

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA SCHOOL OF LIFE SCIENCES DEPARTMENT OF MICROBIOLOGY SECOND SEMESTER EXAMINATION, 2017/2018 SESSION

COURSE CODE: MCB 522 (2 UNITS) COURSE TITLE: PETROLEUM MICROBIOLOGY

Instruction: Answer any three (3) questions in all.

Time: 1¹/₂ Hours

- 1. Discuss the microbiology of methanogenesis
- 2(a). With the aid of schematic diagram describe the process of dissimilatory sulphate reduction.
- 2(b). Give two reasons why sulphate reducing bacteria are often detected only when fuel is heavily contaminated?
- 3(a). Enumerate five factors each on: Causes, Effects, and Control of oil spills
- 3(b). Explain two methods in which oxygen can be supplied to microorganisms in oil contaminated site.
- 4(a). Define biostimulation
- 4(b). With the aid of a diagram explain how the feasibility of bioremediation depends on the interactions between substrate and organisms in the environment?
- 5. Discuss how you would use hydrocarbonoclastic bacteria to search for oil and gas in the Niger Delta area of Nigeria.