



MACHAKOS UNIVERSITY

University Examinations 2019/2020 Academic Year

SCHOOL OF EDUCATION

DEPARTMENT OF EARLY CHILDHOOD EDUCATION

REGULAR / SCHOOL BASED EXAMINATION FOR

BACHELOR OF EDUCATION (EARLY CHILDHOOD EDUCATION)

ECE: 206: MATHEMATICS AND SCIENCE FOR ECE

DATE: 11/12/2019

TIME: 2.00-4.00 PM

INSTRUCTIONS: answer question one and any other two questions

QUESTION ONE (30 MARKS)

- a) Explain how you would introduce the pre-number activities of *grouping, Sorting and classifying to a pre-primary 2 class*. (INCLUDE Strategies and Resources). (12 marks)
- b) Explain *four steps* in the Demonstration of good health practices in caring for the teeth. (12 marks)
- c) Discuss any **four principles of** teaching Mathematics and Science in ECE. (8 marks)

QUESTION TWO (20 MARKS)

The Science process-skills of Observing, Classifying, Measuring, Investigating and Communicating are critical in ECE. Describe how you would plan for these with reference to a named practical activity in ECE.

QUESTION THREE (20 MARKS)

Discuss how each of the following documents assist the teacher in planning for Teaching.

- a) The content Syllabus.
- b) The Schemes of Work.

QUESTION FOUR (20 MARKS)

Explain the activities you would use to develop **ONE** of the following:

- a) Sorting and ranking.
- b) Classifying objects in the immediate environment.

QUESTION FIVE (20 MARKS)

Write briefly about the importance of the following components of Schemes of work:

- a) Specific learning outcome. (3 marks)
- b) Key inquiry question. (3 marks)
- c) Learning experience. (5 marks)
- d) Learning resources. (5 marks)
- e) Assessment. (4 marks)