JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE PUBLIC HEALTH/ COMMUNITY HEALTH AND DEVELOPMENT

3RD YEAR 2ND SEMESTER 2015/2016 ACADEMIC YEAR

KISII CAMPUS

COURSE CODE: HCD 3325

COURSE TITLE: BASIC IMMUNOLOGY

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

DATE: AUGUST 2016 **EXAM SESSION: MAY - AUGUST**

TIME: 2.00 HOURS

Instructions:

1. **Answer all questions in section A and any other 2 questions in 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 in this section (30 marks)

1. a) Identify four major components of innate immunity (2mks)
   b) Explain the principle behind sebaceous gland as an immunologic gland (1mks)

2. Differentiate the activities that occur in type I anaphylactic reaction during the immediate response phase and the late phase (3mks)
3. a) Briefly describe Immune hymolytic anaemia (IHA) as an autoimmune disorder (1mks)
   b) Identify four immunological functions of lymph node (2mks)
4. What is the significance of the following as immunologic processes
   a) Diapedesis (1mk)
   b) Magination (1mk)
   c) Apoptosis (1mk)
5. a) Identify four qualities of acquired immunity (2mks)
   b) Citing one example, briefly explain the source and functions of acute phase reactants (1mk)
6. During the process of hematopoiesis, as cells mature, some of them loose the ability to divide. Citing relevant examples explain why this is so. (3mks)
7. Illustrate the structure of a monocyte cell. (3mks)
8. Briefly explain the activities of T helper cells in immunology (3mks)
9. Identify an immune cell that actively involved in rejection of tumor and virally infected cells and the mechanism involved. (3mks)
10. a) Identify any four requirements of a vaccine (2mks)
    b) Briefly explain any two effector functions of an antibody (1mk)

SECTION B : Answer any two Questions (40 Marks)

1. Describe the major events of an inflammatory response (20mks)
2. Discuss the role of MALT in body defense. (20mks)
3. Citing relevant examples, describe the various strategies directed against acquired immunity by microorganisms (20mks)
4. Describe the classical pathway of complement activation (20mks)