



The Open University of Sri Lanka  
Faculty of Engineering Technology

Final Examination- 2013/2014

**Bachelor of Industrial Studies (Agriculture)**

**AEI6132 Groundwater Resources Management**

Date : 20-08-2014  
Time : 0930-1230 hours

**SECTION 2: Answer any four (04) questions. All questions carry equal marks.**

1. Briefly explain the shallow groundwater resources in Sri Lanka and the consequences due to improper management of shallow groundwater resources using suitable examples from Sri Lanka
2. (a) Discuss the advantages of Sprinkler irrigation system over the flood irrigation system  
(b) Describe a Sprinkler irrigation system with its components using a detail sketch.
3. (a) What is meant by “Recharge” and explain its importance in ground water resources management.  
(b) Briefly discuss the indirect methods of recharge estimation.
4. Briefly explain the groundwater contamination and the factors affecting the groundwater contamination.
5. Explain briefly the problems and options for managing groundwater as an economic resource.
6. Write brief notes on any three (03) of the following
  - (a) Salinity on coastal aquifers
  - (b) Low cost water purification methods
  - (c) Persistent Organic Pollutants
  - (d) Calculation of Reference Crop Evapotranspiration