CHUKA UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF

EDCI 333: PHYSICS TEACHING METHODS

STREAMS: **TIME: 2 HOURS**

DAY/DATE: THURSDAY 12/04/2018 **2.30 P.M. – 4.30 P.M.**

INSTRUCTIONS:

- **This paper consists of five questions.**
- **Answer question ONE and any other THREE questions.**

Q1. (a) Define the following terms as used in the teaching of physics.

(i) Scientific knowledge
(ii) Scientific attitude
(iii) Scientific interest
(iv) Laboratory skill
(v) Hypothesis
(vi) Career area
(vii) Inductive teaching
(viii) An outcome
(ix) Experimentation
(x) Theme (10 marks)

(b) Explain five objectives of teaching physics in secondary schools in Kenya. Use examples. (10 marks)

(c) Discuss the need for reviewing the physics syllabus regularly. (5 marks)

Q2. Select a topic within the physics syllabus at secondary school level.

(a) Prepare a test specification grid for setting an end of topic test worth 30 marks. (5 marks)

(b) Prepare the test items. (5 marks)

(c) For each item suggest the appropriate response and award the scores. (5 marks)

Q3. Discuss the challenges faced by the following stakeholders during implementation of the physics syllabus.

(a) Teachers (8 marks)

(b) Students (4 marks)

(c) Kenya National Examination Council (KNEC) (3 marks)

Q4. Trace the changes that have taken place on the ways of delivering physics content in Kenya since independence. Give reasons for the changes indicated. (15 marks)

Q5. Select one topic from the form two syllabus. Select an experimental concept on a lesson plan show how to approach the experiment inductively. (15 marks)
