



**National Open University Of Nigeria**  
**Plot 91, Cadastral Zone, NnamdiAzikiwe Expressway, Jabi - Abuja**  
**Faculty of Science**  
**JANUARY/ FEBRUARY 2018 EXAMINATION**

**COURSE CODE: BIO 408 (2 CREDIT UNITS) TIME ALLOWED: 2HOURS**

**COURSE TITLE: SOIL ECOLOGY**

**INSTRUCTION: QUESTION ONE IS COMPULSORY AND ANY OTHER THREE QUESTIONS.**

- 1a What is Bio-Integration? **(6 marks)**
- 1b Outline and explain the factors determining soil formation **(15 marks)**
- 1c Outline the four soil formation processes **(4 marks)**
  
- 2a List any three primary pools or reservoirs of nutrients in a soil **(3 marks)**
- 2b What is a soil moisture regime? **(3marks)**
- 2c Outline and define the five main classes of soil based on soil moisture regime **(9 marks)**
  
- 3a Enumerate the six basic types of reactions governing Chemical weathering **(6 marks)**
  
- 3b List and explain any three major causes of physical weathering **(9 marks)**
  
- 4a What is Biogeochemical Weathering **(3marks)**
- 4b Briefly, describe the four principal shapes of soil **(12 marks)**
  
- 5a Identify and describe any four factors affecting the growth of soil organisms**(12 marks)**
- 5b Outline any three merits of Soil Organisms **(3 marks)**