



KERALA AGRICULTURAL UNIVERSITY
B.Tech. (Agrl. Engg.) 2019 Admission
I Semester Final Examination- January 2020

Sacs.1104

Principles of Soil Science (2+0)

Marks:50
Time: 2 hours

- I Define the following (10x1=10)**
1. Soil fertility.
 2. 2:1 type minerals.
 3. Lattice space.
 4. Diffusion.
 5. Saline soils.
 6. Liquid fertilizers.
 7. Salt tolerance of crops.
 8. Soil taxonomy.
 9. Organic farming.
 10. Electrophoresis.
- II Write Short notes on ANY FIVE of the following (5x2=10)**
1. Chemical and biological weathering.
 2. Symbiotic and Non-symbiotic bacteria.
 3. Fulvic acid and humic acid.
 4. Expanding and non-expanding clay minerals.
 5. Zeta potential.
 6. Submerged soil.
 7. Organic soil colloids.
- III Answer ANY FIVE of the following (5x4=20)**
1. Saline and Sodic soils.
 2. Particle distribution of soil.
 3. Explain decomposition of organic matter to humus.
 4. Submerged soil.
 5. Nutrient movement in soil.
 6. Enlist the factors that influence the soil formation.
 7. How does soil act as a 'Dynamic natural body'.
- IV Write an essay on ANY ONE of the following (1x10=10)**
1. Origin of soil structure and its importance in agriculture.
 2. Role of parent material and climate in soil formation.
