marks)
   b) Explain characteristics of science and mathematics activities skills in young children. (10 marks)