B.Sc. CHEMISTRY- FIFTH SEMESTER Skill Based Elective Course –III

Paper Code: 17UCHS03

Internal assessment Marks: 25

External Marks:75

AGRICULTURAL CHEMISTRY (30 Hours)

UNIT - I FERTILIZERS

Effect of Nitrogen, potassium and phosphorous on plant growth – commercial method of preparation of urea, triple superphosphate. Complex fertilizers and mixed fertilizers – their manufacture and composition. Secondary nutrients – micronutrients – their function in plants.

UNIT-II MANURES

Bulky organic manures – Farm yard manure – handling and storage-oil cakes- blood meal – fish manures.

UNIT - III PESTICIDES AND INSECTIDES

Pesticides – classification of Insecticides, fungicides, herbicides as organic and inorganic – general methods of application and toxicity. Safety measures when using pesticides.

Insecticides: Plant products – Nicotine, pyrethrin – Inorganic pesticides – borates. Organic pesticides – D.D.T. and BHC.

UNIT – IV FUNGICIDES AND HERBICIDES

Fungicide: Sulphur compounds, Copper compounds, Bordeaux mixture.

Herbicides: Acaricides - Rodenticides. Attractants - Repellants. Preservation of seeds.

UNIT - V SOILS

Classification and properties of soils -soil water, soil temperature, soil minerals, soil acidity and soil testing.