Bhairavnath Shikshan Mandal's

Bhiaravnath Vidynan Mahavidyalaya, Khutbav

Tal.Daund Dist.Pune

Weekly Academic Planner 2020-21

Class: T. Y. B.Sc. (Industrial Chemistry (CH-335)) (Total Lectures :48)

Name of Teacher- Asst.Prof. Memane Archana Dada

Month	Week 1 (4L)	Week 2 (4L)	Week 3 (4L)	Week 4 (4L)
Sept			**1. Modern Approach to Chemical Industry (8L)** • Introduction, • basic requirements of chemical industries, • chemical production, • raw materials, • unit process and unit operations, • Quality control, • quality assurance, • process control, • research and development, pollution control,	• human r • safety m classific chemica reaction and cont process, • Convers • selectivi yield, co act, • patent ac • trade ma
Oct	• **Assignment On First Chapter.** • **Test On First Chapter .** • **CH-2. Agrochemicals.** General	• Pesticide formulation, • slow release pesticide formulations, • storage stability test, • and Industrial entomology.	• **Assignment On Second Chapter.** • **Test On Second Chapter.** **CH-3. Manufacture of Basic Chemicals. (8L)** • Ammonia: Physicochemical	**Assignment O Chapter.** **Test On Third Chapter.** **CH-4. Petrochemica and eco-frien fuels .(8L)** • Introduc

	introduction and scope of agrochemicals, ● meaning and examples of: Insecticides, ● Herbicides, ● Fungicides, ● Rodenticides, ● Pesticides, ● Plant growth regulators.	● Advantages and disadvantages of agrochemicals. ● Structure,: DDT, ● BHC, ● Warfarin, ● Aldrin, Endosulphan, ● synthesis and application:DDT, ● BHC andEndosulphan. Biopesticides like Neem oil and Karanj oil.	principles involved, ● Manufacture of ammonia by modified HaberBosch process, ● its uses. ● b) Sulphuric acid: Physicochemical principles , ● Manufacture of sulphuricacid by contact process, its uses. ● c) Nitric acid: Physicochemical principles involved, Manufacture of nitric acid by Ostwald's process, ● its uses.	● occurren ● composi petroleu ● resource ● processi petroleu ● calorific of fuel, cracking ● octane ra (octane number) ● cetane n ● flash poi ● and petr refinerie ● applicati petroche ● syntheti petroleu lubricati & additi ● b) Fuels eco-frien fuels: lic gaseous (LPG, ● CNG), ● fossil fu ● diesel, ● bio diese ● gasoline ● aviation ● Use of s energy f power generati

Nov	**CH-5. Food and Starch Industry .(8L)** (a) Definition and scope, nutritive aspects of food constituents, • food deterioration factors and their control; • (b) Preservation and processing: Heat and cold preservation and processing, • cold storage, • food dehydration and concentration, • and preservation methods, fruits, • beverages, • cereals, • grains, • legumes and oil seeds;	• (c) Food additives: Enhancers, • sugar substitutes, sweeteners, • food colors, • Starch industries: Chemistry of starch, manufacturing of industrial starch and its applications, characteristics of some food starches, • non-starch polysaccharides-cellulose-occurrence.	**CH-6. Cement and Glass industry .(8L)** • Cement industry: Introduction, • Importance, • composition of portland cement, • raw materials, proportioning of raw materials, • setting and Hardening of cement, • reinforced concrete.	• Glass in Introduc • importar • physical chemica properti glass, ch reaction, • annealir glass Sp glasses: • safety, • hard, • borosilic • optical, photoser conducti • glass lar
Dec	• **Assignment On Fourth Chapter.** • **Test On Fourth Chapter.**		**INTERNAL EXAMINATION**	

	• **Assignment On Fifth Chapter.** • **Test On Fifth Chapter.** • **Assignment On Sixth Chapter.** • **Test On Sixth Chapter.**			
Jan				

Faculty Name:

Asst. Prof. Archana Memane **Principal**