

**National Open University of Nigeria**  
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja

**Faculty of Sciences**

**Department of Pure and Applied Sciences**

**2023 2 EXAMINATIONS**

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**COURSE TITLE: SOIL ECOLOGY**

**COURSE CODE: BIO 408**

**TIME ALLOWED: 2 HOURS**

**CREDIT UNIT: 2 Units**

**INSTRUCTION: ANSWER QUESTION 1 AND ANY OTHER THREE QUESTIONS**

- 1a. Discuss the chemical components of soil -5mks
- b. Explain the procedures for collecting composite samples of soil -8mks (step-wise)
- c. State the precautions that must be taken during plant tissue analysis -6mks
- d. Discuss in details the application of plant analysis -6mks
  
- 2a. Discuss the rationale for carrying out tissue analysis – 7mks
- b. Describe the features, distribution and utilization of Vertisols -8mks
  
- 3a. Give a detailed account of physical weathering -8mks
- b. Describe in details soil suborders -7mks
  
- 4a. Describe the features of sedimentary rocks -5mks
- b. Give a detailed discussion of soil depth and layering -10mks
  
- 5a. Explain in details reasons for carrying out soil analysis -5mks
- b. Give a detailed description of Sulfur Cycle -10mks