

# OLABISI ONABANJO UNIVERSITY, AGO-IWOYE, FACULTY OF SCIENCE,

# DEPARTMENT OF MICROBIOLOGY,

## 2017/2018 HARMATTAN SEMESTER EXAMINATION

MCB 315: BACTERIOLOGY

INSTRUCTIONS: ANSWER THREE QUESTIONS, ONE FROM EACH SECTION

TIME: 1HR. 30 MINS.

#### SECTION A

- 1. As it relates to bacteriology, briefly explain the following terms: A. Taxonomy
  - B. Classification C. Identification and D. Nomenclature
- 2. Using 12 features, what are the differences between Prokaryotes and Eukaryotes?

### SECTION B

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  - 3b. Write on the following giving formula where necessary:
    - i. Growth, ii. Pure culture iii. Growth rate iv. Number of generation, v. Generation time
  - 4a. Differentiate between Sterilization and Disinfection.
- 4b. How long will it take a single bacteria cell to form 1,000,000 cells if it had a generation time of 30 minutes?
- c. Giving at least one example, briefly write on the following:
  - i. Selective media, ii. Differentia media, iii. Enrichment media,

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# SECTION C

- 5a. Write extensively on bacterial antibiotics susceptibility testing
- 5b. Explain three (3) methods that can be used in bacterial identification
- 6. Explain in details how you would carry out the following biochemical tests in the laboratory:
- i. Bile solubility test
- ii. Citrate utilization test
- iii. Sugar fermentation test
- iv. Catalase test