



NATIONAL OPEN UNIVERSITY OF NIGERIA
Plot 91, Cadastral Zone, University Village, Nnamdi Azikiwe Expressway, Jabi,
Abuja
Faculty Agricultural Sciences
DEPARTMENT OF CROP AND SOIL SCIENCES
2020_2 EXAMINATION

SOS 301- INTRODUCTION TO PEDOLOGY AND SOIL CLASSIFICATION
EXAMINATION

Instruction: Answer 4 questions in all; No. 1 is compulsory and carries 25 marks and any other three questions carrying 15 marks each. 2 CU

Question D.

1. a. Give a full description of the term “soil” (10 marks)
b. Fully explain the origin and formation of soil (15 marks)
2. Mention and briefly explain the five factors of soil formation (15 marks)
3. a. Define soil morphology (3 marks)
b. Explain briefly the following morphological properties (12 marks)
 - i. micromorphology
 - ii. Porosity
 - iii. Soil texture
4. a. What is soil survey? (5 marks)
b. Explain the components of soil survey (10 marks)
5. a. Mention at least ten (10) Orders in the US Soil Classification Systems (10 marks)
b. How can crop rotation be used in soil fertility maintenance (5 marks)
6. a. Briefly describe the properties of Nigerian soil (10 marks)
b. State at least 5 chief factors contributing to soil fertility (5 marks)