

Subject Code: 2SC1000123	Subject Title: Agriculture Chemistry
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Course Objective:

Generally, awareness with the following areas in chemistry: analysis of agriculture. Opportunities for student and faculty to interact with industry. The fundamental agriculture chemistry skills to work and industrial skills to work effectively in the different fields of chemistry. The capacity to produce, divide and characterize compounds using published reactions, protocols, normal laboratory equipment, and current instrumentation.

Teaching scheme (hours) per week		Credit			Theory Marks		Practical Marks		Total
Theory	Practical	Theory	Practical	Total	Uni. Assessment	Cont. Assessment	Uni. Assessment	Cont. Assessment	
2	--	2	--	2	35	15	--	--	50

Subject Contents				
Sr. No	Topic	Total Hours	Weight (%)	
1	FERTILIZERS Plant Nutrients, Major Nutrients, Minor Nutrients, Trace Nutrients, Definition of fertilizers, Classification of Fertilizers, Synthesis of N Containing fertilizers i.e. Calcium ammonium nitrate, $\text{Ca}(\text{CN})_2$ and Urea Synthesis of P containing fertilizers i.e. DAP (Diammonium phosphate), Super phosphate and tripal super phosphate, Mix fertilizers	15	50	
2	INSECTICIDES Introduction and importance of insecticides, Types of insecticides- Inorganic, Organic and Natural, Synthesis of some common insecticides – DDT, BHC, Malathion, Parathion, Chloranil (Quinones), Mode of action of insecticides, Natural & Homemade Insecticides.	15	50	

Course Outcome:

- ❖ Have solid foundations in the fundamentals and purpose of current chemical and scientific theories.
- ❖ Are capable to design, carry out, record and analyze the results of chemical experiments.
- ❖ Are capable to use current instrumentation and classical techniques, to design experiments, and to properly record the results of their experiment.
- ❖ Are skillful in problems solving, significant thinking and analytical reasoning.

List of References:

1. Industrial chemistry by B.K. Sharma.
2. Pesticides John Wiley by R.Cremlyn.

e-Resource:

1. www.google.com
2. <http://onlinelibrary.wiley.com/>
3. <https://en.wikipedia.org/wiki>