

**CHUKA**



**UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF EDUCATION  
IN ECDE**

**ECDE 238: SCIENCE AND ENVIRONMENTAL EDUCATION FOR ECDE**

**STREAMS: B.ED ECDE (PART TIME/SB)**

**TIME: 2 HOURS**

**DAY/DATE: TUESDAY 06/08/2019**

**2.30 P.M. – 4.30 P.M.**

**INSTRUCTIONS:**

- **Answer question ONE and any other TWO questions**

1. (a) Describe the nature and scope of science activities in ECDE. (10 marks)

(b) Highlight any six factors which a science teacher considers when selecting a recording method in science. (6 marks)

(c) Explain five methods of keeping records in science activities in ECDE. (10 marks)

(d) State types of questions that are asked to ECDE children during science activity lesson. (4 marks)
2. (a) What is African indigenous science. (2 marks)

(b) Discuss any five characteristics of African indigenous science. (10 marks)

(c) Discuss four African scientific beliefs that can be introduced to children at an ECDE level. (8 marks)
3. (a) Explain activities an ECDE teacher can use to facilitate the following presentations according to Jerome Brunner

  - (i) Enactive presentation (3 marks)

- (ii) Iconic presentation (3 marks)
  - (iii) Symbolic presentation (3 marks)
  
  - (b) Explain the scientific skills that can be taught in ECDE using the five senses. (5 marks)
  
  - (c) Give three states of matter. In each case give the teaching material that can be used to explain the concept to the child. (6 marks)
4. Discuss the impact of the knowledge in functioning of plants and animals on the development of scientific skills in ECDE. (20 marks)
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