

OBAFEMI AWOLOWO UNIVERSITY, ILE-IFE, NIGERIA
FACULTY OF SCIENCE
DEPARTMENT OF MICROBIOLOGY

B.Sc. (Microbiology) Degree Examination

SEMESTER: Harmattan 2010/2011 session

DATE: July 29, 2011

COURSE CODE: MCB 409

TIME: 2¹/₂ Hours

COURSE TITLE: Aquatic Microbiology

INSTRUCTION: Answer ALL questions with each section in a separate booklet

Section A

1. Why do you need to treat water prior to consumption? Give details of how a stream water that is already dammed can be treated and disinfected to render it safe for drinking
2. Define ThOD, COD, BOD_u, and BOD₅. What is sewage? Compare sewage treatment using trickling filter method with using stabilization basin and septic tank techniques.

Section B

3. Write briefly on the unique features that make water habitat suitable for microorganisms.
4. Write explicitly on the hydrological cycle and its role in replenishing the earth's fresh water reservoir

Section C

5. With the aid of a well labelled DIAGRAM ONLY, describe the general scheme for the detection of coliforms in water.
6. What are the standards of bacteria quality applicable to supplies of drinking water?
7. Mention the advantages and disadvantages involved in the use of membrane filtration technique for the enumeration of water samples.