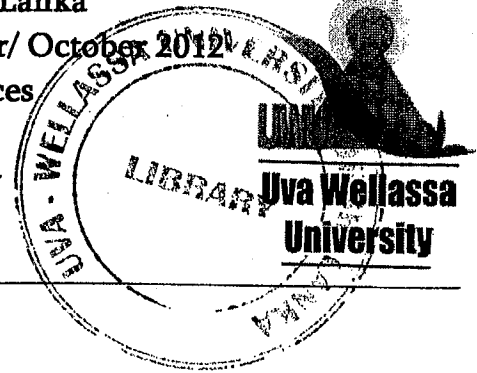


Uva Wellassa University, Sri Lanka
End Semester Examination – September/ October 2012
MRT 251-1 Water Resources

Duration: One (01) hour



Total 04 (four) questions

Answer all questions

Draw sketch diagrams where necessary

01) What is the virtual water tread? How does it affect the water balance of a catchment? Explain with examples.

(30 marks)

02) What are the factors that control the porosity of a rock or soil media? Explain their effects. Arrange the following materials in the order of increasing porosity. Justify your answer describing the physical properties of them.

Chalk

Clay

Shale

Weathered granite

Fractured sandstone

(30 marks)

03) (i) Describe the adverse effects of traditional flood controlling methods.

(ii) "Flood plains are good aquifers". Explain this statement. What kind of aquifers are found in flood plains?

(20 marks)

04) Write short notes on followings topics

(i) The relationship between effective porosity and permeability

(ii) Capillary fringe

(iii) The disease induced by Guinea Worm (Dracunculiasis)

(iv) Edwards Aquifer

(20 marks)