



The Open University of Sri Lanka  
Faculty of Engineering Technology  
Final Examination 2005/2006  
**AEI6132 Groundwater resources management**

Date : 16-03-2006

Time : 0930-1230 hours

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**SECTION 2**

**Answer any four (4) questions. All questions carry equal marks.**

1. (a) Briefly discuss the significance of groundwater for domestic use.  
(b) Write a brief description on the bacteriological safety of groundwater
2. (a) Write a brief note on the operation and maintenance of sprinkler systems.  
(b) Explain the importance of moisture distribution patterns and uniformity of coverage in sprinkler irrigation system.
3. Briefly discuss the impact of high concentration of nitrate and fluoride in drinking water on human health.
4. (a) Write a brief note on ground water protection  
(b) Discuss the methods of delineating groundwater protection zone.
5. Describe the importance of aquifer system management classification and aquifer contamination susceptibility map in maintaining groundwater quality.
6. Write a brief note on any three of the following
  - (a) Regional Flow model for Groundwater modelling
  - (b) Drilling methods of tube well
  - (c) Components of Drip irrigation system
  - (d) Natural Protection of Groundwater