



FACULTY	AGRICULTURE, ENGINEERING AND NATURAL SCIENCES		
SCHOOL	AGRICULTURE AND FISHERIES SCIENCES		
DEPARTMENT	FOOD SCIENCE AND SYSTEMS		
SUBJECT	SEAFOODS TECHNOLOGY		
SUBJECT CODE	AFST 3862		
DATE	NOVEMBER 2024		
DURATION	2 HOURS	MARKS	100

First Opportunity Examination

Examiner: Mr. S. Emvula

Internal Moderator: Dr. S.C. Barrion

External Moderator: Dr. P.J. Williams.

This question paper consists of **two (2)** pages excluding this front page.

Instructions

- **Answer all five (5) questions**

Question 1

- a) Briefly discuss the importance of Exclusive Economic Zones (EEZ) to national and international fishery management systems. [5]
- b) Outline the main objectives of bycatch fees. [2]
- c) State and discuss one (1) Marine Current Ecosystem (MCE) of importance to Namibian marine biodiversity. [5]
- d) Giving examples, briefly explain each of the following:
 - i) Seafoods fraud [4]
 - ii) Broodstocks [4]

Question 2

- a) Outline two (2) reasons why Cod fish liver is rich in Vitamin A. [2]
- b) Fish grading is an important preliminary operation for further industrial fish processing. Discuss this statement giving relevant examples. [5]
- c) Explain one (1) technological advantage of fish that has been fast frozen compared to fish frozen slowly. [5]
- d) Briefly, discuss the use of sensory methods to assess wet fish quality. [5]
- e) State the rationale of K value in evaluating quality for wet fish. [3]

Question 3

- a) Briefly discuss the basic structure of fish muscle. [6]
- b) Provide an explanation on how knowledge of fish muscle structure enhances understanding of wet fish quality. [4]
- c) Discuss the good manufacturing practices (GMP) of equipment and utensils with emphasis on the following factors:
 - i) Choice of materials [5]
 - ii) Design and construction [5]

Question 4

- a) Write short notes on each of the following:
 - i) Caviar [5]
 - ii) Fish surimi [5]

- b) Outline three (3) preservation effects involved in fish smoking. [6]
- c) Differentiate between shellfish and scombroid poisoning. [4]

Question 5

- a) Lucky Star is a common canned fish product available in Namibian markets. Describe the process of manufacturing this product. [10]
- b) Describe the steps involved in industrial processing of crabs to obtain fresh crab meat. [10]

END OF THE EXAMINATION