

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF MASTERS OF ARTS IN EDUCATION

EDCI 817: BIOLOGY EDUCATION

STREAMS:M.E.D

TIME:3 HOURS

DAY/DATE: TUESDAY 25/04/2023

2.30 P.M. –5.30 P.M.

INSTRUCTIONS

- **Answer three questions**
- **Do not write on the question paper**

1. a) Discuss four situations where biological knowledge has been applied to promote the welfare of man (12 marks)
b) Explain how biological knowledge has been abused in procurement of abortion and surrogate motherhood (8 marks)
2. Discuss the development of secondary school biology curriculum under the following initiatives:
 - a) UNESCO pilot project of 1967. (10 marks)
 - b) Nuffield science project of 1969 (10 marks)
3. a) Examine the significance of audio-visual aids in teaching biology in secondary schools (10 marks)
b)(i) Explain the rationale for improvisation in teaching biology (5 marks)
(ii) Explain the criteria for selecting real objects (realia) for use in teaching biology (5 marks)
4. a) Explain the following approaches in teaching biology at secondary school level
 - i. Inquiry approach (6 marks)
 - ii. Expository approach (4 marks)

- b)i) Explain three types of hazards likely to occur in a biology laboratory (6 marks)
- ii) Explain four advantages of concept mapping teaching strategy (4 marks)