



2nd SEMESTER SUPPLEMENTARY 2011/2012

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UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME: BACHELOR OF SCIENCE IN AGRONOMY YEAR 2, BACHELOR OF SCIENCE IN ANIMAL SCIENCE YEAR 2, BACHELOR OF SCIENCE IN ANIMAL SCIENCE (DAIRY OPTION) YEAR 2, BACHELOR OF SCIENCE IN FOOD SCIENCE, NUTRITION AND TECHNOLOGY YEAR 2, BACHELOR OF SCIENCE IN CONSUMER SCIENCE YEAR 2, BACHELOR OF SCIENCE IN CONSUMER SCIENCE EDUCATION YEAR 2, AND BACHELOR OF SCIENCE IN HORTICULTURE YEAR 2 & YEAR 3.

COURSE CODE: CP 204

TITLE OF PAPER: MICROBIOLOGY

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY QUESTIONS FOUR QUESTIONS

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QUESTION 1

- a) What is meant by:
- i) Symbiosis? [2]
 - ii) Mutualism? [2]
 - iii) Parasitic? [2]
 - iv) Commensalisms? [2]
- b) Describe the different types of toxins and give two examples of each. [10]
- c) What are interferons? How are they involved in host defense in humans? [7]
- [25 Marks]**

QUESTION 2

- a) With the aid of a diagram, explain the basic phases of bacterial growth. [20]
- b) What is the difference between selective media and differential media? [5]
- [25 Marks]**

QUESTION 3

Describe the life-cycle of the malaria causal organisms. [25 Marks]

QUESTION 4

- a) List Koch's postulates [8]
- b) List the different subtypes of cocci bacteria and explain how they come about. [8]
- c) Explain the lysogenic cycle of bacteriophages. [9]
- [25 Marks]**

QUESTION 5

Explain the importance of microbes in the following areas:

- a) Food industry [10]
- b) Nitrogen fixation [15]
- [25 Marks]**