



**NATIONAL OPEN UNIVERSITY OF NIGERIA  
FACULTY OF AGRICULTURAL SCIENCES  
DEPARTMENT OF CROP AND SOIL SCIENCE**

**EXAMINATION: 2020\_1 POP EXAMINATION**

**COURSE CODE: SLM 303**

**COURSE TITLE - INTRODUCTION TO PEDOLOGY AND SOIL CLASSIFICATION**

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

**QUESTION**

1. a. Define Soil Survey? (5 marks)  
b. What is soil profile, list the components of soil profile (10 marks)  
c. Explain the factors of soil formation (10 marks)
2. a. Briefly explain the following deposits in soil formation  
i. Loess  
ii. Alluvial  
iii. Marine  
iv. Organic (8 marks)  
b. What do you understand by weathering,  
Mention 5 processes involved in chemical weathering (7 mark)
3. a. What do you understand by soil classification? (5 marks)  
b. State the major objectives of soil classification (5 marks)  
c. Mention 3 major types of soil and how they can be identified (5 marks)
4. a. What are soil components (5 marks)  
b. Explain size of soil particles (5 marks)  
c. Briefly explain soil texture (5 marks)
- 5 a. Mention Five (5) orders in the USDA soil taxonomy (5 marks)  
b. Briefly explain the five (5) orders mentioned above (10 marks)
6. a. Briefly explain the Nigerian Soils (5 marks)  
b. Briefly describe four (4) different ecological zones in Nigerian climate (10 marks)