

EASTERN UNIVERSITY, SRI LANKA

FINAL YEAR FIRST SEMESTER EXAMINATION IN AGRICULTURE- 2012/13

(March/April 2015)

AE 4110 – WATER QUALITY FOR AGRICULTURE (2: 15/30)

(PRACTICAL)

Answer all Questions

Time: Two hours

01. What are the parameters considered during the testing of irrigation water quality and state the importance of those parameters.
02. Write the procedure of determining the following parameters in a irrigation water sample
 - a. Total Suspended solids
 - b. Total Solids
 - c. Total Dissolved solids
03. What is turbidity of water and Explain the factors affecting the turbidity.
04. What do you mean by Chemical Oxygen Demand (COD), why it is important to study in water quality?
05. An irrigation water contains carbonate, bicarbonate, calcium and magnesium ions 1, 4, 2.5 and 1.5 me l^{-1} respectively. Calculate the residual sodium carbonate (RSC) content of the irrigation water and give comments for the use of irrigation purposes.
06. An irrigation water having the sodium (Na^+), Calcium (Ca^{2+}) and magnesium (Mg^{2+}) concentrations as 1.5, 2.0 and 1.0 me l^{-1} respectively. Calculate, Soluble sodium percentage (SSP), Sodium Adsorption Ratio (SAR) of irrigation water. Give comments on the use of that water for irrigation.