



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE
2ND YEAR 2ND SEMESTER 2018/2019 ACADEMIC YEAR
KISUMU LEARNING CENTRE

COURSE CODE: HCD 3226

COURSE TITLE: MEDICAL BACTERIOLOGY

EXAM VENUE: STREAM: BSc Community Health & Development/BSc Public Health

DATE: EXAM SESSION:

TIME: 2.00 HOURS

Instructions:

- 1. Answer all questions in section A and any two from section B**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

Section A: Answer ALL Questions (Total 30 marks)

1. Define a communicable disease and give two examples describing their transmission (2mks)
2. State any three bacterial organelles describing their function (3mks)
3. Staphylococcus Aureus produces several enzymes and toxins enabling it to cause disease.
Name any six enzymes, describing their function. (6mks)
4. Describe two complications arising from inadequately treated streptococcal infections (4mks)
5. Describe three methods that can be employed to diagnose pulmonary tuberculosis. (6mks)
6. Differentiate multi-drug (MDR) and extensively drug Resistant (XDR) tuberculosis (3mks)
7. Describe any three antigenic structures of Neisseria gonorrhoea. (6mks)

Section B: Answer ANY TWO Questions (Total 20 marks)

1. Discuss
 - a. Transmittance routes of bacterial diseases giving an example in each case (10mks)
 - b. Mechanisms employed by bacterial pathogens to cause diseases giving examples (10mks)
2. Discuss the following;
 - a. Prevention and control strategies that could be employed to curb spread of Staphylococcal infections as an issue of public concern. (10mks)
 - b. Prevention and control measures that can be put in place to prevent the spread of Tuberculosis. (10mks)
3. Attempt the following:
 - a. Discuss the pathogenesis of *Neisseria Gonorrhoea* (10mks)
 - b. Discuss the Lancefield grouping of streptococci (10mks)
4. Discuss
 - a. The pathogenesis and clinical presentation of plaque in human (15mks)
 - b. Prevention and control of plaque (5mks)