

# SIDDHINATH MHAVIDYALAYA

## DEPARTMENT OF CHEMISTRY

### TEACHING PLAN -2022-2023

TEACHING PLAN OF SEMESTER – V				
PAPER DSE2T: Green Chemistry				
	MODULE	TEACHER	NO OF LECTURES	TO BE COMPLETED
Unit- I	<b>Drugs &amp; Pharmaceuticals: Drug discovery, design and development; Basic Retrosynthetic approach. Synthesis of the representative drugs of the following classes: analgesics agents, antipyretic agents, antiinflammatory agents (Aspirin, paracetamol, Ibuprofen); antibiotics (Chloramphenicol); antibacterial and antifungal agents (Sulphonamides; Sulphanethoxazol, Sulphacetamide, Trimethoprim); antiviral agents (Acyclovir), Central Nervous System agents (Phenobarbital, Diazepam), Cardiovascular (Glycerol trinitrate), antilaprosy (Dapsone), HIV-AIDS related drugs (AZT- Zidovudine).</b>	PARNAB DOLUI	16	2 MONTHS
			08	
Unit- II			<b>Fermentation: Aerobic and anaerobic fermentation. Production of (i) Ethyl alcohol and citric acid, (ii) Antibiotics; Penicillin, Cephalosporin, Chloromycetin and Streptomycin, (iii) Lysine, Glutamic acid, Vitamin B2, Vitamin B12 and Vitamin C.</b>	
<b>PAPER SEC3P: Practical</b>				
Unit- I	Preparation of Aspirin and its analysis.	PARNAB DOLUI	06	1 MONTH
Unit- II	Preparation of magnesium bisilicate (Antacid).		08	

**TEACHING PLAN OF SEMESTER – V**

**PAPER SEC3T: Pharmaceutical Chemistry**

	<b>MODULE</b>	<b>TEACHER</b>	<b>NO OF LECTURES</b>	<b>TO BE COMPLETED</b>
Unit- I	<b>Drugs &amp; Pharmaceuticals: Drug discovery, design and development; Basic Retrosynthetic approach. Synthesis of the representative drugs of the following classes: analgesics agents, antipyretic agents, antiinflammatory agents (Aspirin, paracetamol, Ibuprofen); antibiotics (Chloramphenicol); antibacterial and antifungal agents (Sulphonamides; Sulphanethoxazol, Sulphacetamide, Trimethoprim); antiviral agents (Acyclovir), Central Nervous System agents (Phenobarbital, Diazepam), Cardiovascular (Glyceryl trinitrate), antilaprosy (Dapsone), HIV-AIDS related drugs (AZT- Zidovudine).</b>	PARNAB DOLUI	16	3 MONTHS
Unit- II	<b>Fermentation: Aerobic and anaerobic fermentation. Production of (i) Ethyl alcohol and citric acid, (ii) Antibiotics; Penicillin, Cephalosporin, Chloromycetin and Streptomycin, (iii) Lysine, Glutamic acid, Vitamin B2, Vitamin B12 and Vitamin C.</b>		10	
<b>PAPER SEC3P: Practical</b>				
Unit- I	<b>Preparation of Aspirin and its analysis.</b>	PARNAB DOLUI	04	
Unit- II	<b>Preparation of magnesium bisilicate (Antacid).</b>		04	

**TEACHING PLAN OF SEMESTER VI (2020-2021)****PAPER DSE-2T: INDUSTRIAL CHEMICALS AND ENVIRONMENT**

	<b>MODULE</b>	<b>TEACHER</b>	<b>NO OF LECTURES</b>	<b>TO BE COMPLETED</b>
Unit-I	Industrial Gases and Inorganic Chemicals	<b>PARNAB DOLUI</b>	<b>10</b>	<b>2months</b>
Unit-II	Industrial Metallurgy (General principles of Metallurgy )		<b>6</b>	
Unit-III	Environment and its Segments		<b>8</b>	
Unit-IV	Energy and Environment		<b>4</b>	
Unit-V	Biocatalysis		<b>3</b>	
<b>PAPER DSE-2P: INDUSTRIAL CHEMICALS AND ENVIRONMENT</b>				
Unit-I	Determination of Dissolved Oxygen in Water	<b>PARNAB DOLUI</b>	<b>2</b>	<b>2 months</b>
Unit-II	Determination of Chemical Oxygen Demand (COD)		<b>3</b>	
Unit-III	Determination of Biological Oxygen Demand (BOD)		<b>3</b>	
Unit-IV	Percentage of available chlorine in Bleaching Powder		<b>2</b>	
Unit-V	Measurement of choride,Sulphate and Salinity of water Sample by Simple Titration Method (AgNO <sub>3</sub> and Potassium Chromate )		<b>4</b>	
Unit-VI	Prepration of Borax /Boric Acid		<b>2</b>	

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## TEACHING PLAN

<b>TEACHING PLAN OF SEMESTER VI (2022-2023)</b>				
<b>PAPER DSE-2T: INDUSTRIAL CHEMICALS AND ENVIRONMENT</b>				
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Unit-I	Industrial Gases and Inorganic Chemicals	<b>PARNAB DOLUI</b>	<b>10</b>	<b>2months</b>
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