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University Examinations 2022/2023

FIRST YEAR SECOND SEMESTER EXAMINATION FOR POST GRADUATE DIPLOMA
IN EDUCATION

ECG 4156: METHODS OF TEACHING COMPUTER STUDIES

DATE: APRIL 2023

TIME: 2 HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE (30 MARKS)

- a) Explain the concept of stimulus variation components as applied in the teaching and learning processes (3 marks)
- b) Explain the major steps involving the processes of giving instructions to learners on a physics practical lesson (3 marks)
- c) Analyse the stages a teacher should follow when carrying out a demonstration during a physics lesson (8 marks)
- d) Assuming that you are presenting a physical lesson plan to teacher's service commission in search for employment. Prepare a form two physics practical lesson plan for 80 minutes on the subtopic *verifying Hooke's law*. The lesson commences at 10.00 am on Friday, 19th may 2023 (10 marks)

QUESTION TWO (12 MARKS)

- a) Discuss the qualities of a good physics assessment technique (7 marks)
- b) Compare and contrast micro-teaching and traditional methods of teaching as it happens nowadays (5 marks)

QUESTION THREE (12 MARKS)

- a) Discuss the seven major processes of generating scientific knowledge in physics by both teachers and learners (7 marks)
- b) Explain why motivating learners either during the lesson and away from the lesson is crucial for effective training and learning (5 marks)

QUESTION FOUR (12 MARKS)

- a) With relevant illustrations discuss the aims of teaching physics in secondary schools and colleges so as to help the government achieve sustainable development goals (8 marks)
- b) Evaluate four drivers of keeping a physics teacher relevant in giving up to date instruction to learners (4 marks)

QUESTION FIVE (12 MARKS)

- a) Discuss the new and innovative methods of teaching physics while employing ASEL-PDSI model (8 marks)
- b) Examine the terms 'fact' and 'concept' as applied in the teaching of physics (4 marks)