d. How much area can be covered with a 50-Kg bag of 26-5-10 at the rate of 1.0 Kg nitrogen per 1000 m^2.

e. You are treating a large sports turf complex and would like to determine how many Kg of a 16-8-8 fertilizer should be applied per ha if the recommendation calls for 0.75 Kg nitrogen per 1000 m^2.

3. a. Discuss the benefits and disadvantages of manure (organic) fertilizers

b. List down the uses of plant analysis

c. How can you get soil sample to determine;

i. Mobile nutrient content in soil

ii. Immobile nutrient content in soil.

d. Briefly discuss about the importance of sampling location in soil sampling.

EASTERN UNIVERSITY, SRI LANKA
FINAL YEAR, FIRST SEMESTER EXAMINATION IN AGRICULTURE – 2012/2013
AC – 4111 SOIL FERTILITY EVALUATION AND MANAGEMENT
Practical Examination (Mar –Apr – 2015)

Answer all questions
Time: Two Hours

1.a. Indicate the steps to be followed to prepare a collected plant sample for nutrient analysis

b. Briefly discuss about the diagnostic steps can be adopted to assess soil fertility

c. You have collected soil from location A and B . And allowed the samples to dry at room temperature. Filled two glass jars half way with water, then placed a dry clod of soil from each sample into its jar. Stirred the water gently. Interpret the results based on the observations given bellow.

Soil collected from A:
Soil clods that hold together, that absorb water easily, and that emit air bubbles
Soil collected from B:
Soil that falls apart and gives off few air bubbles

2. a. List down the factors to be considered in fertilizer calculation

b. You have a 50- Kg bag of 26-5-10 fertilizer that you want to apply to a lawn at a rate of 1.0 Kg nitrogen per 1000 m^2. How much of the 26-5-10 fertilizer will you need to apply per 1000 m^2?

c. How many 50-Kg bags of 26-5-10 will you need to fertilize a 30,000 m^2 lawn at 1.0 Kg nitrogen per 1000 m^2.

Contd...../2