



# MERU UNIVERSITY COLLEGE OF SCIENCE & TECHNOLOGY

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## University Examinations 2011/2012

### SECOND YEAR, FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN PUBLIC HEALTH

#### IPH 2205: FOOD QUALITY ASSURANCE

**DATE: APRIL 2012**

**TIME: 2 HOURS**

**INSTRUCTIONS:** Answer question *one* and any other *two* questions

#### QUESTION ONE (30 MARKS)

- a) In industrial manufacturing practices, quality can have several definitions. Briefly explain the four common definitions. (8 Marks)
- b) List and explain the three groups of food product attributes. (9 Marks)
- c) Briefly explain the objective methods for determining food quality. (5 Marks)
- d) Explain how weather affects food quality. (4 Marks)
- e) State and briefly explain the two types of quality audits. (4 Marks)

#### QUESTION TWO (20 MARKS)

- a) Explain the following terms
  - i. Quality assurance (3 Marks)
  - ii. Quality control (3 Marks)
  - iii. Quality audit. (4 Marks)
- b) List and explain three differences between quality assurance and quality control. (6 Marks)
- c) Explain any two functions of food quality assurance department. (4 Marks)

#### QUESTION THREE (20 MARKS)

- a) Explain HACCP. (3 Marks)
- b) Explain any three benefits of implementing an HACCP program in food manufacturing. (3 Marks)

- c) List and briefly explain the seven principles of a HACCP program. (14 Marks)

**QUESTION FOUR (20 MARKS)**

- a) Explain the following terms as used in food quality assurance;
- i. Sampling (2 Marks)
  - ii. Laboratory sample. (3 Marks)
- b) Samples are analyzed for a number of different reasons in the food industry. Explain this statement. (15 Marks)

**QUESTION FIVE (20 MARKS)**

- a) Explain the importance of statistical process control (SPC) in food quality assurance. (6 Marks)
- b) Describe the two types of control charts. (6 Marks)
- c) In food manufacturing, when is a process in control? (8 Marks)