



**SECOND YEAR EXAMINATION FOR THE AWARD OF THE DEGREE OF
BACHERLOR OF SCIENCE BIOTECHNOLOGY, BIOCHEMISYRY & CELL
AND MOLECULAR BIOLOGY
SECOND SEMESTER 2022/2023
(JUNE - SEPTEMBER, 2022)**

BIOC 221/ZOOL 221: INTRODUCTION TO IMMUNOLOGY

STREAM: Y2 S2

TIME: 2 HOURS

DAY: THURSDAY, 9:00 AM – 11:00 AM

DATE: 15/09/2022

INSTRUCTIONS:

- 1. Do not write anything on this question paper.***
- 2. Answer ALL Questions in section A (Compulsory) and any other TWO***

SECTION A (40 Marks)

1. Explain experimental criteria to determine disease causation of according to Koch (5Marks)
2. Briefly explain the causes of immunogenicity (5Marks)
3. Explain the major features of innate immunity (5Marks)
4. Discuss Host-Pathogen interactions and the body's normal flora (5Marks)
5. Use a diagram to classify adaptive immunity (5Marks)
6. Outline a diagrammatic scheme to show lineage of Leucocytes (5Marks)
7. Discuss the steps involved in an inflammatory reaction (5Marks)
8. Explain the functions of primary lymphoid organs (5Marks)

SECTION B (30 Marks)

9. Discuss the causes of autoimmune diseases (15Marks)
10. Discuss the basic structure and functions of antibodies (15Marks)
11. Give a detailed explanation of mechanisms of pathogenesis (15Marks)