



**National Open University of Nigeria**  
**Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja**  
**Faculty of Science**  
**2022\_1 EXAMINATIONS**

**COURSE CODE: EMT411**

**COURSE TITLE: WATER ANALYSIS**

**CREDIT: 1Unit**

**TIME ALLOWED: 2 Hours**

**Instruction:** Attempt question number ONE (1) and any other TWO (2) questions. Question number one (1) carries 30marks, while the other questions carry (20) marks each.

1.
  - a. What is Sampling of water? (10 marks)
  - b. What are the techniques used to test these parameters of water? (10 marks)
  - c. Explain Chemical Oxygen Demand (COD) (5 marks)
  - d. Describe the measurement of Silicates & Phosphate in water sample. (5 marks)
2.
  - a. What is Alkalinity? (6 marks)
  - b. Explain Total dissolved solids (8 marks)
  - c. What are the reasons for Surface water sampling? (6 marks)
3.
  - a. Explain groundwater sampling and analysis. (12 marks)
  - b. Name the elements that are usually referred to as the major constituents or primary constituents (8 marks)
4.
  - a. List the factors that are pertinent in selecting containers used to collect and store water samples (6 marks)
  - b. Explain Microbial analysis of water (10 marks)
  - c. What are the health effects of Sulphates in the human body? (4 marks)
5.
  - a. Write briefly on water. (15 marks)
  - b. When analysing groundwater, what are the five (5) common practices to measure? (5 marks)

