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DEPARTMENT OF MICROBIOLOGY, AGO-IWOYE
 2014/2015 HARMATTAN SEMESTER EXAMINATION
COURSE: BACTERIOLOGY **CODE: MCB 315**

INSTRUCTION: Answer one question from each section. Section A is compulsory. Time: 1hr 30mins

SECTION A

- ✓ a. Describe extensively on a test to differentiate *Streptococcus pneumoniae* from other alpha-haemolytic Streptococci.
- ✓ b. Explain how you would identify *Pseudomonas*, *Neisseria*, *Brucella* and *Pasteurella* species using a biochemical test.
- ✓ c. What is the principle behind the Indole test?

SECTION B

- ✓ 2a. Define "bacteria" as far as you can.
- b. "Bacteria are recognized based on their shape", discuss. (Diagrams are important)
- 3a. Describe any three methods that can be used to preserve pure cultures in a Microbiology laboratory in detail.

b. In a tabular form, give at least two materials that can be sterilized using the following methods:

- | | |
|-----------------|-----------------|
| i. Incineration | ii. Moist heat |
| iv. Red heat | v. Hot air oven |

SECTION C

- ✓ a. Distinguish between the following nutritional types of bacteria

- ✓ i. Aerobic rods and cocci
- ✓ ii. Facultative anaerobic cocci

- 5a. Highlight five characteristic features of mycoplasma.

- b. Describe the laboratory preparation of L-forms.

they lack cell wall
 they have a fried egg appearance
 the cell membrane is fragile
 they are pleomorphic

iii. U/V light

(2) preservation of bacteria
 1.0 is a relatively modern, slow growth
 rate in liquid media
 2.0 is a relatively modern, slow growth
 rate in liquid media
 3.0 is a relatively modern, slow growth
 rate in liquid media
 4.0 is a relatively modern, slow growth
 rate in liquid media
 5.0 is a relatively modern, slow growth
 rate in liquid media