

**EASTERN UNIVERSITY, SRI LANKA**  
**Third Year First Semester Examination In Agriculture – 2012/2013**  
**Special Examination – October 2015**  
**AC – 3101 Soil Fertility And Plant Nutrition**

Time – Two hours

Answer all Questions

1. a. Explain the ways by which nutrients move from soil to plant roots for uptake.  
b. Briefly explain the gaseous losses of nitrogen from soil.
  
2. a. Discuss the factors affecting organic matter content in soil.  
b. Explain the fate of  $\text{NH}_4^+$  in soil.
  
3. a. Explain the impact of C : N ratio of organic residue on nitrogen availability  
b. Discuss the main pathways of potassium through plant and soil
  
4. Write short notes on the followings.
  - a. Antagonism and Stimulation.
  - b. Merits and demerits of organic manures and chemical fertilizers.

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