FACULTY	AGRICULTURE, ENGINEERING AND NATURAL SCIENCES		
SCHOOL	AGRICULTURE AND FISHERIES SCIENCES		
DEPARTMENT	FOOD SCIENCE AND SYSTEMS		
SUBJECT	SEAFOODS TECHNOLOGY		
SUBJECT CODE	F3612SS		
DATE	NOVEMBER 2024		
DURATION	3 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) Differentiate between bycatch and quota fees. **[6]**

b) Outline the importance of fish lipids in human nutrition. **[5]**

c) State and briefly discuss any two (2) factors determining the choice of a fishing method. **[6]**

d) Give and explain one (1) reason for complementing cereals with seafood proteins in a human diet. **[3]**

Question 2

a) Why is it advisable to grade fish by size and species? **[5]**

b) Which month is known as non-fishing month for hake in Namibia? Explain the reason for this closed-off month. **[3]**

c) Discuss the importance of fish evisceration. **[6]**

d) Outline reasons why fish are prone to gaping. **[4]**

e) State the proximate content of the following in fish: **[2]**

i) Water

ii) Protein

Question 3

a) Discuss the advantages of Individual Quick Freezing methods in seafoods products. **[4]**

b) Differentiate three (3) methods of chilling fish. **[6]**

c) Briefly explain preservation of fish by glazing. **[4]**

d) Outline and briefly discuss two (2) materials used in manufacturing of utensils and equipment for seafood processing operations. **[6]**

Question 4

a) With examples, discuss three (3) objectives of quality evaluation in fish. **[7]**

b) Write short notes on each of the following in relation to quality evaluation in wet fish:

i) Sensory methods **[5]**

ii) K value **[4]**

iii) Peroxide value **[4]**

Question 5

a) Briefly state the rationale of the following stages used in fish canning process:

i) Precooking **[3]**

ii) Sealing **[3]**

iii) Sterilisation **[3]**

b) Summarize the steps involved in processing of fresh shrimps to obtain shrimp meat. **[9]**

c) Outline the importance of fish meal processing plants in the seafood value chain. **[2]**

END OF THE EXAMINATION