

**BINDURA UNIVERSITY OF SCIENCE EDUCATION**  
**FACULTY OF AGRICULTURE AND ENVIRONMENTAL SCIENCE**  
**DEPARTMENT: NATURAL RESOURCES**  
**PROGRAMME: BSc NATURAL RESOURCES MANAGEMENT**

**COURSE CODE: NR126 (1): INTRODUCTION TO WATER RESOURCES MANAGEMENT**

**DURATION: 2 HOURS**

**TOTAL MARKS: 70**

**INSTRUCTIONS TO CANDIDATES**

**JUN 2024**

Answer *Three* questions out of the following five questions. You must answer question *One* from Section A and any *Two* questions from Section B.

**SECTION A (COMPULSORY)**

1. (a) Define eutrophication. [2 Marks]
- (b) What are the negative effects of eutrophication on aquatic ecosystems? [4 Marks]
- (c) Highlight the water allocation systems used in Zimbabwe. [4 Marks]
- (d) Outline the Dublin Principles. [4 Marks]
- (e) Explain ways in which a river system can purify itself. [6 Marks]
- (f) Explore the factors that lead to fresh water scarcity. [10 Marks]

**SECTION B**

2. Using examples, discuss the causes of conflicts emanating from shared fresh water resources. [20 Marks]
3. (a) Examine the notion that 'Wetlands are a fragile ecosystem that provides various goods and services.' [10 Marks]
- (b) Explain how groundwater can be polluted. [10 Marks]
4. Discuss the legislation that governs water use in Zimbabwe. [20 Marks]

5. Formulate temporal water quality monitoring program for of surface water resources in Mashonaland Central.

**[20 Marks]**

**END OF PAPER**