P.M.B.2002, AGO-IWOYE, OGUN STATE

FACULTY OF SCIENCE

DEPARTMENT OF MICROBIOLOGY

2012/2013 HARMATTAN SEMESTER EXAMINATION

COURSE CODE: MCB 315 COURSE TITLE: BACTERIOLOGY

INSTRUCTION: ATTEMPT ANY TWO QUESTIONS IN EACH SECTION Time: 1hr : 3 mins

SECTION A

1a. State the step by step procedure for the preparation of 16g/500ml of Nutrient agar for a practical class.

b. Describe how you can obtain a pure culture of a named organism from different types of pure water being sold on the campus.

2a. List five methods that can be used to preserve microbial cultures.

b. Discuss how any three out of the following factors can influence the growth of bacteria.

(i) Temperature (ii) pH (iii) Osmotic pressure (iv) Oxygen requirement.

3a. Define bacterial growth.

b. Describe, with the aid of a well labeled graph, the stages involved during a bacterial growth

SECTION B

4a. Highlight the differences between the L-forms and mycoplasma.

b. State five (5) distinguishing features of prokaryotes

5. Describe the following:

(i). Oxygenic Photrotrophic Bacteria (ii). Endospore-forming Bacteria

(iii) Aryl Sulphatase Test (iv). Phenyl Deaminase Test

(v) Tween 80 Hydrolysis Test

6. A water source channeled to your apartment is not to be treated for faecal contaminants. Highlight the steps to be taken in order to ascertain that the water is potable from microbiological point of view.