



UNIVERSITY OF EMBU

2017/2018 ACADEMIC YEAR

SECOND SEMESTER EXAMINATIONS

**FIRST YEAR EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE IN
APPLIED MICROBIOLOGY**

JPM 621: FUNDAMENTALS OF APPLIED MOLECULAR BIOLOGY

DATE: APRIL 9, 2018

TIME: 2:00 – 5:00 PM

INSTRUCTIONS:

Answer ANY FOUR Questions

QUESTION ONE (25 MARKS)

Describe gene regulation in prokaryotes.

QUESTION TWO (25 MARKS)

Antimicrobial resistance to existing drugs is one of the greatest threats to the healthcare system. Discuss this statement.

QUESTION THREE (25 MARKS)

Describe the structure and function of transfer RNA in prokaryotes

QUESTION FOUR (25 MARKS)

Discuss the role of recombinant DNA technology in vaccine development

QUESTION FIVE (25 MARKS)

Discuss the contribution of molecular genetics to microbial community analysis

--END--

100
100
100



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