

 **NATIONAL OPEN UNIVERSITY OF NIGERIA**

**Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja**

**Faculty of Science**

**JULY, 2017 EXAMINATION**

**COURSE CODE: BIO406**

**COURSE TITLE: PARASITOLOGY AND IMMUNOLOGY**

**CERDIT UNIT: 2**

**TIME: 2 HOURS**

**INSTRUCTION: ANSWER QUESTION ONE (1) AND ANY OTHER THREE (3) QUESTIONS**

1. (a) Enumerate the variables involved and the ultimate outcome of a host becoming inoculated

 by a pathogen. (4 marks)

 (b) Outline the **three** techniques that make prevention as a means of protection. (3 marks)

 (c) Give a detailed description of the specific immune response to infection. (6 marks)

 (d) Account for the evidence to show that graft rejection is immunological (12 marks)

2. (a) List the three characteristics for antigen to be immunogenic. (3 marks)

 (b) Write **short notes** on the following:

 i. Antigen-presenting cells(4 marks)

 ii. Tumour antigens(4 marks)

 iii. Nativity (4 marks)

3. (a) Outline any three types of hypersensitivity. (3 marks)

 (b) In a tabular form describe **three** types of delayed hypersensitivity reactions under the

 following headings; clinical appearance, histology, antigen and site (12 marks)

4. (a) List the factors that restrain the development of autoimmune responses. (3 marks)

 (b) Write short notes on the following:

 i. Artificially acquired active immunity (4 marks)

 ii. Naturally acquired passive immunity (4 marks)

 iii. Artificially acquired passive immunity (4 marks)

5. (a) Define organ transplantation. (3 marks)

 (b) Describe the four types of traditional vaccines. (4x3=12 marks)