



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2015/2016

**FOURTH YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN ENVIRONMENTAL
SCIENCE WITH INFORMATION TECHNOLOGY**

MAIN CAMPUS

**NES 401: ECONOMIC VALUATION FOR ENVIRONMENTAL
PROTECTION**

Date: 4th January, 2016

Time: 11.00 - 1.00 pm

INSTRUCTIONS:

- Answer Question ONE (COMPULSORY) and any other TWO Questions.



1. a) Discuss the applicability of Economic Environmental Valuation to the using suitable illustrations. [10 mks]
b) Explain how we can impute values for zero priced environmental resources. [10mks]
c) Using suitable examples, explain what is meant by the following terms.
 - i) Willingness to Pay (WTP) [5mks]
 - ii) Revealed preference [5mks]
2. Free functioning markets cannot be relied upon to take care of the environment. Discuss. [20 mks]
3. With reference to a private manufacturing company that uses environmental resources for production;
 - a) Explain how increasing productivity can be synonymous with decreasing Marginal Variable Costs. [15mks]
 - b) Depict graphically the market scenario in (a) above. [5mks]
4. Explain how you would conduct environmental valuation using Travel Cost Method (TCM). [20 mks]
5. Firms use environmental resources to produce commodities whose sale generates revenue for the firms through the market mechanism. Represent graphically:
 - a) The market interaction of supply and demand that determines the equilibrium price of a commodity. [7 mks]
 - b) Market price that determines the amount of revenue an individual firm receives. [6 mks]
 - c) A self-equilibrating market mechanism of (a) and (b) above [7 mks]
6. Discuss the limitations of Hedonic pricing method. [20 mks]