



# CRAWFORD UNIVERSITY

## FAITH CITY, IGBESA, OGUN STATE

2016/2017 RAIN SEMESTER EXAMINATIONS

COLLEGE: NATURAL AND APPLIED SCIENCES

DEPARTMENT: BIOLOGICAL SCIENCES

PROGRAMME: MICROBIOLOGY COURSE CODE: MCB 403 TIME ALLOWED: 3 HRS

COURSE TITLE: MICROBIOLOGICAL QUALITY CONTROL. COURSE UNIT: 3

INSTRUCTION: QUESTIONS 1 & 2 COMPULSORY AND ANY OTHER 5

1. As a public health control officer in charge of general quality control; what will be your choice of sampling plan between a 2-Class and a 3-Class attribute plan? (5 Marks)
- b. On the basis of the choice above, how can better quality control be assured based on higher stringency of the plan? (5 Marks)

2. What is SSOP AND why is it recommended in a manufacturing plant? (10 Marks)
- b. What are the 7 general principles of HACCP and why is HACCP important in Microbiological Quality Control?(10 Marks)

3. List 4 International Quality Control Agencies.(2 Marks)
- b. List the 3 groups of microbial indicators.(3 Marks)
- c. Mention 5 factors to be considered in developing a sampling plan.(5 Marks)

4. How will you ensure a given sample of water passes Quality control test? (10 Marks)

- 5a. Mention 2 types of sampling Plan. (2 Marks)

b. Define the following terms:

i. Microbiological standard for food (2 marks)

ii. Aerobic Colony Count (2 Marks)

iii. Process indicators (2 Marks)

iv. Faecal Indicators (2 marks)

- 6a. Explain the following terms:

i. Standards Organisation ( 1 Mark)

ii. Field Blank (1 Mark)

iii. A Lot (1 Mark)

- b. With the aid of the appropriate diagrams write a detailed note on Sampling Plan and its application in maintaining quality product in the food industry. (7 Marks)

- 7a. What are the basic steps involved in carrying out plant and equipment sanitation and hygiene? (5Marks)

b. List 5 microbial pathogens that must not be detected in at least 25g of food sample(5Marks)