

OLABISI ONABANJO UNIVERSITY, AGO-IWOYE

DEPARTMENT OF MICROBIOLOGY

2010/2011 HARMATTAN SEMESTER EXAMINATION

MCB 409: ENVIRONMENTAL MICROBIOLOGY

INSTRUCTION : Attempt FOUR questions in all.

Two questions should be answered from each section.

Time allowed: 2 Hours

SECTION A

- 1a. The term Pollution in an aquatic system is relative. Discuss in relation to the purification ability of water.
- b. Using a diagram, describe the Biological Cycle in an Aquatic System.
- 2a. Discuss the Biological and Physicochemical Mechanisms of water purification.
- 3a. Describe the mode of transmission of air borne pathogens.
- b. Can Air be said to be a good medium for the growth of microorganisms?

SECTION B

- 4a. Describe the use of trickling filter for sewage treatment. Highlight the merits and limitations of the process.
- b. State five reasons for treating sewage.
5. Explain how the following influence the types of microorganisms in aquatic habitat ;
 - (i) Light (ii) Temperature (iii) Nutrient Load
 - (iv) Hydrostatic Pressure
- 6a. Explain the stages involved in the Municipal treatment of water.
- b. State five reasons why coliforms are regarded as indicator organisms