



TECHNICAL UNIVERSITY OF MOMBASA
FACULTY OF APPLIED AND HEALTH SCIENCES
DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR:
BACHELOR OF SCIENCE IN FISHERIES & OCEANOGRAPHY
BSFO 22S/YEAR 4/ SEMESTER 1

AFO 4413: COASTAL & MARINE CAPTURE FISHERIES

END OF SEMESTER EXAMINATION

SERIES: AUGUST 2024

TIME: 2 HOURS

Instructions to Candidates

This paper consists of FIVE questions

Answer question ONE (COMPULSORY) and any other TWO questions.

This paper consists of two printed pages.

Mobile phones are NOT allowed in the examination room

QUESTION ONE (30 MARKS)

- i. Briefly explain the characteristics of artisanal fishery along the Kenya coast
(5 marks)
- ii. Briefly describe the taxa composition of artisanal coastal and marine capture fisheries along the Kenya coast
(5 marks)
- iii. Briefly explain why it is important to maintaining quality assurance in fisheries products
(5 marks)
- iv. List any 5 management measures that promote the sustainable exploitation of fisheries resources
(5 marks)
- v. State any 5 possible values of Ecosystem Approach to Fisheries (EAF) management
(5 marks)

- vi. Briefly explain why the development of deep-sea fisheries can be a threat to fisheries resources in the Western Indian Ocean region citing appropriate deep sea fishery examples (5 marks)

QUESTION TWO (20 MARKS)

Explain how the North-South disparity in climate change will affect the global coastal and marine fisheries resources distribution, composition and production

QUESTION THREE (20 MARKS)

Briefly explain how each of the following management measures in a tropical bottom trawl prawn fishery function to maintain sustainable production:

- a) Fishing licenses (4 marks)
- b) Closed seasons (4 marks)
- c) Zoning of fishing ground (4 marks)
- d) Bycatch Reduction Devices (BRDs) (4 marks)
- e) Vessel Monitoring System (VMS) (4 marks)

QUESTION FOUR (20 MARKS)

Briefly explain how each of the following issues associated with bottom prawn trawling can cause negative impacts:

- a) Production of excessive discards (4 marks)
- b) Targeting of same species (4 marks)
- c) Degradation of bottom habitats (4 marks)
- d) Access to common fishing grounds (4 marks)
- e) Production of excessive bycatch (4 marks)

QUESTION FIVE (20 MARKS)

Briefly discuss any 5 principles of Ecosystem Approach to Fisheries (EAF) management currently being adopted by the Western Indian Ocean countries in the management of fisheries resources.