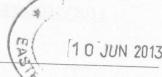
## EASTERN UNIVERSITY, SRI LANKA

## SECOND YEAR FIRST SEMESTER EXAMINATION IN AGRICULTURE – 2010/2011 AE 2101 ENVIRONMENTAL COSERVATION ENGINEERING

Answer all questions Allowed time: Two hours



- 01. (a) Write a brief account on the structure of atmosphere.
  - (b) Differentiate renewable and non renewable energy sources with examples.
  - (c) What are the major environmental problems associated with land and water resources in Sri Lanka?
- 02. (a) List and define the types of pollution.
  - (b) Briefly describe the classification of air pollutants causing environmental pollution.
  - (b) List out the environmental threats created by open dumping of solid wastes.
- 03. (a) Briefly describe the wastewater treatment process.
  - (b) Discuss 'thermal treatment' of solid waste in solid waste management.
- 04. (a) Briefly discuss the process of soil erosion.
  - (b) Calculate the EI30 and KE > 25 indices of rainfall erosivity for the storm data given below.

Time from the start of storm (min)	Rainfall (mm)
01-10	0.6
11-20	4.5
21-30	5.2
31-40	1.8

(Note: KE =  $11.9 + 8.7 \log I$ ,  $I_{30}=23 \text{ mm}$  / hr when kinetic energy of rainfall in  $J/m^2/mm$ )