



KERALA AGRICULTURAL UNIVERSITY
B.Sc (Hons.) Agriculture 2016 Admission
II Semester Final Examination-August-2017

Ssac.1203

Manures, Fertilizers and Soil Fertility Management (2+1)

Marks: 50

Time: 2 hours

I Fill up the blanks (10x1=10)

- 1 Liming is recommended for the reclamation of -----soil
- 2 -----is a commonly used potassium fertilizer.
- 3 Sulphur deficiency results in -----Symptom.
- 4 Availability of phosphorus in alkaline soil is due to its fixation by -----
- 5 Mineral -----is a rich source of phosphorus
- 6 Non availability of element -----in acid soil adversely affects nodulation.
- 7 Plants take up nitrogen mostly in -----form
- 8 -----is an organic chemical fertilizer
- 9 Rock phosphate is recommended for -----soils
- 10 Sulphate of potash contain -----% of K

II Write short notes on any FIVE (5x2=10)

- 1 Complex fertilizer
- 2 Role of nitrogen in plants
- 3 Mechanisms of nutrient transport
- 4 Plant analysis
- 5 Nitrification
- 6 Sulphur cycle
- 7 Manufacturing process of urea and ammonium sulphate.

III Answer any FIVE (5x4=20)

1. What are the factors affecting nutrient availability in soil?
- 2 Explain the soil test crop response approach.
- 3 Describe the fertilizer application schedule under rainfed as well as irrigated conditions.
- 4 Explain the principle of active and passive ion transport of nutrients.
- 5 Describe the manufacturing process of single super phosphate.
- 6 What are the criteria of essentiality – explain
- 7 Describe the factors affecting NUE.

IV Write essay on any ONE (1x10=10)

- 1 Soil amendments to improve productivity.
- 2 Advantages and disadvantages of chemical fertilizers.
