



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR DIPLOMA IN COMMUNITY HEALTH AND
DEVELOPMENT
3RD YEAR 2ND SEMESTER 2018/2019 ACADEMIC YEAR
NAMBALE CAMPUS

COURSE CODE: HCD 3325

COURSE TITLE: BASIC IMMUNOLOGY

EXAM VENUE:

STREAM: BSc. In Public Health/ Community Health & Development

DATE: **EXAM SESSION:**

TIME: 2 HOURS

Instructions:

- 1. Answer all the questions in Section 'A' and ANY two questions in Section 'B' each contain 20 marks**
- 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 THE QUESTIONS IN THIS SESSION (30 MARKS)

1. Define the following the following terms (3 marks)
 - a) Haptens
 - b) Cytokines
 - c) Neutralization
2. Give the full name and meaning of an APC's in immunity? (1 mark)
3. From where do NK cells receive their activation signals (2 marks)
4. What is the difference between the two MHC? (2 marks)
5. Name **FOUR** characteristics of innate immunity (2 marks)
6. How does incubation period of a disease influence its response to immunity? (3 marks)
7. What is the example of sensitization to exogenous alloantigens? (3 marks)
8. What is the effect of T cell activation? (3 marks)
9. Name some of the types of vaccines in terms of their production? (3 marks)
10. Give some of the steps involved when a macrophage ingests a pathogen (4 marks)
11. What are the chains of events in the cell-mediated response? (4 marks)

SECTION B: ANSWER ANY OF THE TWO QUESTIONS IN THIS SESSION (40 MARKS)

1.
 - a) Differentiate between the primary and secondary lymphoid organs? (10 marks)
 - b) What is the consequence of antigen-antibody reactions (10 marks)
2.
 - a) What are some of the factors that influence development of immune response? (10 marks)
 - b) Name and give functions of different types of T-cells? (10 marks)
3.
 - a) Discuss the mechanisms of B cells activation? (10 marks)
 - b) Illustrate the process of hematopoiesis? (10 marks)
4.
 - a) Give 5 ways in which microbes evade immune response? (10 marks)
 - b) Discuss the schedules for the KEPI in Kenya? (10 marks)