JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE IN COMMUNITY HEALTH AND DEVELOPMENT

2ND YEAR 2ND SEMESTER 2018/2019 ACADEMIC YEAR

KISUMU CAMPUS

COURSE CODE: HCD 3226

COURSE TITLE: MEDICAL BACTERIOLOGY

DATE: 14/08/2019   **EXAM SESSION: 2.00 – 4.00 PM**

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 the terms prokaryotes and eukaryotes and state any three distinguishing characteristics between the two groups. (5 mks)
2. What is a communicable disease? Give 2 examples of bacterial diseases, naming the causative organism in each case. (3 mks)
3. Describe 3 fundamental bacterial shapes giving an example in each case and the disease it causes in human. (6 mks)
4. Describe two complications of an inadequately treated streptococcal infection (4 mks)
5. Briefly explain three methods that can be used in diagnosis of Pulmonary tuberculosis

   (6 mks)
6. Define the following terms
   a. Multi-drug resistant tuberculosis (1 mk)
   b. Extensively drug resistant tuberculosis (1 mk)
7. State any two bacterial organelles describing their function (4mks)

4. Section B: Answer ANY TWO Questions (Total 40 marks)

1. Discuss the following giving an example in each case:
   a. How bacterial diseases are transmitted from one person to another (10mks)
   b. Mechanisms employed by bacterial pathogens to cause diseases (10mks)
2. Discuss the following;
   a. Prevention and control strategies that could be employed to curb spread of Staphylocal infections as an issue of public health concern. (10mks)
   b. Prevention and control measures that can be put in place to prevent the spread of mycobacterial infections. (10mks)
3. Discuss the following:
   a. Pathogenesis of *Neisseria Gonorhea.* (10 mks)
   b. Temperature as a bacterial growth reguirement, its importance in public health and how the same can be used to control bacterial diseases. (10mks)

4. Discuss
   a. The pathogenesis and classification of plaque in human (15 mks)
   b. Prevention and control of plaque (5 mks)