Dr. D.Y. PATIL COLLEGE OF PHYSIOTHERAPY

Dr. D.Y.PATIL VIDYAPEETH, PUNE

(DEEMED TO BE UNIVERSITY)

Re-accredited by **NAAC** with a **CGPA of 3.62** on a four point scale at **'A' Grade.**

(An ISO 9001:2008 Certified University)

LESSON PLAN (Theory)

Subject : **Electrotherapy –II**

Class : **BPT II year Odd Batch (2017-18)**

Class Incharge : **Dr. Neha Kulkarni**

Subject Teacher/s : **Dr. Soumik Basu, Dr. P. Muruganandam, Dr. Roma Raykar**

Total Hours prescribed: -100

S. No.	Topics	No. of lecture/s required	Mode of teaching	Remarks
1	**Low frequency currents –** • 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. • Electrical stimulation for re-education – short /long pulse motor points • Strong surged faradic current under pressure /elevation. • Electrical Reactions and Electro – diagnostic tests: Electrical Stimuli and normal behaviour of Nerve and muscle tissue. • Types of lesion and development of reaction of • degeneration. • - Faradic – Intermittent direct current test. • - S.D. Curve and its application and characterstics • Chronaxie, Rheobase& pulse ratio • High voltage pulsed galvanic current • TENS: Define, Principles of production, types, dosage, electrode placement, Physiological and therapeutic effects, indication and	15 5 10 4 13 1 4 2 5	PPT PPT PPT PPT PPT PPT PPT	

	contraindications • Micro –currents • Didynamic currents	1 1	PPT PPT	
2	**Medium frequency currents must know –** Interferential therapy: Define, Principles of production, static Interferential system, dynamic interference system, dosage, electrode placement, Physiological and therapeutic effects, indication and contraindications. • Russian currents • Rebox type currents	10 1 1	PPT PPT PPT	
3.	**Biofeedback method:** Instrumentation, principles, therapeutic effects, indications, contraindications, limitations, precautions, operational skills and patient preparation	4	PPT	
4	**Ultra – violet rays (UVR):** 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	**Light Amplification of stimulated Emission of Radiation (LASER)–** 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	**Care of wound** –application of Therapeutic currents, Ultrasound, U.V.R. & LASER	4	PPT	
7	**Combination Therapy**	2	PPT	
8	**Intermittent Therapy** unit, its operation and different methods of application region wise. **Interferential Pneumatic Therapy** unit, its operation and different methods of application – region wise.	2 2	PPT PPT	