



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF AGRICULTURAL AND FOOD SCIENCES**

**UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE
AGRICULTURAL EXTENSION EDUCATION**

SECOND YEAR FIRST SEMESTER 2017/2018 ACADEMIC YEAR

REGULAR

COURSE CODE: ECT 3332/ECT 332

COURSE TITLE: SPECIAL METHODS OF TEACHING BIOLOGY.

EXAM VENUE: LAB 10

STREAM: BSc (Agricultural Extension Education)

DATE: 15/12/17

EXAM SESSION: 2.00 – 4.00PM

TIME: 2.00 HOURS

Instructions:

- 1. Answer ALL question in Section A (compulsory) and ANY other TWO questions in Section B.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

SECTION A (COMPULSARY) 30 MARKS

QUESTION 1

- a) Explain any five goals of teaching biology in secondary schools.(10 marks)
- b) Explain any four Scientific skills used in teaching biology (4 marks)
- c) As a biology teacher, explain how you can ensure that the learning need of all students are taken into consideration (6 marks)
- d) Explain how a biology teacher can use project work as a teaching strategy.(4 marks)
- e) As a biology teacher ,explain any three common accidents in a practical biology lesson and how you can overcome them.(6 marks)

SECTION B (40 MARKS)

ANSWER ANY TWO QUESTIONS FROM THIS SECTION

QUESTION TWO

- a) State any five laboratory rules to be observed by learners during any learning activity in the laboratory (5 marks)
- b) Explain steps involved in teaching a practical activity in biology lesson. (5 marks)
- c) Explain how to use field trip method in teaching biology (10 marks)s

QUESTION THREE

- a) Explain how a teacher should use environment as a teaching resource to reinforce teaching of biology in secondary schools.(8 marks)
- b) Using an appropriate topic of your choice in biology plan a forty minutes lesson indicating relevant teaching and learning aids.(12 marks)

QUESTION FOUR

- (a) Name and explain any five types of questions tested in biology practical examination. (10 marks)
- (b) Explain five practical skills that can be tested in biology (10 marks)