

## NATIONAL OPEN UNIVERSITY OF NIGERIA FACULTY OF SCIENCES.

## DEPARTMENT OF ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT Plot 91, Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja 2021 EXAMINATIONS

**COURSE CODE: EMT411** 

**COURSE TITLE: WATER ANALYSIS** 

**CREDIT: 1 Unit** 

**TIME ALLOWED: 1 Hour** 

Instruction: Attempt question number ONE (1) and any other TWO (2) questions. Question

number one (1) carries 30 marks, while the other questions carry (20) marks each.

- 1a. Write a short note on water (9 marks)
- 1b. Examine the need for water analysis (9 marks)
- 1c. Explain water sampling (7 marks)
- 1d. Pointiate justification for surface water sampling? (5 marks)
- 2a. Briefly explain groundwater sampling (10 marks)
- 2b. Explain the approaches to the problem of adequate and economical coverage of ground-water quality in an area (10 marks)
- 3a. What parameters should be considered when analyzing groundwater? (12 marks)
- 3b. Explain the presence of Bicarbonate in water (3 marks)
- 3c. Write short note on Electrical Conductivity of water (5 marks)
- 4a. What is alkalinity? (10 marks)
- 4b. Explain the term charge balance (10 marks)