



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

EXAMINATION: 2021_1 POP EXAMINATION

COURSE TITLE: SOIL MICROBIOLOGY AND BIOCHEMISTRY (2 CU)

COURSE CODE: SLM 505

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

Q1

- a. Elaborate on micro-organisms in soils (10 marks)
- b. Discuss the three (3) domains of living organisms (20 marks)

Q2

- a. Explain in details microbial sampling problems (10 marks)
- b. Outline methods used in microbial ecology (5 marks)
- c. Briefly describe electron microscope (5 marks)

Q3

Discuss at least five (5) environmental factors affecting bacterial abundance in the soils (20 marks)

Q4

- a. Briefly explain forms of Nitrogen in the soil (10 marks)
- b. Write on Nitrogen mineralization (10 marks)