



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

P.O. Box 62157

00200 Nairobi - KENYA

Telephone: 891601-6

Ext 1022/23/25

MAIN EXAMINATION

SEPTEMBER –DECEMBER 2021

FACULTY OF SCIENCE

DEPARTMENT OF BIOLOGY

REGULAR PROGRAMME

BIO 410: FISHERIES BIOLOGY RESOURCE MANAGEMENT

Date: DECEMBER 2021

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and any TWO Questions

Q1. a) A farmer with a fish pond requires guidance on regulation of;

- i. Salinity
- ii. Dissolved oxygen
- iii. pH

Advise him on how to maintain these parameters for productive fishing **(6 marks)**

b) What demerits are encountered when using numerical method during determination of feeding habits of fish?

(4 marks)

c) Define fecundity; explain how fecundity potential is determined

marks)

(6

d) Which five bio-indicators are employed in determination of health marine and marine ecosystems during monitoring and evaluation exercise **(10 marks)**

e) Describe key features of artisanal fisheries at Kenyan coast **(4 marks)**

Q2. Which are the fishing culture being promoted by blue revolution to realize sustainable development goals (SDGs) globally **(15 marks)**

b) Define term common good; how is common good a threat to fisheries resource management **(5 marks)**

Q3. Discuss the three methods used in determination of fish age; what advantages and disadvantages does each offer **(20 marks)**

Q4. Integrated process has been employed in addressing aquatic toxicology describe achievements of fisheries management Acts by Kenyan government **(20 marks)**

Q5. Describe anatomical adaptation of chondrichthyales in reference to the following systems

- i) Skeletal system
- ii) Cardiovascular system
- iii) Endocrine system
- iv) Sensory system

(20 marks)

END