



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES
DEPARTMENT OF PURE & APPLIED SCIENCES
UNIVERSITY EXAMINATION FOR:
BACHELOR OF TECHNOLOGY IN INDUSTRIAL MICROBIOLOGY AND
BIOTECHNOLOGY
AAB 4201: BACTERIOLOGY
END OF SEMESTER EXAMINATION
SERIES: DECEMBER 2016
TIME: 2 HOURS
DATE: Pick Date Select Month Pick Year

Paper 2

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of Choose No questions. Attempt Choose instruction.

Do not write on the question paper.

Question ONE

a) Name diseases caused by the following bacterial species (4mks).

1. *Corynebacterium diphtheriae*

2. *Bacillus anthracis*

b) Explain the principle of Gram staining technique (6mks)

c) Give 2 examples of spore forming and non spore bacteria (4mks)

d) List unique characteristics of gliding bacteria (4mks)

e) Describe health risks associated with Cyanobacteria (6mks)

f) Describe any 3 forms of cancer associated with *Mycoplasma* in humans (6mks)

Question TWO

Discuss the unique characteristics of genus *Mycobacterium* (20mks)

Question THREE

Describe the structure and medical relevance of bacterial cell walls (20mks)

Question FOUR

Using illustrations, describe the basic arrangement of cells in coccus bacteria (20mks)

Question FIVE

Discuss the economic roles of bacteria in the environment (20mks)