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University Examinations 2013/2014

SECOND YEAR, SECOND SEMESTER EXAMINATION FOR THE DEGREE IN PUBLIC HEALTH

AFS 2201: INTRODUCTION TO MICROBIOLOGY

DATE: DECEMBER 2013

TIME: 2 HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE – 30 MARKS

- a. i. Briefly define the term “microbiology” and cite the characteristics of micro-organisms. (5 Marks)
- ii. Briefly explain the classification of micro-organisms citing the major taxonomic groups. (5 Marks)
- b. Define the following terminologies:
- i. Culture medium (2 Marks)
 - ii. Colony (2 Marks)
 - iii. Culture (2 Marks)
 - iv. Saprophytes (2 Marks)
 - v. Bacteriophages (2 Marks)
- c. i. State the differences between gram positive and gram negative bacteria. (5 Marks)
- ii. Briefly describe the procedure for gram staining. (5 Marks)

QUESTION TWO – 20 MARKS

Giving relevant examples, discuss the history of microbiology. (20 Marks)

QUESTION THREE – 20 MARKS

- a. Discuss microscopy under the following sub-heading:
- i. Types of microscopes (5 Marks)
 - ii. Parts of the microscopes and their functions. (5 Marks)
- b. Discuss using illustrations, the various bacterial morphologies/shapes when viewed under the microscope. (10 Marks)

QUESTION FOUR – 20 MARKS

- a. Discuss asexual and sexual reproduction in fungi.
- b. Discuss the life cycle of zygomycetes/bread mould

(10 Marks)

(10 Marks)