



**NATIONAL OPEN UNIVERSITY OF NIGERIA  
FACULTY OF AGRICULTURAL SCIENCES  
DEPARTMENT OF CROP AND SOIL SCIENCE  
2025\_2 EXAMINATIONS**

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***COURSE TITLE: FERTILIZER TECHNOLOGY (2CU)***

***COURSE CODE: SLM 512***

***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***

1a. Fertilizers are broadly grouped into two (2) types, briefly discuss these groups with at least five different examples of each group. (15 marks)

1b. outline at least five advantages and five disadvantages of organic fertilizer in agriculture. (10 marks)

1c. explain contact placement as one of the methods adopt in fertilizer application (5 marks)

2a. Compost making involves the use of vital materials which aid in the successful production of quality compost manure. Briefly state these materials and their functions. (12 marks)

2b. Mention any 3 (three) nutrient elements that are obtained from the air or water (3 marks)

2c. State the law of minimum in nutrient consumption and the name of the scientist that postulated the law. (5 marks)

3(a). explain the composition of the following potassium fertilizer sources

i. Sulphate of potash (5 marks)

ii. Muriate of potash (MOP) (5 marks)

iii. Potassium sulphate (5 marks)

3(b). State any 5 major functions of potassium as an essential primary nutrient element (5 marks)

4a. State the chemical formula and nutrient contents of the following micronutrient fertilizers

Sodium molybdate (4 marks)

Sodium borate (4 marks)

Copper sulphate (4 marks)

Zinc sulphate (4 marks)

Ferrous(II) sulphate (4 marks)