

OLABISI ONABANJO UNIVERSITY, AGO - IWOYE

DEPARTMENT OF MICROBIOLOGY

B. Sc (Microbiology) 2018/2019 HARMATTAN SEMESTER EXAMINATION

Course code and title: MCB407 - Industrial Microbiology. Date: 24th April 2019

Instruction: Answer question 1 and any other three (3) questions. One question must be answered from each section.

Time Allowed: 1hr 40mins

Question 1

- a. Give instances when microorganisms are applied for providing services for mankind than for the production of tangible products.
- b. Mention five alcohol producing microorganisms.
- c. Highlight the factors affecting bioremediation of hydrocarbons.

SECTION A

- 2a. Discuss the qualities a microorganism must possess to be useful for industrial fermentation processes.
- b. What is the relationship between industrial Microbiology and Biotechnology?
3. Without considering the genetic constitution, identify various groups into which microorganisms that are relevant in industrial microbiological processes may be placed.

SECTION B

4. Discuss the commercial production of
 - (i) Citric acid
 - (ii) Wine
- 5a. Explain the different sources of nutrient required by microorganisms
- b. Write concisely on:
 - (i) Fermentor
 - (ii) Batch culture
 - (iii) Continuous culture

SECTION C

6. Discuss biogenesis of petroleum as it applies to microbiology.
7. Explain biodeterioration and biotransformation of hydrocarbons.