BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SCIENCE AND ENGINEERING

SUSTAINABLE DEVELOPMENT DEPARTMENT

BACHELOR OF SCIENCE HONOURS DEGREE IN DEVELOPMENT STUDIES

DG110: ENVIROMENTAL SYSTEMS

EXAMINATION **TIME: 3 HOURS**

ANSWER FOUR QUESTIONS. CHOOSE ONE QUESTION FROM EACH SECTION. USE ILLUSTRATIONS AND DIAGRAMS WHERE RELEVANT. MARKS FOR EACH QUESTION ARE INDICATED IN BRACKETS [ ].

SECTION A: LITHOSOHERIC SYSTEMS

1. Define the following terms as used in environmental geography.
   i. Environment [5]
   ii. Cascading system [5]
   iii. Morphological system [5]
   iv. Process-response [5]
   v. Feedback mechanism [5]
2. a) Briefly describe the process of plate tectonics [10]
   b) Examine the development opportunities derived from the crustal systems [15]

SECTION B: ATMOSPHERIC SYSTEMS

3. Using illustrations explain the circulation of energy in the solar cascading system [25]

END OF EXAMINATION

4. Discuss the creation of different weather conditions associated with low pressure systems in the tropical regions [25]

SECTION C: FLUVIAL-HYDRO SYSTEMS

5. a) With the aid of a clearly labelled diagram, explain the components and circulations in the hydrological system [10]

   b) Discuss the threats posed by the hydrological system to development [15]

6. Explain the functioning of a drainage basin system as an open system [25]

SECTION D: BIOSPHERE SYSTEMS

7. Discuss the implications of human activities on natural ecosystems [25]
8. Proffer any possible ways to curtail the impacts of human interference with the soil system [25]

END OF EXAMINATION