



FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF LIFE SCIENCES
DEPARTMENT OF MICROBIOLOGY
FIRST SEMESTER EXAMINATION, 2018/2019 SESSION

ANALYTICAL & QUALITY CONTROL MICROBIOLOGY (MCB515), 2UNITS

Instruction: Answer 3 questions in all. Attempt only one question in section A.

Time allowed: 1½ Hours

Section A (Attempt only one question in this section)

- 1(a). Describe sampling and various forms of sampling.
- 1(b). Describe levels of food sampling.
- 1(c). How should food manufacturers and producers carry out sampling?
- 2(a). What is a standard?
- 2(b). Write short notes on the following detailing the functions they were created to perform: (i) Standards Organization of Nigeria (SON) (ii) Codex Alimentarius

Section B (Attempt only two questions in this section)

- 1(a). Discuss factors affecting quality of microbiological laboratory results
- 1(b). As a newly employed microbiologist in a food manufacturing plant assigned to quality control section, how would you ensure the production area and products are kept from contamination?
- 1(c). Working safely with hazardous chemicals requires proper use of laboratory requirements. Explain.
- 2(a). Describe the basic principle of hot air oven and highlight the different types of hot air ovens and their working principles.
- 2(b). Describe the procedure you will employ to calibrate a pH meter.
- 3(a). How would you detect a named bacterial toxin in food?
- 3(b). What are the hazards associated with use of autoclave in Microbiology Laboratory?
- 3(c). Highlight the advantages and disadvantages of dry heat sterilization