



# CRAWFORD UNIVERSITY

## FAITH CITY, IGBESA, OGUN STATE

2023/2024 HARMATTAN EXAMINATIONS

COLLEGE: NATURAL AND APPLIED SCIENCES

DEPARTMENT: BIOLOGICAL SCIENCES

PROGRAMME: MICROBIOLOGY

COURSE CODE: MCB 427

COURSE TITLE: MICROBIOLOGICAL QUALITY CONTROL COURSE UNIT: 3

INSTRUCTION: ANSWER ANY FIVE QUESTIONS

TIME ALLOWED: 3HRS

- 1 a. What is Hazard Analysis and Critical Control Point (HACCP)? (2mks)
  - b. List and explain the seven principles of HACCP. (7mks)
  - c. Draw the flowchart and indicate the critical control points for Garri production.(3mks)
- 2 Write an essay on the International Standard Organization (ISO) (12mks)
- 3 a. What are process-behaviour charts?(2mks)
  - b. List and explain the two categories of control charts. (4mks)
  - c. Write short notes on the following;
    - i. C-Chart ii. U-Chart iii. NP-Chart iv. P-Chart v. Short run control Chart vi. S-Chart (6mks)
- 4a What is external quality assessment?(2mks)
  - b. Discuss the roles of two national bodies in charge of regulation of products in Nigeria. (4mks)
  - c. List and explain the two classes of plant hygiene and sanitation. (6mks)
- 5 a. Define the concept 'process control'.(3mks)
  - b. Discuss the following components of process control with the aid of flowcharts;
    - i. incoming quality control ii. in process quality control iii. outgoing quality control (9mks)
- 6 a. Define the term 'microbiological criteria'.(1<sup>1/2</sup> mks)
  - b. List and explain the three components of microbiological criteria for ready-to-eat food.( 4<sup>1/2</sup> mks)
  - c. Describe in details how microbiological quality can be classified. (6mks)
7. Write an essay on the regulatory strategies employed by The National Agency for Food, Drug Administration and Control (NAFDAC) (12mks)