



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

EXAMINATION: 2021_2 POP EXAMINATION

COURSE TITLE: INTEGRATED SOIL MANAGEMENT (2 CU)

COURSE CODE: SLM 506

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. What do you understand by “soil erodibility”? (10 marks)
- b. Mention and explain at least 5 factors that influence the size and stability of aggregates (20 marks)

Q2

- a. Discuss the On-site and Off-site effects of water erosion (10 marks)
- b. Explain Sedimentation as part of erosion process (10 marks)

Q3

- a. Discuss the two main classes of organic matter based on the stages of breakdown (10 marks)
- b. Mention and discuss five (5) key management operations of organic matter (10 marks)

Q4

- a. Define carbon sequestration (5 marks)
- b. Outline fifteen (15) practices that can increase carbon stock in soils (15 marks)