



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

**EXAMINATION: 2021\_1**

**COURSE CODE: SLM 305**

**COURSE TITLE: Introductory Soil Chemistry, Fertility and Micro-biology**

**INSTRUCTIONS:** Answer four questions in all. Question one is compulsory 25 marks and any three questions 15 marks each.

**TIME ALLOWED:** 3 hours

**QUESTIONS**

- 1)
  - a) List five micro-nutrients that you know. (5 marks)
  - b) Explain the roles mycorrhizae plays in the availability of micro nutrients to crops. (10 marks)
  - c) Outline the importance of soil fungi in agriculture. (10 marks)
- 2) What do you understand by soil acidity and alkalinity in soil chemistry (10 marks)
- 3) Based on the mode of respiration of soil organisms, explain the term
  - a) Aerobes (5 marks)
  - b) Anaerobes (5 marks)
  - c) Facultative Anaerobes (5 marks)
- 4)
  - a. What are soil fungi.(5 marks)
  - b. List the physical and chemical importance of termites in tropical Africa. (10 marks)
- 5) Discuss the importance of soil pH in crop production. (15 marks)