



**UNIVERSITY OF SWAZILAND
SUPPLEMENTARY EXAMINATION PAPER**

PROGRAMME: BSC LWM 4 AND BSC AG ED 4

COURSE CODE: LUM 404 S

TITLE OF PAPER: NATURAL RESOURCES MANAGEMENT

TIME ALLOWED: TWO (2) HOURS

SPECIAL MATERIAL REQUIRED: NONE

INSTRUCTIONS: ANSWER QUESTION ONE AND ANY TWO OTHER QUESTIONS.

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BY THE CHIEF INVIGILATOR**

SECTION A. COMPULSORY QUESTION**Question one**

- a. The systems theory is based on the premise that “all elements of a system are interrelated and that the whole is greater than the sum of its parts”. Using an example, discuss how this theory relates to sustainable development. **15 marks**
- b. Discuss how the following factors are important for human development and natural resources conservation;
- i. Education
 - ii. Democratic governance **15 marks**
- c. Describe two practices by which green house gases may be reduced. **10 marks**

SECTION B. ANSWER ANY TWO QUESTIONS**Question two**

- a. Explain how the following components of an environmental impact assessment (EIA) are useful in natural resources management.
- i. Scoping /5
 - ii. Public hearing /5
 - iii. Comprehensive Mitigation Plan /5
- 15 marks**
- b. Discuss three land management issues on Swazi Nation Land that may cause a decline in livestock and crop production. **15 marks**

Question three

- a. Discuss four environmental problems associated with high population density in the world. (You may use examples from your country) **20 marks**
- b. Suggest how the problems discussed in part (a) could be resolved. **10 marks**

Question four

- a. Discuss any three methods of water resources conservation that could be used at farm or country level to promote responsible use of the resource **15 marks**
- b. Describe any three sources of renewable energy that could be used to save non renewable energy sources. **15 marks**