



National Open University of Nigeria
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja
Faculty of Science
2023_2 EXAMINATIONS

COURSE CODE: ESM 444

COURSE TITLE: Industrial Waste and Industrial Water Treatment.

CREDIT: 2 Units

TIME ALLOWED: 2 Hours

Instruction: Attempt question number ONE (1) and any other THREE (3) questions. Question number one (1) carries 25 marks, while the other questions carry (15) marks each.

- (1a) Explain the primary treatment of industrial wastewaters. **(13marks)**
(b) Explain in detail the Biological treatment of industrial wastewaters. **(12marks)**
- (2a) State the aim of waste management practice. **(2marks)**
(b) State the various ways of reducing wastes. **(13marks)**
- (3a) Describe a boiler. **(6marks)**
(b) Explain the types of boilers. **(9marks)**
- (4a) What is industrial waste? **(5marks)**
(b) State ten sources of industrial waste. **(5marks)**
(c) Enumerate ten common industrial wastes. **(5marks)**
- (5) Discuss landfill method of disposing wastes. **(15marks)**