

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF
SCIENCE IN BIOLOGY**

FOST 410: ICHTHYOLOGY

STREAMS: BSc (BIOLOGY) (Y4S1)

TIME: 2 HOURS

DAY/DATE: TUESDAY 19/12/2023

8.30 A.M. – 10.30 A.M.

INSTRUCTIONS:

- Answer ALL the questions in section A and any two in section B

SECTION A (30 MARKS)

1. State the importance of the following features in ichthyology
 - a) Scales (2 marks)
 - b) Lateral line (2 marks)
 - c) Colouration (2 marks)
2.
 - a) Explain briefly the origin and diversity of fish. (3 marks)
 - b) Describe gaseous exchange in fish. (3 marks)
3. Write explanatory notes on the following terms.
 - a) Bioacoustic in fish (2 marks)
 - b) Schooling (2 marks)
 - c) Ampullae of Lorenzini (2 marks)
4.
 - a) State the differences among oviparity ovoviparity, and viviparity in fish (3 marks)
 - b) Explain the courtship behaviour and parental care in fish. (3 marks)
5. Describe and illustrate the digestive system of a bony fish. (3 marks)
6. Describe briefly the migration of anadromous and catadromous fish. (3 marks)

SECTION B: 40 MARKS)

7. Discuss distinctive characteristics of Agnatha, chondrichtheys and osteichtheys. (20 marks)
 8. Discuss merits and demerits of artisanal and commercial fisheries. (20 marks)
 9. Write an essay on aquacultural practices in Kenya. (20 marks)
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