



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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MAIN EXAMINATION

SEPTEMBER –DECEMBER 2021

FACULTY OF EDUCATION

DEPARTMENT OF UNDERGRADUATE STUDIES

REGULAR PROGRAMME

ED 315: SUBJECT METHODS PHYSICS

Date: DECEMBER2021

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and any TWO Questions

- Q1
- a) List the main professional documents that a physics teacher needs in order to implement physics curriculum effectively. **(5 marks)**
 - b) State the two major approaches to teaching and their differences **(3 marks)**
 - c) State the common methods of teaching in
 - (i) discovery methods **(3 marks)**
 - (ii) expository methods **(3 marks)**
 - d) State the four points to be considered when writing the schemes of work **(4 marks)**
 - e) Explain why a scheme of work prepared for one group of learners may not be suitable for another group of learners. **(3 marks)**
 - f) Distinguish between the following terms
 - (i) Curriculum and syllabus **(2 marks)**
 - (ii) Assessment and Grading **(2 marks)**
 - g) From the topic “Particulate Nature of Matter and subtopic Brownian motion”
 - (i) Write three objectives each at different levels of learning

- (ii) Based on the objectives in g(i) above, construct two question items to evaluate the attainment of the objectives **(3 marks)**
(2 marks)
- Q2 a) Discuss the importance of using Physics syllabus **(8 marks)**
b) State and explain briefly the factors a Physics teacher needs to pay attention to in order to benefit from the syllabus **(12 marks)**
- Q3 a) Explain why Physics teachers should prepare schemes of work **(15 marks)**
b) Enumerate the steps to be followed when scheming **(5 marks)**
- Q4 a) List and explain five reasons why teachers need to prepare lessons plans for use when teaching Physics **(15 marks)**
b) Explain the purpose of the following components of the lesson plan **(5 marks)**
(i) Introduction
(ii) Lesson development
(iii) Conclusion
(iv) Learning activities
(v) Rubric
- Q5 a) Explain why teachers need to maintain records of work for the work Covered **(5 marks)**
b) State and explain the factors to be considered by a Physics teacher when selecting a suitable method of teaching approach **(15 marks)**

END