



### **KIBABII UNIVERSITY**

MAIN CAMPUS

#### UNIVERSITY EXAMINATIONS

FIRST YEAR

MAIN EXAMINATIONS

### FOR THE POST GRADUATE DIPLOMA

IN

#### **EDUCATION**

**COURSE CODE: ESM 725E** 

COURSE TITLE: BIOLOGICAL SCIENCES EDUCATION

DATE: 9<sup>TH</sup>/SEPTEMBER/2022

TIME: 8AM-10AM

### INSTRUCTIONS TO CANDIDATES

Answer question one (compulsory) and any other two questions

TIME: 2 Hours

Kibabii University observes ZERO tolerance to examination cheating

## Question One (30 Marks)

- a). List three components in the teaching of biology (3 marks).
- b). Briefly explain the two approaches of teaching biology (4 marks)
- c). Explain the procedure that learners nee to follow when they undertake project work (5 marks)
- d). Describe the characteristics of well stated instructional objectives (5 marks).
- e). Outline the considerations that a biology educator needs to make when designing of activities of a biology lesson (8 marks).
- f). State the factors that are likely to affect the reliability and validity of a biology examination (5 marks)

# Question Two (20 Marks)

- a). Discuss the criteria a teacher should use in the choice of strategy and method of teaching a topic in biology (10 marks).
- b). Explain five general objectives set to be achieved by the end of a biology lesson (10 marks)

## Question Three (20 Marks)

Discuss the various resources for the teaching of biology (20 marks). a)

## Question Four (20 Marks)

- a) Discuss the three phases of a lesson plan (6 marks)
- b) Explain the major entries of a Scheme of Work (14 marks)

# Question Five (20 Marks)

- a). Explain the main purposes of assessment in biology education (8 marks)
- b). Construct a sample table of specifications to facilitate a biology test construction (12 marks).