



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2009/2010
INSTITUTIONAL BASED PROGRAMME

EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION
(EARLY CHILDHOOD EDUCATION)

ECE 304: TEACHING OF SCIENCE & MATHEMATICS IN ECE

DATE: WEDNESDAY, 28TH APRIL 2010

TIME: 2.00 P.M. - 4.00 P.M.

INSTRUCTIONS:

This paper consists of Two Sections A & B. Attempt ALL questions in Section A and any Two from Section B.

SECTION A (30 MARKS): SHORT ANSWER QUESTIONS.

1. List six skills children acquire when they do Science and Mathematics activities.
(6 marks)
2. Explain three Mathematics activities you would involve 3 year old children in.
(6 marks)
3.
 - a) Write three advantages of nature walks. (3 marks)
 - b) Explain briefly six factors to consider when planning a field trip with pre-school children. (3 marks)
4.
 - a) What are concepts. (1 mark)
 - b) Give two different fashions of definitions of Science. (5 marks)
5.
 - a) Identify the goals of Science. (3 marks)
 - b) State any three principles of Science. (3 marks)

SECTION B (40 MARKS): LONG ANSWER QUESTIONS

6. Discuss giving appropriate examples the nature of children that enable them learn Science with ease. (20 marks)
7. a) What is Reversibility? (5 marks)
b) Giving clear illustrations explain Piaget's theory of cognitive development. (15 marks)
8. Exploration and discovery is the best way in which children learn Science concepts and skills. Giving relevant examples discuss this statement. (20 marks)
9. Compare Science as a process and Science as a product. Discuss the characteristics of the learning environment where either of them is used. (20 marks)
