



**UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER**

PROGRAMME: BSc IN HE V & BSc IN HE ED V

COURSE CODE: LUM 501

TITLE OF PAPER: NATURAL RESOURCE MANAGEMENT

TIME ALLOWED: TWO (2) HOURS

SPECIAL MATERIAL REQUIRED: NONE

**INSTRUCTIONS: ANSWER QUESTION ONE AND ANY TWO
OTHER QUESTIONS.**

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN
GRANTED BY THE CHIEF INVIGILATOR**

Question 1. Compulsory question

- a) Discuss the role of national parks in the conservation of natural resources, highlighting the problems to be overcome when conserving the natural resources through national parks. (20 marks)
- b) Discuss four characteristics of water, describing how the characteristics can be used to determine if the water is at its pure state or contaminated. (20 marks)

Question 2

- a) The population of developing countries is increasing at rates higher than that of their economies. Discuss the environmental problems that are brought about by the increase in the population, suggesting means of overcoming the problems. (20 marks)
- b) Discuss how technology can change the status of a named natural resource from being a potential resource to be a renewable resource. (10 marks)

Question 3

- a) Discuss the roles played by predators and parasites in maintaining the ecosystem. (15 marks).
- b) Discuss three methods of water harvesting for domestic water supply, specifying constraints in water harvesting. (15 marks)

Question 4

- a) Ultraviolet radiation is harmful to human beings and it needs to be avoided at all times. Discuss the human activities and actions that allow the ultraviolet radiation to penetrate through the atmosphere to the land, suggesting ways of alleviating the problem. (15 marks)
- b) Acid rain is detrimental to the environment including the trees and aquatic life. Discuss two human activities that contribute to the production of acid rains, specifying ways of overcoming the problem. (15 marks)