



KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR
MAIN EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF EDUCATION EARLY CHILDHOOD

COURSE CODE: ECD 314

**COURSE TITLE: METHODS OF TEACHING SCIENCE AND MATHEMATICS IN
EARLY CHILDHOOD EDUCATION**

DATE: 27/05/2022

TIME: 2-4PM

INSTRUCTIONS TO CANDIDATES

Answer question one and any other two (2) questions

TIME: 2Hours

This paper consists of 2 printed pages please turn over ►

SECTION A -Compulsory

Question One

(30marks)

- a) Explain any five general outcomes for teaching mathematical activities to young children (5marks)
- b) Substantiate the rationale of planning for science and mathematical activities (5marks)
- c) Describe any five concepts learners learn in mathematical activities (5marks)
- d) Is mathematics a science or an art? (5marks)
- e) Discuss how drug addiction affect the learning of science and mathematical activities of preschoolers (5marks?)
- f) Illustrate five weather symbols learned by learners during Science lessons (5marks)

Question Two

(20marks)

- a) Analyze the objectives of teaching environmental science activities to young children (10marks)
- b) Using relevant examples, explain the **two** categories of teaching methods to young scientists (10marks)

Question Three

(20marks)

- a) Describe how one should teach animals to learners (10marks)
- b) Explain the features of a good teacher of science (10marks)

Question Four

(20marks)

- a) Discuss steps taken in carrying out a scientific experiment by the class (16marks)
- b) Describe 4 sub-strands that are taught under the universe strand at level (4marks)

Question Five

(20marks)

- a) Explain how the following simple machines are used in Science and Mathematical activities .
 - i) Beam balance (5marks)
 - ii) Inclining plane (5marks)
- b) Describe any five experiences that enhance pre-school concepts and skills in science and mathematics (10marks).