

SYLLABUS :-

Soil Genesis and Classification: Weathering, formation and composition of soil, classification of soils.

Soil Colloids: Inorganic and organic colloids, their nature and physico-chemical properties, ion exchange phenomena.

Mineral Nutrition of Plants: Essential elements, chemical fertilizers, organic manures. Movement of chemicals in soil-root continuum

Physics of Soil: Texture, structure and basic physical properties, retention and movement of soil water, solute transport, gaseous exchange, soil strength and thermal properties.

Mechanics of Soil: Dynamic properties of soil, stress-strain relations, yield and failure, soil compaction and consolidation, earth pressure and stability of slope.

Soil Tillage: Types of tillage, influence of tillage on soil properties and crop performance.

Soil Management: Management of acid, saline and sodic soils.