



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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MAIN EXAMINATION

JANUARY – APRIL 2019 TRIMESTER

FACULTY OF EDUCATION

DEPARTMENT OF UNDERGRADUATE STUDIES IN EDUCATION

REGULAR PROGRAMME

ED 315: SUBJECT METHODS: PHYSICS

Date: APRIL 2019

Duration: 3 Hours

INSTRUCTIONS: Answer Question ONE and any other THREE Questions

- Q1. a) Explain five ways in which history of physics contributes to the teaching learning process **(5marks)**
- b) Highlight five ways in which a good Physics teacher can mentor low achieving students **(5Marks)**
- c) Explain the term 'improvisation' of instructional materials and the steps for improvisation **(5marks)**
- d) Using a form 1 topic of your choice, construct a 1 week schemes of work with but not limited to the following;
- a class demonstration
 - Practical work
 - Assignments which require comprehension/ knowledge /synthesis skills **(10marks)**
- Q2. Using a physics topic of your choice discuss with justifications how you would select materials, teaching methods and evaluation/testing. **(15marks)**
- Q3. a) Compare and contrast the two types of laboratory layouts. **(8Marks)**
- b) Highlight the roles of both a physics teacher and Laboratory technician during a physics practical lesson **(7marks)**

- Q4. Discuss the components of a good physics Examination Paper. Use a topic to set a CAT of 15 marks that highlights the above points. **(15Marks)**
- Q5. a) Explain how a physics teacher may use tests to improve the performance of learners **(9marks)**
- b) Discuss how a practical/ experiment, enhances conceptualization. Use a case topic of your choice to demonstrate this. **(6 marks)**
- Q6. a) 'Physics is a Science'. Discuss this statement for or against giving reasons. **(9marks)**
- b) Write a 40 minute lesson plan on any physics topic of your choice **(6marks)**

END