

**BOWEN UNIVERSITY, IWO
DEPARTMENT OF BIOLOGICAL SCIENCES**

2010/2011 SECOND SEMESTER EXAMINATION

MCB 411: IMMUNOLOGY

Answer questions **one** and any two others.

Time: 2hr 15 mins.

1. (a) Write short notes on
 - (i) Histocompatibility antigens
 - (ii) Xenograft
 - (iii) Allergens
 - (iv) Major causes of immunodeficiencies
- (b) Discuss the types of acquired immunity you know. (30 Marks)

2. (a) What are complements? Briefly discuss the types found in the human system.
- (b) Discuss briefly the biological importance of the complement activation in man. (20 Marks)

3. (a) Describe the basic structure of an immunoglobulin.
- (b) Give the basic classes of immunoglobulins.
- (c) What are the differences between immunoglobulins M and G in terms of structure and function? (20 Marks)

4. (a) Give a concise definition of immune disease.
- (b) Comment briefly on type IV hypersensitivity reaction in man. (20 Marks)

5. (a) Explain the mechanisms of antibody – antigen reaction.
- (b) List the different leukocytes of the immune system. (20 Marks)