



"Investing in Africa's Future"

**COLLEGE OF SOCIAL SCIENCES, THEOLOGY,
HUMANITIES AND EDUCATION**

HES 423 NATURAL RESOURCE MANAGEMENT AND ECONOMICS

END OF SECOND SEMESTER EXAMINATIONS

APRIL/MAY 2018

LECTURER: MR G. R. CHIMONYO

DURATION: 3 HRS

INSTRUCTIONS

1. Do NOT write your name on the answer sheet
 2. Use answer sheets provided
 3. Answer any **THREE (3)** questions
 4. Read and understand all questions and instructions before your answer
 5. Where necessary, illustrate your answers with sketches, figures and diagrams
 6. Each question is marked out of 20 marks
 7. Take note of mark distribution in each question
 8. Begin your answer for each question on a new page
 9. Credit is given to neat presentation of answers
-

Question One

Discuss the difference in point of view of what is meant by the term “value” of natural resources between the economists and environmentalists.

Question Two

Analyse the strengths and weaknesses of any two of the following methods that are used to value environmental benefits. Each analysed method carries a maximum of **TEN (10 marks)**.

- i. The market price approach
- ii. The replacement cost approach
- iii. The Hedonic price approach
- iv. The household production function approach

Question Three

Examine the main elements of the Ecosystem Approach in natural resource management.

Question Four

- a. Explain the following components of non-use values of environmental assets:
 - i. Option value (3 marks)
 - ii. Bequest value (3 marks)
 - iii. Existence value (4 marks)
- b. Explain how the contingent valuation method is used to elicit willingness to pay for the purpose of estimating non-use value of environmental assets. (10 marks)

Question Five

Compare and contrast the use of cost-benefit analysis (CBA) in the private and public sectors project appraisal.

Question Six

Discuss the view that, although the Malthusian Theory has failed to materialize centuries after its pronouncement, it how generally explains the population-resource-environment interrelations.

Question Seven

‘Sustainability should require both economic efficiency and intergenerational equity.’
Discuss.