



Plant Nutrition and Soil Fertility Management (PLT 271/01)

Instructions

Answer only four (04) questions

No. of questions : Five (05)

No. of pages : One (01)

Time : Two hours (2 hrs)

Total marks allocated: 100 %

ESSAY

Question 01

“Soil N is only a part of the N cycle and microbes play a key role on soil N dynamics”. Discuss this statement giving more emphasis to the soil N gains and transformations.

(25 marks)

Question 02

Prepare a table with following information on major plant nutrients N, P, and K considering (a) nutrient deficiency symptoms, (b) effect of deficiencies on plant growth and development, and (c) types of fertilizers recommended for recovering such deficiencies.

(25 marks)

Question 03

Discuss the following mechanisms in relation to the nutrient uptake in higher plants.

- (a) Mass flow (b) Diffusion (c) Interception

(25 marks)

Question 04

Write short notes on;

- (a) Soil sampling (b) Soil testing (c) Analysis of plants

(25 marks)

Question 05

Write short notes on;

- (a) Fertilizer recommendation
(b) Fertilizer quality
(c) Techniques of fertilizer application

(25 marks)