



**UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER**

PROGRAMME: BSC AGRIC. 5 (LWM)

COURSE CODE: LUM 503 M (Old Programme)

TITLE OF PAPER: WATERSHED MANAGEMENT

TIME ALLOWED: TWO (2) HOURS

SPECIAL MATERIAL REQUIRED: NONE

INSTRUCTIONS: ANSWER QUESTION ONE AND ANY TWO
OTHER QUESTIONS.

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GRANTED BY THE CHIEF INVIGILATOR**

SECTION A. COMPULSORY QUESTION

Question One

- a. Discuss how ecological changes as induced by socio-economic factors may affect the health of a watershed. 20 marks

- b. Describe hydrological processes that occur in forested watershed and how they influence water yield. 20 marks

SECTION B. ANSWER ANY TWO QUESTIONS

Question Two

- a. Describe the land degradation patterns on both communal and TDL land in Swaziland and mention the related causes. 20 marks

- b. Explain the meaning of the following terms as used in watershed management;
 - a. Water quality
 - b. Ecological niche 10 marks

Question Three

- a. Discuss how you would ensure “grassroots” participation in watershed management. 20 marks

- b. Describe the importance of wetlands as water resource. 10 marks

Question Four

- a. Discuss the importance of legislation in prevention of soil erosion in Swaziland. 20 marks

- b. What is environmental impact assessment and what is it important for in watershed management? 10 marks