

**CHUKA**



**UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

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

**ECDE 337: SCIENCE AND ENVIRONMENTAL EDUCATION FOR ECDE**

**STREAMS: B.ED (ECDE)**

**TIME: 2 HOURS**

**DAY/DATE: WEDNESDAY 08/04/2020**

**2.30 P.M. – 4.30 P.M.**

**INSTRUCTIONS:**

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

1. (a) Define the following: (3 marks)

  - (i) Science
  - (ii) Philosophy
  - (iii) Philosophy of science

(b) Citing specific examples, briefly discuss the relationship between philosophical schools of thought as espoused by early childhood educators and the teaching and learning of science. (9 marks)

(c) Explain five reasons why science education is important to children at the basic education subsector including ECDE level. (10 marks)

(d) Discuss the relationship between sensory experiences and early childhood education. (8 marks)
2. Describe ten areas of success in indigenous African Science and technology and illustrate their relevance to the teaching of science to young children. (20 marks)

3. Nature plays a significant role in developing scientific skills in young children. Discuss the relevance of this statement to the ECDE science teacher. (20 marks)
  4. Piaget divided the human learning cycle into 4 stages.
    - (a) Describe each of the four stages of human learning. (12 marks)
    - (b) Isolate the stage of interest to the ECDE teacher and discuss strategies that can be best used to teach science education. (8 marks)
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