



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2015/2016

**THIRD YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN ENVIRONMENTAL
SCIENCE WITH INFORMATION TECHNOLOGY**

MAIN CAMPUS

NES 313: SOLID WASTE MANAGEMENT AND PLANNING

Date: 25th April, 2016

Time: 2.30 - 4.30 pm

INSTRUCTIONS:

- Answer question ONE and any other TWO questions.



1. (a) Explain the sources of municipal solid waste. (8 marks)
(b) Differentiate between the following terms:
 - (i) NIMBY and NIABY. (4 marks)
 - (ii) Private waste collection and public waste collection. (4 marks)
 - (iii) Solid waste recycling and solid waste recovery. (4 marks)(c) Explain activities that can be undertaken at the household level to encourage reduction of solid waste at source. (10 marks)
2. (a) Explain the elements of a modern solid waste transfer station design. (12 marks)
(b) Briefly, explain the effects of improper disposal of household hazardous wastes. (8 marks)
3. Discuss the costs involved in the development of a centralized yard composting facility. (20 marks)
4. (a) Explain the factors that would influence selection of solid waste Collection vehicles. (10 marks)
(b) Explain the financing options for solid waste management and planning. (10 marks)
5. Discuss the key steps involved in conducting a solid waste characterization study. (20 marks)
6. "Discuss the major steps in Integrated Solid Waste Management Strategic Planning." (20 marks)