



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

INSTITUTION BASED PROGRAMME (DECEMBER SESSION)

EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION

(EARLY CHILDHOOD EDUCATION)

ECE 206: SCIENCE AND MATHEMATICS FOR EARLY CHILDHOOD EDUCATION

DATE: WEDNESDAY, 2ND MAY 2012

TIME: 2.00 P.M. – 4.00 P.M.

SECTION A: (30 marks)

Answer all the questions in this section.

1. Differentiate between science skills and process skills. (6 marks)
2. Describe **three** activities you would use to teach preschool children the characteristics of leaves. (6 marks)
3. What is science? How would you distinguish science from other subjects. (6 marks)
4. Describe **three** activities that ECD teachers can use to teach magnetism to young children. (6 marks)
5. Explain **three** activities you would use to teach number value to young children. (6 marks)

SECTION B: (40 marks)

Answer Any two questions in this section.

6. Discuss the possible theories and science explanations children are likely to construct from their observations during a field visit to a nearby volcanic mountain. Explain two misconceptions children are likely to form about rocks and mountains. (20 marks)

7. Discuss science inquiry activities suitable for teaching the concept of weather and climate. Describe one assessment strategy you would employ at the start of the activity. (20 marks)
8. How would you help preschool children differentiate between volume and area? Discuss five activities you would perform with children to understand these concepts. (20 marks)
9. Discuss three examples, of characteristics you would consider critical for introducing a Science Lesson. Describe the guidelines of a Science Lesson that you would suggest to Science teachers. (20 marks)
