

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY** **OF AGRICULTURE AND TECHNOLOGY**

# UNIVERSITY EXAMINATIONS 2015/2016

**SECOND YEAR SECOND SEMESTER / FIRST YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGICAL, MICROBIOLOGY, BIOTECH, FISHERIES AND CHEMISTRY**

**SBT 2173: INTRODUCTION TO MICROBIOLOGY**

**DATE: APRIL 2016 TIME: 2 HOURS**

**INSTRUCTIONS: ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER**

**TWO QUESTIONS**

**QUESTION ONE (30 MARKS)**

a) Briefly describe one technique of microbial oblation. [6 mark]

b) Write short notes on Robert Koch in relation to his contribution in Microbilogy. [6 marks]

c) Differentiate between the following terms

(i) Autotrophs and heterotrophs [3 marks]

(ii) Mesopholic and psychropholic bacteria. [3 marks]

d) Outline the concept of gram staining. [6 marks]

e) State six characteristics of bacteria. [6 marks]

**QUESTION TWO**

a) Discuss Microbial growth. [20 marks]

**QUESTION THREE**

a) Discuss the Economic Importance of Microorganisms. [20 marks]

**QUESTION FOUR**

a) Discuss identification of Microorganisms. [20 marks]