



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

**EXAMINATION: 2021\_1 POP EXAMINATION™**

**COURSE TITLE: ADVANCED SOIL FERTILITY (2 CU)**

**COURSE CODE: SLM 501**

**TOTAL SCORE: 70 MARKS**

**INSTRUCTION: Answer 3 questions in all**

*Question 1 is compulsory (30 marks) and any other TWO questions (20 marks each)*

**TIME ALLOWED: 2 Hours**

1. a. Define soil and explain its two (2) main groups (10 marks)  
b. Explain the components of the soil (10 marks)  
c. Outline the functions or roles of the soil in agricultural productivity (10 marks)
2. a. Mention major soil types in Nigeria Savannah (10 marks)  
b. Discuss the features of soils in (a) above (10 marks)
3. a. Define soil fertility and state the factors affecting it (10 marks)  
b. What is the importance of soil fertility to agriculture (10 marks)
4. a. What are nutrient elements? Discuss 3 factors that determine their classification (10 marks)  
b. Discuss the two (2) basic forms of nutrient elements in the soil (10 marks)