



The Open University of Sri Lanka
Faculty of Engineering Technology

Technology Program

Final Examination- 2009/2010

AEX6233 Hydrology

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

1. (a) Briefly discuss the importance of forecasting in the statistical concepts of hydrology.
- (b) Use the following data and calculate the Pearson's correlation coefficient and discuss the results.

x	y
1.3	151.6
0.9	105.6
1.8	200.0
2.1	221.3
1.5	170.0
7.5	742.2

2. (a) Write a brief note on Unit Hydrograph.
- (b) Briefly discuss the factors affecting the shape of the hydrograph.
3. (a) Write a brief note on "Infiltration".
- (b) Briefly explain the factors affecting the infiltration and the role of infiltration on water resources planning.
4. (a) Write a brief note on the operation and maintenance of sprinkler system
- (b) Explain the importance of moisture distribution patterns and uniformity of coverage in sprinkler irrigation system.
5. Briefly explain five major water resources projects recently planned in Sri Lanka and their advantages and disadvantages.
6. Write a brief note on any three (03) of the following
 - (a) Interception
 - (b) Drilling methods of tube well
 - (c) Components of Drip irrigation system
 - (d) Natural Protection of groundwater