

1ST SEM. 2018/2019



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UNIVERSITY OF ESWATINI

RE-SIT / SUPPLEMENTARY EXAMINATION PAPER

- PROGRAMME** : **BACHELOR OF SCIENCE IN FOOD SCIENCE, NUTRITION AND TECHNOLOGY, CONSUMER SCIENCE, CONSUMER SCIENCE EDUCATION YEAR IV**
- COURSE CODE** : **FNS405**
- TITLE OF PAPER** : **FOOD PRESERVATION**
- TIME ALLOWED** : **TWO (2) HOURS**
- INSTRUCTIONS** : **ANSWER QUESTION ONE (1) AND ANY OTHER (2) QUESTIONS**

DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR

QUESTION 1 [COMPULSORY]

- (a) Discuss the **three (3)** types of freezing used in preservation of foods. (12 Marks)
- (b) Describe the **four (4)** methods of evaporation of foods. (8 Marks)
- (c) Explain the difference between MAP and CAP. (10 Marks)
- (d) Discuss UHT processing and Aseptic packaging in thermal preservation. (10 Marks)
- [TOTAL = 40 Marks]

QUESTION 2

- (a) Discuss the following techniques in thermal processing: -
 ii) Pasteurization
 iii) Commercial sterilization (10 Marks)
- (b) Discuss **three (3)** functions of starter cultures. (9 Marks)
- (c) Explain **three (3)** points to consider in storage of dried foods. (6 Marks)
- (d) Discuss **two (2)** benefits of blanching fruits and vegetables. (5 Marks)
- [TOTAL = 30 Marks]

QUESTION 3

- (a) Explain the process of canning and list **three (3)** reasons that might lead to spoilage of canned foods. (10 Marks)
- (b) Discuss the **five (5)** conditions for spoilage. (10 Marks)
- (c) Discuss the importance of food preservation (use 5 points) (10 Marks)
- [TOTAL = 30 Marks]

QUESTION 4

- (a) Explain the **four (4)** types of drying techniques that could be utilized in the preservation of food. **(20 Marks)**
- (b) Describe the **three (3)** characteristics of a good starter culture in the fermentation process. **(6 Marks)**
- (c) Explain how low temperature is applicable in food preservation. **(4 Marks)**

[TOTAL = 30 Marks]