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UNIVERSITY EXAMINATIONS

BACHELORS OF EDUCATION SCIENCE

2022/2023 ACADEMIC YEAR

THIRD YEAR FIRST SEMESTER

SPECIAL/SUPPLEMENTARY EXAMINATION

COURSE CODE: ESM 312

COURSE TITLE: BIOLOGY EDUCATION

DATE: 21ST AUGUST 2023

TIME: 2:00-4:00PM

INSTRUCTIONS TO CANDIDATES

Answer question one and any other two (2) Questions in this Paper

TIME: 2 Hours

This Paper Consists of 3 Printed Pages. Please Turn Over.

QUESTION ONE (COMPULSORY) (30 Marks)

- a) Outline **four** characteristics of a questionnaire. (4mk)
- b) State **three** ways by which biological knowledge has been misused. (3mks)
- c) Describe **four** basic principles that biology students need to internalize for them to understand themselves and the environment. (4mks)
- d) Illustrate the relationship between the syllabus, lesson plan, curriculum and the schemes of work (4mks)
- e) Outline **three** limitations of essay tests. (3mks)
- f) Briefly explain **three** environmental considerations when constructing a Biology laboratory. (3mks)
- g) Classroom observation is a practical evaluation of curriculum implementation through actual visits to lessons being delivered. State **four** aspects the evaluator must pay attention to. (4mks)
- h)
 - i. Identify **two** categories of field trips. (2mks)
 - ii. State **three** advantages of field trips. (3mks)

QUESTION TWO (20 MARKS)

- a) Describe **five** ways of improving the lecture method of teaching. (10mks)
- b) Outline **five** reasons why heuristic strategy of teaching is still being used despite its various disadvantages. (10mks)

QUESTION THREE (20 MARKS)

- a) List **five** material resources for teaching Biology. (5mks)
- b) Describe **five** factors that hinder effective use of resources in teaching Biology. (5mks)
- c) Explain **five** factors to consider when selecting a chart for teaching purposes. (10mks)

QUESTION FOUR (20 MARKS)

- a) Describe **five** attitudes that a Biology student should acquire in the learning of Biology. (10mks)
- b) Briefly discuss **five** skills that secondary school students acquire from Biology practical lessons. (10mks)

QUESTION FIVE (20 MARKS)

- a) State **four** differences between the syllabus and the schemes of work. (8mks)
- b) Outline **four** reasons why planning is an important step in teaching science. (4mks)
- c) Briefly describe **four** main components of a lesson plan. (8mks)