NATIONAL UNIVESRITY OF LESOTHO FACULTY OF HEALTH SCIENCES DEPARTMENT OF NUTRITION END OF SEMESTER I EXAMINATIONS NUT 2300- INTRODUCTION TO FOOD SCIENCE AND TECHNOLOGY

January 2024 100 marks Time: 3 hours

Answer All questions. The mark for each part is shown in brackets.

Section A (10 marks)

- 1. For the following statements, indicate whether they are True or False,
 - Chemical agents are the most worrying among others because they keep on increasing the concentration with time.
 - ii. Food additives are broken down into six main categories, food preservatives being one of them.
- iii. Non-thermal food processing techniques are applied only to solid food substances.
- iv. Codex Alimentarious Commission is concerned about protecting the health of the consumers and facilitating international food trade.
- v. HACCP is the system that ensure that food produced for human consumption is safe and nutritious.
- vi. Food processing is very crucial factor in achieving food security of all countries in the world.
- vii. Food Fortification is very important action to add preservatives in food to avoid food borne illness.
- viii. High pressure food processing is one of the non-thermal modes of processing.
- ix. Enzyme activity is also responsible for food deterioration.
- x. In Lesotho, HACCP is already mandatory for ill people's foods.

| Section B | (90 mark | (s) | |
|--|------------------|-------------------|------------------------|
| Question 1 | | | |
| Define these terms as used in food science and technology; (10) | | | |
| 8 | a. Hazard | | |
| k | o. Fortification | | |
| C | c. Adulteration | | |
| d. Food Value Chain | | | |
| ϵ | e. Blanching | | |
| Question 2 | | | |
| Copy and complete (20) | | | |
| Unit Operation | | Brief description | Preservative mechanism |
| F | Pasteurization | | |
| Fermentation | | | |
| Chilling | | | |
| Drying | | | |
| Freezing | | | |
| | | | |
| Question 3 | | | |
| Differentiate between the following; | | | |
| a. Quality Control & Quality Assurance | | | (10) |
| b. Food Laws & Food Standards | | | (8) |
| Question 4 | | | |
| a. Give all the HACCP principles. | | | (7) |
| b. State all the quality aspects of food products. | | | (5) |
| c. Describe the importance of food processing. | | | (10) |
| Question 5 | | | |
| a. Explain any five reasons why there is an increase in the frequency of | | | |
| foodborne diseases. | | | (10) |
| b. Write short notes on Codex Alimentarius. | | | (10) |
| end | | | |