

BINDURA UNIVERSITY OF SCIENCE EDUCATION
FACULTY OF AGRICULTURE AND ENVIRONMENTAL SCIENCE

ESM214

Department of Environmental Science

BSc Honours in Safety, Health and Environmental Management Part II Examination

Environmental Monitoring, Evaluation and Management

2 HOURS (70 Marks)

5 NOV 2024

INSTRUCTIONS TO CANDIDATES

Answer question ONE from SECTION A and any TWO questions from SECTION B.

SECTION A (COMPULSORY)

- 1(a). Describe the six steps used in systems analysis according to Quade and Miser (1995). **[15 Marks]**
- (b). Draw a schematic diagram of the project cycle and explain what happens at each stage. **[15 Marks]**

SECTION B

2. What are the challenges developing countries face, and what obstacles prevent assistance in improving air quality? **[20 Marks]**
3. Explain how the DPSIR model can be used as an analytical framework for assessing eutrophication and organic pollution. **[20 Marks]**
- 4(a). Distinguish ESIA from Strategic Environmental Assessment (SEA). **[10 Marks]**
- (b). Explain the importance of the Logical Framework Matrix in environmental monitoring. **[10 Marks]**
- 5(a). Explain in one to two sentences the term Life Cycle Assessment (LCA) and what the overall goals of the technique are. **[6 Marks]**
- (b). Describe the major life stages of a beef burger purchased from a street burger restaurant. **[6 Marks]**
- (c). What are the inputs, outputs and most important issues at each lifecycle stage? **[8 Marks]**
(You may choose to set out your answer in the form of a table or of bulleted text).

END OF PAPER