



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

EXAMINATION: 2021_2 POP EXAMINATIONTM

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. The soil constitutes a variety of organisms forming a food web. List any 10 of these organisms, factors affecting their composition, number and activities. (16 Marks)

b. State clearly the factors affecting the soil ecosystem functions. (14 Marks)

Q.2a. Explain the nature of the Symbiosis between Rhizobia and Legumes and the diversity of Organisms Involved in Nitrogen Fixation (20 Marks)

Q. 3. Highlight the importance of dead Plants as Source of energy and relationship between plants and soil microorganisms. (20 marks)

Q.4a. Is there any benefit in the direct relationship between the Soil and Plants? (10 Marks)

b. Explain the development of Plant Roots relative to their role in the Soil (10 Marks)