BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SCIENCE AND ENGINEERING

DEPARTMENT OF SUSTAINABLE DEVELOPMENT

BACHELOR OF SCIENCE IN SUSTAINABLE DEVELOPMENT

JUN 2025

DG 110: ENVIRONMENTAL SYSTEMS

TIME: 3 HOURS

ANSWER ANY THREE QUESTIONS. MARKS FOR EACH QUESTION ARE INDICATED IN BRACKETS [ ].

1. As a Project Manager responsible for a conservation project in a tropical rainforest, how will you incorporate the concepts of ecosystem components, flows, and transfers into your project plan? **[25]**
2. A project management team is tasked with managing water resources in a drought-prone area. How can understanding the key features of a hydro system and the drainage basin system help them make informed decisions? **[25]**
3. You have just received a final set of climate data for your project's location. How will you use this data to address challenges related to micro-scale circulation systems? **[25]**
4. A project management team is assessing the stability of a construction site. How can the understanding of crustal systems and slope systems help them mitigate geological risks? **[25]**
5. You have been managing an environmental conservation project. How would you differentiate between morphological, cascading, and process-response systems to better understand environmental impacts? **[25]**

END OF PAPER