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KIBABII UNIVERSITY

DEPARTMENT OF CURRICULUM AND PEDAGOGY

SPECIAL/SUPPLEMENTARY EXAMINATION

2022/2023 ACADEMIC YEAR

COURSE CODE: ESM312 COURSE TITLE: BIOLOGY  
EDUCATION

DATE...14/11/2022.....

TIME...11:00AM

VENUE: AUDITORIUM B

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**INSTRUCTIONS TO CANDIDATES**

Answer **THREE** questions: Question **ONE** and any other **TWO**

TIME: 2 Hours

The university observes **ZERO** tolerance to examination cheating.

*This paper consists of 3 printed pages. Please turn over.*

### QUESTION 1 (30 MKS)

- a) In what ways has man misused biological knowledge? (3mks)
- b) State the basic principles of biology that students need to internalize for them to understand themselves and the environment. (4mks)
- c) What is the relationship between the syllabus, lesson plan, curriculum and the schemes of work (4mks)
- d) Outline **three** limitations of essay tests. (3mks)
- e) Briefly explain **three** environmental considerations when constructing a Biology laboratory. (3mks)
- f) State **four** aspects of the curriculum implementation that an evaluator must pay attention to during classroom evaluation. (4mks)
- g)
  - i. Identify **two** categories of field trips. (2mks)
  - ii. State **three** advantages of field trips. (3mks)
- h) Outline **four** characteristics of a questionnaire. (4mk)

### QUESTION 2 (20 MKS)

The use of a wide variety of teaching and learning resources should motivate learner to like and develop interest in biology. Despite this, the failure rate in the subject is still quite high in the KCSE examination. Discuss (20 Mks).

### QUESTION 3 (20 MKS)

- a) Describe the objectives of teaching Biology at secondary schools in Kenya (10 mks)
- b) Explain how you will teach biology to contribute to the promotion of **national** cohesion in Kenya (10 mks)

**QUESTION 4 (20 MKS)**

Explain the environmental considerations in the layout of a Biology laboratory at secondary school (6 mks)

State content areas in the secondary school Biology curriculum where teacher discussion teaching method is applicable (4 mks)

Describe how you would organize/prepare Biology students to conduct a class practical to illustrate the concept of blood circulation in the human body (10 mks)

**QUESTION 5 (20 MKS)**

a) Using four relevant examples discuss the misuse of scientific information (8 mks)

b) Explain three ways in which biology related to other disciplines? (12 mks)