



KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR
FIRST YEAR SECOND SEMESTER
SPECIAL/SUPLIMENTARY EXAMINATION

FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY, BACHELOR OF SCIENCE BIORESOURCE MANAGEMENT AND CONSERVATION AND BACHELOR OF AGRICULTURAL EDUCATION AND EXTENSION

COURSE CODE: SBT 122
COURSE TITLE: GENERAL MICROBIOLOGY

DATE: 18TH OCTOBER, 2018 **TIME: 8:00 -10:00 A.M.**

INSTRUCTIONS TO CANDIDATES

Answer Question one (1) and any other two (2) Questions. Question one is compulsory and carries 30 marks, the other Questions carry 20 marks each.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over
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1 a) Define the following terms (3 marks)

i Microbiology

ii Bacteremia

b) Explain the contribution made by Louis Pasteur to the current scientific world (3marks)

c) Explain the importance of studying microbiology (3marks)

(d) Explain the treatment of milk (3marks)

(e) Explain the physical requirements of bacterial growth (3 marks)

(f) Explain how you in how would you control the outbreak of Vibrio cholera in a given village (3 marks)

(g) Explain the mode of transmission of Treponema pallidum (causative agent of syphilis) (3marks)

(i) Explain how one can get infected with HIV Human immunodeficiency viruses (3 marks)

(j) Explain how water can be purified by sedimentation (3 marks)

(k) Explain opportunistic virus infections (3 marks)

2 (a) Explain down the procedure for Ziel Nelsen (ZN) stain (10 marks)

(b) With the aid of diagrams describe the bacterial classification basing on their shapes (10 Marks)

3 a) Describe sterilization by moist heat (10 Marks)

b) Most microbial diseases are categorized as infectious; explain the qualities of a successful pathogen of a communicable disease (10)

4 Explain the effects of microorganisms on the host (20 Marks)

5 Microorganisms splay a big role in the treatment of sewage or waste water. With the aid of a diagram, explain how microorganisms aid in stabilization of sewage or waste water in an oxidation lagoons or ponds