

# 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
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- 2a. Discuss the rationale for carrying out tissue analysis – 7mks
  - b. Describe the features, distribution and utilization of Vertisols -8mks
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- 3a. Give a detailed account of physical weathering -8mks
  - b. Describe in details soil suborders -7mks
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- 4a. Describe the features of sedimentary rocks -5mks
  - b. Give a detailed discussion of soil depth and layering -10mks
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- 5a. Explain in details reasons for carrying out soil analysis -5mks
  - b. Give a detailed description of Sulfur Cycle -10mks