

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

EXAMINATION: 2021\_2 POP EXAMINATION TO

COURSE TITLE: INTRODUCTORY SOIL CHEMISRY, FERTILITY AND

MICROBIOLOGY(3CU) COURSE CODE: SLM 305 2021 EXAMINATION SET B TOTAL SCORE: 70 MARKS

INSTRUCTION: Answer FOUR Questions in all.

Question 1 is compulsory (25marks) and any THREE Questions (15 marks

each)

**TIME ALLOWED: 3 hours** 

Q1

- (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)

Q2

What do you understand by soil acidity and alkalinity in soil chemistry (15 marks)

Q3

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)

**Q**4

(a) What are soil fungi.(5 marks)

(b) List the physical and chemical importance of termites in tropical Africa. (10 marks)

Q5

Discuss the importance of soil pH in crop production. (15 marks)