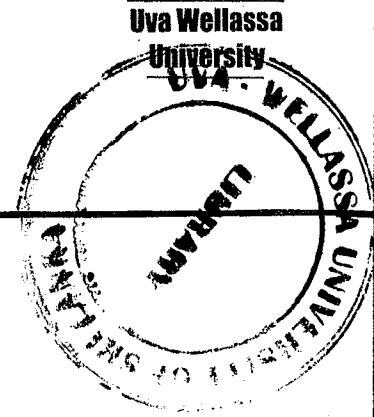


Uva Wellassa University
Faculty of Animal Science & Export Agriculture
BSc in Palm and Latex Technology and Value Addition



End Semester Examination March/ April 2013
Year IV Semester I

Industrial Waste Management (PLT 441-2)



Instructions

- Answer **all** questions
- No. of questions : 03
- No. of page/s : Two (02)
- Time : One hour and Forty Minutes
- Total marks allocated : 30%

Index No:

Part II: Essay

Question 01.

- i) Briefly describe the Coconut oil manufacturing process with the aid of a process flow diagram including all the material inputs and outputs (raw material input/chemical additions, product output and all the other material/waste streams should be clearly indicated)
- ii) State the potential pollutants emitted with the particular waste streams, associated pollution parameters and describe the current environmental issues related to the coconut oil manufacturing processes
- iii) List the potential waste minimization opportunities / CP options that can be implemented before waste treatment and disposal
- iv) Describe the applicable treatment technologies for the treatment of wastewater generated from the above mentioned production processes.

Question 02.

- i) Describe the modes of environmental Pollution , major sources of pollution and associated Pollution Parameters
- ii) Discuss Health & Environmental impacts of water pollution caused by the industries
- iii) What are the local regulations currently in place to control the environmental Pollution issues?
- iv) What are the major global issues on environmental pollution?
- v) Describe the uses or the area of the application of following international Treaties/ Protocols and conventions declared to protect the environment
 - Basel Convention
 - Rotterdam Convention
 - Montreal Protocol

Question 03.

- i) Briefly describe the hierarchy of solid wastes management.
- ii) Explain the benefits of waste recycling as a waste minimization option as well as a resource conservation measure.
- iii) What are the major characteristics of Hazardous waste?
- iv) Briefly describes the most suitable treatment technologies and disposal methods applicable for Biodegradable solid waste and hazardous waste.
- v) What are the available thermal destruction methods in order to facilitate hazardous waste disposal?