



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE
AND TECHNOLOGY**

UNIVERSITY EXAMINATIONS 2012/2013

2ND YEAR 2ND SEMESTER EXAMINATIONS FOR THE

DEGREE OF BSC. PUBLIC HEALTH

(KISII LEARNING CENTRE)

COURSE CODE: HPD 3226

COURSE TITLE: MEDICAL BACTRIOLOGY

DATE: 21/4/2013

TIME: 9.00-11.00AM

DURATION: 1.5 HOURS

INSTRUCTIONS

- 1. This paper contains TWO sections.**
- 2. Answer ALL questions in section A (Compulsory) and ANY other Two questions in section B.**
- 3. Write all answers in the booklet provided**

1. a) What are spreading factors? 3mks
 - b) List 5 spreading factors with examples of bacteria that produce them and briefly mention their functions. 12mks
 - c) Briefly discuss *Clostridium tetani* under the following subtopics. 15mks
 - i. Distribution
 - ii. Pathogenesis and Clinical manifestation
 - iii. Diagnosis and Treatment
 - iv. prevention and control
- Q2 Microbial strategies to avoid phagocytic killing are aimed at blocking one or of more steps in the phagocytic process. By special reference to the steps in phagocytosis, outline these strategies. 20mks
- Q3 Discuss the three types of human plague 20mks
- Q4 As a public health officer, you are called to investigate a suspected food poisoning incidence. After taking the necessary investigative procedures, you are asked to give the public the most important steps that would prevent further food poisoning.
- a) Outline the steps of control as you would prefer. 8mks
 - b) Write short notes on food poisoning due to the following organisms. 12mks
 - i. *Salmonella*
 - ii. *Clostridium botulinum*
 - iii. *Listeria*
 - iv. Enteropathogenic *Escherichia coli*
- Q5. a). List the Most Clinically Relevant Methods for bacterial identification. 10mks
- b). outline the mode of action of the following antibiotics. 10mks
 - i. Erythromycin
 - ii. Chloramphenicol
 - iii. Rifamycin
 - iv. Quinolones and fluoroquinolones
 - v. Sulfonamides (Sulfa drugs)