

1<sup>ST</sup> SEM. 2020/2021

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## UNIVERSITY OF ESWATINI

### MAIN EXAMINATION PAPER

:

**PROGRAMME** 

BACHELOR OF SCIENCE IN FOOD

SCIENCE, NUTRITION AND

TECHNOLOGY, CONSUMER SCIENCE, CONSUMER SCIENCE

**EDUCATION LEVEL 4** 

**COURSE CODE** 

**FNS405** 

TITLE OF PAPER

FOOD PRESERVATION

TIME ALLOWED

TWO (2) HOURS

INSTRUCTIONS

**ANSWER QUESTION ONE (1)** 

AND ANY OTHER (2) QUESTIONS

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## **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 two (2) ways in which low temperature can be applied 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:
  - i.Pasteurization
  - ii.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**

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]

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# **QUESTION 4**

a) Discuss UHT processing and Aseptic packaging in thermal preservation.

(10 Marks)

b) Discuss the four (4) techniques that can be used in proper food handling before processing.

(20 Marks)

[TOTAL = 30 MARKS]