



2<sup>nd</sup> SEM. 2018/19

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UNIVERSITY OF ESWATINI

MAIN EXAMINATION PAPER

**PROGRAMME** : **BACHELOR OF SCIENCE IN FOOD  
SCIENCE, NUTRITION AND  
TECHNOLOGY YEAR IV**

**COURSE CODE** : **FNS402**

**TITLE OF PAPER** : **FOOD QUALITY ASSURANCE AND  
CONTROL**

**TIME ALLOWED** : **TWO (2) HOURS**

**INSTRUCTIONS** : **ANSWER QUESTION ONE (1)  
AND ANY OTHER TWO (2)  
QUESTIONS**

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

**QUESTION 1 (COMPULSORY)**

- (a) Draw the Cause and Effect diagram and explain its meaning in food quality. **(10 Marks)**
- (b) Explain the **four (4)** quality assurance steps within the PDCA model. **(8 Marks)**
- (c) Define the following terms: **(9 Marks)**
  - i. Food Quality
  - ii. Quality Control
  - iii. Quality Assurance
- (d) Name the **three (3)** types of standardization offered by SWASA. **(3 Marks)**
- (e) Discuss the role of FDA and USDA in relation to food standards. **(10 Marks)**

**[TOTAL MARKS = 40]**

**QUESTION 2**

- (a) Discuss the **three (3)** extrinsic and **three (3)** intrinsic attributes that affect food quality. Support your answers using examples. **(30 Marks)**

**QUESTION 3**

- (a) Discuss the purpose of control charts in food production. Use examples to illustrate how the control charts are used. **(15 Marks)**
- (b) Briefly explain the following terms: **(15 Marks)**
  - i. Certification
  - ii. Auditing
  - iii. Non-conformances

**[TOTAL MARKS = 30]**

**QUESTION 4**

- (a) Discuss traceability in food processing and why it is important, stating examples where necessary. (5 Marks)
- (b) Justify why companies need a TQM system. (5 Marks)
- (c) Discuss the GMP conditions under the following: (15 Marks)
- i. Personnel
  - ii. Plant and Grounds
  - iii. Sanitary facilities and controls
- (d) Discuss the **fifth** principle of HACCP giving examples where appropriate. (5 Marks)

[TOTAL MARKS = 30]