



FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
DEPARTMENT OF MICROBIOLOGY
SECOND SEMESTER EXAMINATION, 2017/2018 SESSION
COURSE CODE: MCB 523
COURSE TITLE: ENVIRONMENTAL MICROBIOLOGY

Instructions: Answer 5 questions in all. Attempt at least one question in each section
Time Allowed: 2½ Hours

SECTION A

1. Describe the sulphur and the carbon cycles and their economic importance?
- 2a). Describe the formation of soil and the microbial associations in the soil?
- 2b). How will you isolate and characterise the microbial load of a soil sample?

SECTION B

3. Describe how you would carry out microbial assessment of the **AIR** in the laboratory?
4. Describe the microbiology of anaerobic digestion?
5. Write short notes on the under listed terms as they relate to secondary sewage treatment.
 - (i) oxidation pond
 - (ii) trickling filter

SECTION C

- 6a). What are Bio-pesticides?
- 6b). List the types of Bio-pesticides
- 6c). Write a comprehensive essay on advantages of Bio-pesticides

- 7a). Briefly describe the aquatic environment
- 7b). Write short notes on lotic and lentic ecosystems
- 7c). List the types of aquatic ecosystems