

**LESSON PLAN (Theory)**

**Subject : Electrotherapy –II**  
**Class : BPT II year Odd Batch (2016)**  
**Class Incharge : Dr. Neha Kulkarni**  
**Subject Teacher/s : Dr. Soumik Basu**  
**Total Hours prescribed: -100**

S. No.	Topics	No. of lecture/s required	Mode of teaching	Remarks
1	<b>Low frequency currents –</b>	15	PPT	
	• Physiological effects, therapeutic uses, indications and contraindications and dangers of faradic type current, intermittent galvanic current and galvanic current			
	• Cathodal /Anodal Galvanism, Iontophoresis – with various ions &Pharmaco therapeutic drugs.	5	PPT	
	• Electrical stimulation for re-education – short /long pulse motor points	10	PPT	
	• Strong surged faradic current under pressure /elevation.	4	PPT	
	• Electrical Reactions and Electro – diagnostic tests: Electrical Stimuli and normal behaviour of Nerve and muscle tissue.	13	PPT	
	• Types of lesion and development of reaction of			
	• degeneration.			
	• - Faradic – Intermittent direct current test.	1	PPT	
	• - S.D. Curve and its application and characteristics	4	PPT	
	• Chronaxie, Rheobase& pulse ratio			
	• High voltage pulsed galvanic current	2		
	• TENS: Define, Principles of production, types, dosage, electrode placement, Physiological and therapeutic effects, indication and contraindications	5	PPT	
• Micro –currents	1	PPT		
• Didynamic currents	1	PPT		

2	<b>Medium frequency currents must know –</b> Interferential therapy: Define, Principles of production, static Interferential system, dynamic interference system, dosage, electrode placement, Physiological and therapeutic effects, indication and contraindications. <ul style="list-style-type: none"> <li>• Russian currents</li> <li>• Rebox type currents</li> </ul>	10    1 1	PPT    PPT PPT	
3.	<b>Biofeedback method:</b> Instrumentation, principles, therapeutic effects, indications, contraindications, limitations, precautions, operational skills and patient preparation	4	PPT	
4	<b>Ultra – violet rays (UVR):</b> Wavelength, frequency, types & sources of UVR generation, techniques of irradiation, physiological & therapeutic effects, indications, contraindications, precautions, operational skills of equipment & patient preparation. Dosimetry of UVR.	8	PPT	
5	<b>Light Amplification of stimulated Emission of Radiation (LASER)–</b> Definition, historical background, physical principles, biophysical effects, types, production, therapeutic effects, techniques of application, indications, contraindications, precautions, operational skills and patient preparation.	5	PPT	
6	<b>Care of wound –application of Therapeutic currents, Ultrasound, U.V.R. &amp; LASER</b>	4	PPT	
7	<b>Combination Therapy</b>	2	PPT	
8	<b>Intermittent Therapy</b> unit, its operation and different methods of application region wise. <b>Interferential Pneumatic Therapy</b> unit, its operation and different methods of application – region wise.	2  2	PPT  PPT	