

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF POSTGRADUATE DIPLOMA IN EDUCATION

PGDE 754: METHODS OF TEACHING BIOLOGY

STREAMS: PGDE (L1BIII) SB

TIME: 2 HOURS

DAY/DATE: THURSDAY 12/04/2018

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS:

- **Answer question ONE (compulsory) and any other three.**
- **Do not write on the question paper.**

- Q1. (a) Give five reasons why it is important to state instructional objectives in behavioral terms. (5 marks)
- (b) Give five advantages of using Real objects as instructional resources in teaching biology. (5 marks)
- (c) Explain five factors the biology teacher should consider when preparing a scheme of work. (5 marks)
- Q2. (a) Justify the use of project work as an instructional strategy for secondary school biology. (7 marks)
- (b) Outline the historical development of the Kenyan biological curriculum. (8 marks)
- Q3. Explain how biology hazards can be minimized. (15 marks)
- Q4. (a) State four factors which influence curriculum change. (4 marks)
- (b) Justify the use of specimen in biology teaching in secondary schools. (4 marks)

(c) Explain seven objectives of teaching biology in secondary schools. (7 marks)

Q5. Imagine you are a biology teacher taking over a form one class.

Your predecessor was teaching the topic “Nutrition in Animals.” According to the scheme of work, you are supposed to teach the sub-topic “Definition and tooth structure of mammals” in a double lesson. (80 minutes)

The sub-topic has the following objectives:

The learner should be able to:

- (i) Draw and label a longitudinal section of a generalized tooth.
- (ii) Identify different types of teeth (incisors, canines, pre-molars and molars)
- (iii) Draw teeth arrangement in the sheep, dog, pig etc.
- (iv) Write down the dental formula of the sheep, dog and pig.

Prior to this lesson, the learners had covered definition, dental formula calculations and also discussed the general functions of the various teeth.

Question: Prepare a lesson plan which you would use to teach so that the stated objectives are achieved by the learner. (15 marks)
