



Uva Wellassa University of Sri Lanka
Faculty of Science and Technology
Mineral Resources and Technology Degree Programme
4th Year 2nd Semester Examination – August/September 2014



MRT 451-2 Advanced Hydrogeology

Number of questions: Four (04)

Answer all questions

Time allocation: Two (02) hours

Total marks: 100

1. a. What is the importance of fractures and discontinuities in hydrogeological point of view?
(07 marks)
- b. Describe the factors that control the groundwater flow through fractures.
(18 marks)
2. a. Describe the 'Hydrogeologic mapping' and its importance.
(15 marks)
- b. Describe 'Geologic Cross-Sections' and their importance in hydrogeology.
(10 marks)
3. a. Classify geological formations into categories depending on the relative permeability.
Describe each category.
(18 marks)
- b. What is an Aquifuge?
(07 marks)
4. a. What are the different types of aquifers? Describe briefly.
(18 marks)
- b. An aquifer appearing to be a confined one locally may not be an actual confined aquifer in regional scale. Explain why.
(07 marks)