



FACULTY	AGRICULTURE, ENGINEERING AND NATURAL SCIENCES		
SCHOOL	AGRICULTURE AND FISHERIES SCIENCES		
DEPARTMENT	FOOD SCIENCE AND SYSTEMS		
SUBJECT	FOOD PROCESSING AND TECHNOLOGY		
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DURATION	3 HOURS	MARKS	100

SECOND OPPORTUNITY EXAMINATION

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This question paper consists of **THREE (3)** pages excluding this front page.

Instructions:

- Answer all **six (6)** questions

QUESTION 1

- a) What are oligosaccharides? [1]
- i) Oligosaccharides are carbohydrates that contain 2–20 sugar units joined by glycosidic bonds
 - ii) Oligosaccharides are carbohydrates that contain 15–20 sugar units joined by glycosidic bonds
 - iii) Oligosaccharides are carbohydrates that contain 0–20 sugar units joined by glycosidic bonds
 - iv) None of the above
- b) Starch is an example of _____. [1]
- i) Oligosaccharide
 - ii) Polysaccharide
 - iii) Monosaccharide
- c) Amino acids are building blocks of protein made up of _____. [1]
- i) Amino group, hydrogen, Side chain and acid group
 - ii) Oxygen, hydrogen, Side chain and acid group
 - iii) Sulphur, hydrogen, Side chain and acid group
- d) Which of the combinations is an example of vitamins found in food: [1]
- i) Vitamin A, F, C, K
 - ii) Vitamin A, B, K, G
 - iii) Vitamin A, D, K, B
- e) Water is also referred to as moisture in food. [1]
- i) True
 - ii) False
- f) Which of the following is a water-soluble vitamin: [1]
- i) Vitamin C
 - ii) Vitamin E
 - iii) Vitamin A
 - iv) None of the above
- g) Match with the best fit. [6]

i) Carbohydrate
ii) Fat
iii) Enzyme
iv) Sucrose
v) Filtration
vi) Beating

1) Biological catalyst
2) Mixing
3) Starch
4) Separation
5) Sweetener
6) Butter

QUESTION 2

- a) With examples write short notes about the following:
 - i) Food Preservation [5]
 - ii) Food technology [5]
- b) Discuss the importance of packaging and labelling in food processing. [8]

QUESTION 3

- a) Explain the concept of food processing and its primary objectives. [7]
- b) What are the main negative effects of food processing on nutritional content of food? [5]
- c) Explain the role of food processing in enhancing food security. [10]

QUESTION 4

Answer with a TRUE or FALSE: [5]

- a) The Codex Alimentarius Commission is a joint program of the World Health Organization (WHO) and the Food and Agriculture Organization (FAO).
- b) Food processing establishments in Namibia are required to obtain a license or permits to operate.
- c) The Namibian national food control system focuses solely on inspections and enforcement actions.
- d) The Namibian Ministry of Agriculture, Water and Land Reform has no role in the national food control system.
- e) The Namibian Agronomic Board is responsible for setting mandatory food safety and quality standards in the country.

QUESTION 5

- a) Name the institution responsible for setting standard and guidelines for food processing in Namibia. [2]
- b) Explain any three (3) responsibilities of the Namibian Ministry of Health and Social Services in the national control system for food processing. [6]
- c) What are the five (5) key objectives of Codex Alimentarius? [10]

QUESTION 6

- a) What are the benefits of cooling in food processing? [10]
- b) What drives hurdle technology? Give two (2) advantages of it over other preservation methods. [5]
- c) List any five (5) major areas of laws and regulations that are relevant in food processing. [10]

END OF THE EXAMINATION