



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

EXAMINATION: 2021_1 POP EXAMINATION

COURSE CODE: SLM 514

COURSE TITLE: SOIL ECOSYSTEM (2 UNITS)

TOTAL SCORE: 70 MARKS

INSTRUCTION: Answer *THREE* Question in all

Question 1 is compulsory (30 marks) and any TWO Questions (20 marks)

TIME ALLOWED: 2 hours

Q.1a. Define and explain the meaning of microbial ecology (1 Mark)

b. Differentiate between the following discrete categories of organisms in the ecosystem: Producers, Herbivores, Primary carnivores, Secondary carnivores and Decomposers (6 Marks)

c. In a Table form classify soil organisms indicating their major and smaller groups' size and examples (23 Marks)

Q.2a. Without microorganisms there will be no organic matter decomposition. Discuss the assertion, describing clearly, the process and products formed after decomposition. (11 Marks)

b. Explain the meristic approach to soil ecosystem development. (9 Marks)

Q. 3. Discuss the decomposition of the various components of organic matter. (20 Marks)

Q. 4. Differentiate between aerobic and anaerobic soil organisms. (20 marks)