



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF PURE & APPLIED SCIENCES

UNIVERSITY EXAMINATION FOR:

BSFO, BSCH, BSEH

AAB 4106 : GENERAL MICROBIOLOGY

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2016

TIME: 2 HOURS

DATE: Pick Date Dec 2016

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

Question ONE

- a) Different bacterial cells stain differently in the gram staining technique. Explain.(6 marks)
- b) Distinguish between the Enriched and Enrichment media. (4 marks)
- c) Describe the preparation of specimen slides for laboratory staining and visualization (4mrks)
- d) Briefly discuss the distinguishing features of filamentous fungi (4 marks)
- e) State Four differences between bacteria and viruses. (4 marks)
- f) Describe the flaming technique in sterilization. (4 marks)
- g) Describe the economic importance of yeasts (4 marks)

Question TWO

Discuss the role of microorganisms in the following;

a) Agriculture (10 marks)

b) Food industry (10 marks)

Question THREE

Plot a graph to explain typical bacterial growth under batch conditions. (20 marks)

Question FOUR

Discuss the environmental requirements of typical microbes for growth and reproduction. (20 marks)

Question FIVE

You have isolated a bacterium from spoiled fish on culture media. Describe the steps you will follow to identify the isolate. (20 marks)