

1ST SEM. 2019/2020



PAGE 1 OF 3

UNIVERSITY OF ESWATINI
RE-SIT 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) Describe the **four (4)** advantages of fermenting foods. (12 Marks)
- (b) Give **four (4)** examples of chemical additives that could be used in food preservation. (4 Marks)
- (c) Describe how low temperature is applicable in food preservation. (4 Marks)
- (d) Explain **two (2)** types of drying techniques that could be utilized in the preservation of food. (10 Marks)
- (e) Discuss the process of canning and list **three (3)** reasons that might lead to spoilage of canned foods. (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) Discuss UHT processing and Aseptic packaging in thermal preservation. (10 Marks)
- (a) Discuss the **four (4)** techniques that can be used in proper food handling before processing. (20 Marks)
- [Total = 30 Marks]

PAGE 3 OF 3
FNS405 (R/S)

QUESTION 4

Describe the **three (3)** types of preservation techniques used in your term project, stating the principle applied in each case. Among the techniques used, which method was the best and why?

(30 Marks)
[Total = 30 Marks]