



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2011/2012

INSTITUTION BASED PROGRAMME
DECEMBER SESSION EXAMINATION FOR THE DEGREE OF BACHELOR OF
EDUCATION

ECT 304: SUBJECT METHODS BIOLOGY

DATE: Thursday 3rd May, 2012

TIME: 4.30 p.m. – 6.30 p.m.

INSTRUCTIONS: *Answer Question ONE and any other TWO questions.*

1. a) Explain four purposes of teacher made tests and examinations in the teaching of biology. (4 marks)
- b) i) State two factors which are unique to biology and must be considered when preparing biology schemes of work. (4 marks)
- ii) Explain why you consider each of these factors important. (4 marks)
- c) i) What is the importance of museum material in a biology laboratory? (6 marks)
- ii) State FOUR strategies you would use to build up the museum materials in your school biology laboratory (8 marks)
- d) Explain how a demonstration lesson can be made more effective. (4 marks)
2. You have been requested by the District Quality Assurance and Standards Officer in the District where you are teaching to lead a two hour seminar to all biology teachers in the District on the importance of using ICT and Technology to improve the teaching and learning of biology in the District.
Write your seminar paper outlining: i) What ICT and technology in teaching of biology is; ii) how it can be used in teaching and learning of at least THREE NAMED biology topics and concepts; iii) How it will facilitate better teaching and learning outcome (20 marks)
3. a) Discuss the role and functions of standardized External/National biology examinations. (15 marks)
- b) What are their limitations? (5 marks)

4 Project approach of teaching biology is considered to be superior to all other approaches, yet very few teachers use this approach in Kenya secondary schools.

a) Discuss the reasons for this reluctance to use this approach among the teachers of biology in Kenya, (10 marks)

b) What suggestion would you make to turn around this state of affairs. (10 marks)

5 a) Explain the concept of improvisation and its importance in the the teaching of biology. (5 marks)

b) Discuss factors a biology teacher should consider when choosing suitable teaching approaches and methods of a given biology topic. (15 marks)
