



KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR
MAIN EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF EDUCATION EARLY CHILDHOOD

COURSE CODE: ECD 303

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

DATE: 25/02/2022

TIME: 2:00 – 4:00 PM

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 (30marks)-compulsory

Question One

- a) State 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) List any five concepts EYE learners learn in mathematical activities (5marks)
- d) Is mathematics a science or an art? (5marks)
- e) How does drug addiction affect the learning of science and mathematical activities of preschoolers (5marks?)
- f) Illustrate five weather symbols learned by EYE learners during Science lessons (5marks)

Question two

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

Question three

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

Question four

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

Question five

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