



**NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF AGRICULTURAL SCIENCES
DEPARTMENT OF CROP AND SOIL SCIENCE
2024_2 EXAMINATION**

COURSE TITLE: PERMANENT CROPS PRODUCTION (2CU)

COURSE CODE: CRP313

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: 1 ½ Hours

1. a. Soil as an environmental factor affects crop production, write on the following: i two soil chemical characteristics. ii two soil physical characteristics iii two soil biotic factors. (18 marks)
b. How can soil acidity be managed.(7 marks)
c. Enumerate five (5) uses of rubber tree and produce.(5 marks)
2. a. Write on permanent crops.(5 marks)
b. Describe five (5) field operations in maintenance of rubber plantation.(10 marks)
c. Differentiate between crop trees and forest trees.(5 marks)
3. a. State three(3) cacao nursery management practices.(3 marks)
b. Explain the following cacao field operations: i planting of seedlings/saplings.ii shade trees establishment and management. iii. Weeding. iv harvesting. (12 marks)
c. All trees has economic values: Explain. .(5 marks)
4. a. State the disadvantages of establishing citrus from seeds.(5 marks)
b. Explain why budding and grafting are preferred in citrus nursery operations (10 marks)
c Identify five(5) of the uses of citrus and its bye products.(5 marks)