



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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UNIVERSITY EXAMINATIONS 2024/2025

FIRST YEAR, SECOND SEMESTER EXAMINATION FOR POST GRADUATE DIPLOMA OF
EDUCATION

ECG 4154: METHODS OF TEACHING BIOLOGY

DATE: JANUARY 2025

TIME: 3 HOURS

INSTRUCTIONS: *Answer Question ONE and any other THREE Questions.*

QUESTION ONE (24 MARKS)

- a) Distinguish between Expository and heuristic teaching approaches. (4 Marks)
- b) Explain the steps followed in selecting the biology text book. (4 Marks)
- c) State three reasons for preparing lesson plan in biology. (3 Marks)
- d) State the merits of micro-teaching in teaching training. (2 Marks)
- e) State two advantages of class practical over project in biology. Give an example in each case. (4 Marks)
- f) Briefly describe the significance of biology teaching and learning resources to teachers and students. (4 Marks)
- g) Explain three advantages of essay test as a classroom examination in Biology. (3 Marks)

QUESTION TWO – (12 MARKS)

Prepare a scheme of work for two weeks in the topic the transport. (12 Marks)

QUESTION THREE – (12 MARKS)

- a) Justify the importance of practical in teaching biology in secondary schools in Kenya. (6 Marks)
- b) Describe the merits of using real specimen when teaching Biology. (6 Marks)

QUESTION FOUR – (12 MARKS)

Describe the design of Biology Laboratory and its management for effective teaching. (12 Marks)

QUESTION FIVE

- a) Suggest two ways by which a teacher can introduce a Biology lesson. (2 Marks)
- b) Briefly explain three situations in which lecture method can be used in a lesson and three situations in which lecture method must not be used in a Biology lesson. (6 Marks)
- c) Describe four negative contributions of Biology to the community. (4 Marks)