



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

MAIN CAMPUS

UNIVERSITY EXAMINATION DECEMBER 2018 SECOND YEAR FIRST SEMESTER EXAM FOR

THE DEGREE OF BACHELORS IN PUBLIC HEALTH / COMMUNITY HEALTH AND

DEVELOPMENT

HCD 3226: MEDICAL BACTERIOLOGY

EXAM VENUE: **STREAM: (BSc. P. Health / Comm Hlth & Dev)**

DATE: **EXAM SESSION:**

TIME: 2.00 HOURS

INSTRUCTIONS:

1. THIS PAPER CONSISTS OF TWO SECTIONS A&B
2. ANSWER ALL THE QUESTIONS IN SECTION A AND ANY OTHER 2 QUESTIONS IN SECTION B
3. CANDIDATES ARE ADVISED NOT TO WRITE ON THE QUESTION PAPER.
4. CANDIDATES MUST HAND IN THEIR ANSWER BOOKLETS TO THE INVIGILATOR WHILE IN THE EXAMINATION ROOM

SECTION A- ANSWER ALL QUESTIONS (30 MARKS)

1. Briefly describe the pathogenesis of rheumatic fever in humans (3 marks)
2. Briefly explain *Streptococcus pyogenes* (3 marks)
3. Differentiate endotoxins from exotoxins (4 marks)
4. Highlight 4 characteristics of bacteria (4 marks)
5. Outline any 2 unique characteristics of gram positive bacteria (4 marks)
6. Outline bacterial flagellation, citing examples in each category (4 marks)
7. Briefly explain any 4 classifications of bacteria (4 marks)
8. Outline any 4 main functions of plasma membrane (4 marks)

SECTION B- ANSWER ANY TWO QUESTIONS FROM THIS SECTION (40 MARKS)

9. Describe the five pathologies caused by *Staphylococci aureus* (20 marks)
10. Describe with four examples the morphological classification of bacteria(20marks)
11. Discuss the etiology of botulism (20 marks)
12. Tuberculosis is a major community health problem. Discuss (20 marks)