

JHARKHAND RAI UNIVERSITY



Bachelor of Physiotherapy (BPT)

THIRD SEMESTER SYLLABUS

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DEPARTMENT OF PHYSIOTHERAPY (BPT)

Duration: Four years Six months

Academic Year: 2023 – 2027

Syllabus

COURSE SCHEME											
BATCH 2023-2027											
BACHELOR OF PHYSIOTHERAPY											
CHOICE BASED CREDIT SYSTEM											
SEMESTER III											
S.No	CODE	COURSE TITLE	Periods			Evaluation Scheme				Subject Total	Credit
			L	T	P	Assignment	TA	Total	ESE		
1	23A301	Pathology & Microbiology	4	0	0	20	10	30	70	100	4
2	23A302	Biomechanics - I	3	0	0	20	10	30	70	100	3
3	23A303	Advance Exercise Therapy - I	4	0	0	20	10	30	70	100	4
4	23A304	Principles of Bioelectrical Modalities - I	4	0	0	20	10	30	70	100	4
5	40BPT.153	Professional Skills	2	0	0	20	10	30	70	100	2
PRACTICAL/SESSIONAL											
1	23A302 P	Biomechanics - I	0	0	2			30	20	50	1
2	23A303 P	Advance Exercise Therapy - I	0	0	4			30	20	50	2
3	23A304 P	Principles of Bioelectrical Modalities - I	0	0	4			30	20	50	2
									TOTAL	650	22

Program: Bachelor of Physiotherapy (BPT)
Semester: Third
Course: Pathology & Microbiology
Course Code: 23A301

L	T	P	Credits
4	0	0	4

COURSE LEARNING OBJECTIVE:

- CLO1:** To acquire the knowledge of concepts of cell injury and changes produced in different tissue.
- CLO2:** To give the generalize idea about pathological changes in different system in human body.
- CLO3:** To learn about immunology and hematological disease.

COURSE OUTCOME

At the end the course the candidate will able to

- CO1: Acquire the knowledge of concepts of cell injury and changes produced there by in different tissues and organs; capacity of the body in healing process.
- CO2: Recall the etio-pathogenesis, the pathological effects and the clinico-pathological correlation of common infection and non-infectious disease.
- CO3: Acquire the knowledge of concepts of neoplasia with reference to the etiology, gross and microscopic features, diagnosis and prognosis in different tissues and organs of the body.
- CO4: Correlate normal and altered morphology of different organ systems indifferent diseases needed to understand the disease process and their clinical significance (with special emphasis to neuro-musculo-skeletal and cardiovascular – respiratory system).
- CO5: Acquire knowledge of common immunological disorders and their resultant effects on the human body.
- CO6: Understand in brief, about the hematological diseases and investigations necessary to diagnose them and determine their prognosis.
- CO7: To have sound knowledge of the agents responsible for causing human infections pertaining to CNS, CVS, musculoskeletal and Respiratory system.

UNIT 1: Basics of Pathology: Inflammation, injury and repair. **Oncology:** Classification, gross pathological state, cancer pain syndrome (Brief description) **Skin:** Etio-pathogenesis, gross pathology of commonly occurring skin Diseases, Burns, Pressure ulcers (Brief description).

UNIT 2: Cardiovascular system: Etio-pathogenesis, gross pathology of conditions- aging, IHD, MI, CCF, HT, RHD, Congenital heart disease, Arteriosclerosis, Thrombo-angitis, Vasomotor-Raynaud's, venous thrombosis, Gangrene, Lymph edema. **Haematology:** (Brief description) – Etio-

pathogenesis, gross pathology of conditions anaemia, polycythaemia, leukaemia, haemolytic disease, and haemophilia.

UNIT 3: Respiratory system: Etio-pathogenesis, gross pathology of conditions - aging, Pneumonia, Pulmonary TB, Bronchiectasis, COPD, Bronchial Asthma, Restrictive Lung disease, Occupational lung disease. **Musculoskeletal system:** Etio-pathogenesis, gross pathology of conditions - Osteomalacia, Osteoporosis, Osteomyelitis, Osteoarthritis, rheumatoid arthritis, Gout, spondyloarthropathy, Osteonecrosis, Myofascial pain syndrome. Biological responses to trauma, bone and soft tissue immobilization.

UNIT 4: CNS AND PNS: Etio-pathogenesis, gross pathology of conditions - Aging, Meningitis, Encephalitis, Parkinson's, Amyotrophic lateral sclerosis, Ataxias, Multiple Sclerosis,, Neuropathies (Carcoat Marie Tooth's disease, Compression and entrapments, diabetic, G.B syndrome), Poliomyelitis and post-polio syndrome, Myasthenia Gravis.

UNIT 5: Microbiology-I: Immunology: Brief description of immune system, immunity, immune responses & immune deficiency Immunology, Hypersensitivity disorders. **Infectious diseases:** Brief description of classification of microorganisms, identification. Sterilization and disinfections with special reference to principles of antiseptics and prevention of communicable diseases in clinical practice.

UNIT 6: Microbiology-II Brief description of identification of infectious diseases; principles of prevention of infectious diseases caused by common pathogens - streptococci, staphylococci, gonococci, Meningococci, salmonella, V. cholerae, E. coli, shigella, tetanus, Diphtheria, M. leprae, M. tuberculosis, Poliomyelitis, Rabies, Malaria, Amoebiasis, Helminthiasis, Scabies, ringworm, candidiasis.

Suggested Readings:

Text Books:

1. Harsh Mohan, Textbook of Pathology, Jaypee Brothers.
2. Bhatia & Lal, Essential of Medical Microbiology, Jaypee Brothers.

Reference Books:

1. Vasanthi Kainathan, Concise Book on Pathology, Jaypee, New Delhi.

Note: Latest editions of all the suggested books are recommended

Program: Bachelor of Physiotherapy (BPT)

Semester: Third

Course: Biomechanics -1

Course Code: 23A302

L	T	P	Credits
3	0	0	3

COURSE LEARNING OBJECTIVE:

CLO1: The primary purpose of this paper is understanding basic biomechanics of human body.

CLO2: To learn about muscle contraction and relaxation.

CLO3: To gain knowledge about posture and ergonomics and its correction.

COURSE OUTCOME

At the end of the course candidate will able to

CO1: Understand and apply various concepts and terminology within the area of biomechanics.

CO2: Describe how biomechanical factors influence motion in sport and exercise.

CO3: Demonstrate an understanding of statics, Kinematics and Kinetics in human movement.

CO4: Evaluate movement and estimate force on human structures during exercise.

CO5: Demonstrate an understanding of how changes of movement patterns and techniques will influence the load on human tissues during movement.

UNIT 1: Mechanics: Introduction to mechanics including motion, forces, parallel forces system vectors. Newton's Law of motion, concurrent force system-composition forces, Center of Gravity, line of gravity, stability and equilibrium, law of inertia. Levers, torque, mechanical advantage. Moment arm and anatomic pulleys.

UNIT 2 Joint Structure and Function: Basic principles of joint design and a human joint, Tissues present in human joint including dense fibrous tissue, bone, cartilage and connective tissue, Classification of joints, Joint function, Kinematics chains and range of motion. General effects of injury and disease.

UNIT 3: Muscle Structure and Function: Mobility and stability functions of muscle, Elements of muscles structure and its properties, Factors affecting muscle tension. Types of muscle, contraction and muscles work, Classification of muscles and their functions, Group action of muscles, coordinated movement.

UNIT 4: Posture: Definition, factors responsible for posture, relationship of gravity on posture
Postural imbalance: Factors responsible for imbalance in static and dynamic positions including ergonomics.

Suggested Readings:

Text Books:

1. – Norkin & Leverage, Joint Structure and Function-A comprehensive Analysis, F.A Davis.
2. Norkins & White, Measurement of joint motion-A guide to goniometry, F.A Davis.

Reference Books:

1. Smith, Brunnstrom's clinical kinesiology, F.A Davis.

Note: Latest editions of all the suggested books are recommended.

Program: Bachelor of Physiotherapy (BPT)

Semester: Third

Course: Advanced Exercise Therapy -I

Course Code: 23A303

L	T	P	Credits
4	0	0	4

COURSE LEARNING OBJECTIVE:

CLO1: The primary purpose of this paper is to impart advanced knowledge about mobilization technique.

CLO2: Understanding of the skill of use of advanced concepts & techniques like stretching, PNF, Resistance Exercise.

CLO3: To makes student ready for future to practice as a qualified Physiotherapist.

COURSE OUTCOME

At the end of the course candidate will able to

CO1: Know how to describe various factors that contributing to fatigue and tension.

CO2: Students will understand and explain the various therapeutic equipment for the improvement in muscle strength, mobility, endurance, ambulation etc.

CO3: Understand and able to make out normal and abnormal range of motions. Students will make out the strength of different muscles.

CO4: Understand principles and procedures, indications, contraindications and precautions, appropriate methods of application of each of the assessment strategy and treatment techniques hands on and on models of stretching, joint mobilization, PNF, MMT etc.

UNIT 1: Joint mobilization: Definition – Mobilization, Manipulation, indications, limitations, contraindications and precautions, applications of Mobilization technique to various joints, Principles of Maitland, Mulligan and Mckenzi joint Manipulation techniques.

UNIT 2: Stretching: Definition, properties of soft tissue, mechanical and neurophysiological properties of connective tissue, mechanical properties of non-contractile tissue. Determinants, type and effect of stretching, precautions, general applications of stretching technique.

UNIT 3: Resisted exercise: Definition – Strength, power, endurance. Guiding principle of resisted exercise, determinants, types Manual and Mechanical Resistance Exercise, Isometric Exercise, Dynamic Exercise - Concentric and Eccentric, Dynamic Exercise - Constant and Variable Resistance.

UNIT 4: Isokinetic Exercise, Open-Chain and Closed- Chain Exercise, precautions, contraindications. Progressive Resistance Exercise - de Lormes, Oxford, MacQueen, Circuit Weight Training, Plyometric Training—Stretch-Shortening Drills, Isokinetic Regimens.

UNIT 5: Proprioceptive Neuromuscular Facilitation – Principles, Diagonal patterns of movements, Basic procedures, Upper Extremity Diagonal patterns, Lower Extremity Diagonal Patterns. Technique in PNF – Rhythmic Initiation, Repeated Contractions, Reversal of Antagonists, Alternating Isometrics, Rhythmic Stabilization.

UNIT 6: Manual Muscle Testing: Principles, types, grading, benefits, precaution, limitation.

Suggested Readings:

Text Books:

1. Kisner & Colby, Therapeutic Exercises Foundations and Techniques, F A Davis.
2. Gardiner, Principle of Exercise Therapy, C.B.S Delhi.

Reference Books:

1. Vos et al, Proprioceptive Neuromuscular Facilitation, Williams & Wilkins.
2. Hollis, Practical Exercise Therapy, Blackwell Scientific Publications.

Note: Latest editions of all the suggested books are recommended.

Program: Bachelor of Physiotherapy (BPT)
Semester: Third
Course: Principles of Bioelectrical Modalities – I
Course Code: 23A304

L	T	P	Credits
4	0	0	4

COURSE LEARNING OBJECTIVE:

- CLO1:** The primary purpose of this paper is to recall the basic physics principles.
- CLO2:** To impart basic knowledge and understanding of certain common electrical components.
- CLO3:** To acquire the skill of application of agents of electrotherapy.

COURSE OUTCOME

At the end of the course candidate will able to

- CO1: Recall the physics principles & amp; Laws of Electricity, Electro-magnetic spectrum & amp.
- CO2: Describe effects of environmental & amp; man made electro-magnetic field at the cellular level & amp; risk factors on prolonged exposure.
- CO3: Describe the main electrical supply, electric shock – precautions.
- CO4: Enumerate production of various therapeutic electrical currents. Describe the panel diagrams of the machines.
- CO5: Describe in brief, certain common electrical components such as transistors, valves, capacitors, transformers etc.; the simple instruments used to test / calibrate these components (such as potentiometer, oscilloscope etc.) of the circuitry.
- CO6: Describe and identify various types of electrodes used in therapeutics, describe electrical skin resistance & significance of various media used to reduce skin resistance.
- CO7: Describe and apply various types low frequency current.

UNIT 1: Fundamentals of Electricity & Magnetism-I: DC Currents -Modern concept of electricity: fundamental electric charges (proton and electron), bound and free electrons, free electrons and current, static electric charge, charging of an object potential and capacitance, potential difference and EMF. **A. C. currents:** Sinusoidal wave form, frequency, wavelength, Amplitude and phase of a sine wave, Average & RMS value of a sine wave.

UNIT 2: Quantity of electricity: Magnitude of current, conductors and insulators, resistance of conductor and Ohm’s law, resistances in series and parallel. **Capacitors:** Electric field around a capacitor, charging and discharging a capacitor, types of capacitor with application of each in Physiotherapy department. **Rheostat:** series and shunt Rheostat with application of each in the Physiotherapy department.

UNIT 3: Fundamentals of Electricity & Magnetism- II: Electric Current: Thermal effect, chemical effect (ionization) and magnetic effect. Electric shock, Earth shock, causes and its

prevention. **Magnetism:** Magnetic - non-magnetic substances and their properties, properties of magnet, molecular theory, poles of magnet and its properties, magnetic lines of force and their properties, Electromagnetism, magnetic effects of electric current, Electromagnetic induction, Lenz's law, Inductor and Inductance types of inductor, reactance and impedance.

UNIT 4: Thermionic Valves: Thermionic emission, Diode and Triode valves and their characteristics, Construction and application of Cathode Ray Oscilloscope. **Semiconductor Devices:** Intrinsic and extrinsic semiconductors, advantages of diode and transistors devices. Basing of Diode and their characteristics, Light Emitting Diodes, integrated circuits. **Electronic Circuits:** Rectifiers & smoothing circuits, Oscillators - Sinusoidal TYPES. **A.C. & D.C. meters:** Functions and applications of Ammeter and volt meters, Ohm meters, Wheat stone bridge.

UNIT 5: Introduction to Therapeutic currents- I: Low Frequency Currents: Introduction of direct, alternation & modified currents, **Direct Current** – Production, Physiological and therapeutic effects of constant current, anode and cathode, Galvanism, Ionization and their application in various conditions Modified Direct Current –various pulses, duration and frequency and their effect on nerve and muscle tissue. Production of interrupted and surged current and their effects ,Physiological and therapeutic effects, principles of clinical application, indications, contra indications, precautions, operational skill of equipment & patient preparation. Iontophoresis –principles of clinical application, indication, contraindication, precaution, operational skill of equipment and patient preparation.

UNIT 6: Transcutaneous Electrical nerve stimulation (TENS)- Type of low frequency, pulse widths, frequencies & intensities used as TENS application, Theories of pain relief by TENS, Principle of clinical application effects & uses, indications, contraindications, precautions, operational skills of equipment & patient preparation.

Suggested Readings:

Text Books:

1. Froster, A. and Palastanga, N, Clayton's Electrotherapy: Theory and Practice, AITBS, Delhi 1999.
2. Singh, Jagmohan, Textbook of Electrotherapy, Jaypee, New Delhi.

Reference Books:

1. Jhon, Low & Ann, Reed Butterworth Heine, Electrotherapy Explained: Principles, Oxford 2000.

Note: Latest editions of all the suggested books are recommended.

Program: Bachelor of Physiotherapy (BPT)

Semester: Third

Course: Professional Skills

Course Code: 40BPT.153

L	T	P	Credits
2	0	0	2

Course Learning Objective:

The Objectives of the course are to help students/candidates:

CLO1: Acquire career skills and fully pursue to partake in a successful career path.

CLO2: Prepare good resume, prepare for interviews and group discussions.

CLO3: Explore desired career opportunities in the employment market in consideration of an individual SWOT.

Course Outcome:

At the end of this course the students will be able to:

CO1: Prepare their resume in an appropriate template without grammatical and other errors and using proper syntax.

CO2: Participate in a simulated interview.

CO3: Actively participate in group discussions towards gainful employment.

CO4: Capture a self - interview simulation video regarding the job role concerned.

CO5: Enlist the common errors generally made by candidates in an interview.

CO6: Perform appropriately and effectively in group discussions.

CO7: Explore sources (online/offline) of career opportunities.

CO8: Identify career opportunities in consideration of their own potential and aspirations.

CO9: Use the necessary components required to prepare for a career in an identified occupation (as a case study).

Module 1: Resume Skills

i. Resume Skills: Preparation and Presentation

- Introduction of resume and its importance
- Difference between a CV, Resume and Bio data
- Essential components of a good resume

ii. Resume skills: common errors

- Common errors people generally make in preparing their resume.
- Prepare a good resume of her/his considering all essential components

Module 2: Interview Skills

i. Interview Skills: Preparation and Presentation

- Meaning and types of interview (F2F, telephonic, video, etc.)
- Dress Code, Background Research, Do's and Don'ts
- Situation, Task, Approach and Response (STAR Approach) for facing an interview
- Interview procedure (opening, listening skills, closure, etc.)
- Important questions generally asked in a job interview (open and closed ended questions)

ii. Interview Skills: Simulation

- Observation of exemplary interviews
- Comment critically on simulated interviews

iii. Interview Skills: Common Errors

- Discuss the common errors generally candidates make in interview
- Demonstrate an ideal interview

Module 3: Group Discussion Skills

- Meaning and methods of Group Discussion
- Procedure of Group Discussion
- Group Discussion- Simulation
- Group Discussion - Common Errors

Module 4: Exploring Career Opportunities

- Knowing yourself – personal characteristics
- Knowledge about the world of work, requirements of jobs including self-employment.
- Sources of career information
- Preparing for a career based on their potentials and availability of opportunities

Bibliography & Suggested Reading including audio video material:

Please check IT-ITeS Sector Skills Council readiness programs namely

- Foundation Skills In IT (FSIT) - Refer the websites like <https://www.sscnasscom.com/ssc-projects/capacity-building-and-development/training/fsit/> and
- Global Business Foundation Skills (GBFS) – Refer websites like <https://www.sscnasscom.com/ssc-projects/capacity-building-and-development/training/gbfs/>

B. Team Skills

Course Learning Objective:

The objectives of the course is to make learners:

CLO1. Understand the significance of Team Skills and help them in acquiring them.

CLO2. To help them design, develop and adapt to situations as an individual and as a team.

Course Outcome:

By the end of this course the learners/candidates will be able to:

CO1: Use common technology messaging tools that are used in enterprises for flow of information and transition from command and control to informal communication during an online/offline team session.

CO2: Actively use and operate online team communication tools: Webinar, Skype, Zoom, Google hangout etc.

CO3: Appreciate and demonstrate Team Skills.

CO4: Participate in a digital lifestyle conversant with computers, applications, Internet and nuances of cyber security.

CO5: Explore (online) and identify career opportunities in consideration of their own potential and aspirations.

CO6: Discuss and articulate the key requirements of an entrepreneurial exercise.

CO7: Empathise and trust colleagues for improving interpersonal relations.

CO8: Engage in effective communication by respecting diversity and embracing good listening skills.

CO9: Distinguish the guiding principles for communication in a diverse, smaller internal world.

CO10: Practice interpersonal skills for better relations with seniors, juniors, peers and stakeholders.

CO11: Project a good personal image and social etiquette so as to have a positive impact on building of one's chosen career.

CO12: Generate, share and maximise new ideas with the concept of brainstorming and the documentation of key critical ideas/thoughts articulated and action points to be implemented with timelines in a team discussion (as MOM) in identified applicable templates.

Module 1: Presentation Skills

- Types of presentations
- Internal and external presentation
- Knowing the purpose
- Knowing the audience
- Opening and closing a presentation
- Using presentation tools
- Handling questions

- Presentation to heterogenic group
- Ways to improve presentation skills over time

Module 2: Trust and Collaboration

- Explain the importance of trust in creating a collaborative team
- Agree to disagree and disagree to Agree – Spirit of Team work
- Understanding fear of being judged and strategies to overcome fear

Module 3: Listening as a Team Skill

- Advantages of Effective Listening
- Listening as a team member and team leader. Use of active listening strategies to encourage sharing of ideas (full and undivided attention, no interruptions, no prethink, use empathy, listen to tone and voice modulation, recapitulate points, etc).

Module 4: Brainstorming

- Use of group and individual brainstorming techniques to promote idea generation.
- Learning and showcasing the principles of documentation of team session Outcomes.

Module 5: Social and Cultural Etiquette

- Need for etiquette (impression, image, earn respect, appreciation, etc).
- Aspects of social and cultural/corporate etiquette in promoting teamwork.
- Importance of time, place, propriety and adaptability to diverse cultures.

Module 6: Internal Communication

- Use of various channels of transmitting information including digital and physical, to team members.

Bibliography & Suggested Reading including audio video material:

Please check IT-ITeS Sector Skills Council readiness program namely Global Business Foundation Skills (GBFS) in website (<https://www.sscnasscom.com/ssc-projects/capacity-building-anddevelopment/training/gbfs/>), and Generic and the entrepreneurial NOS at NSQF Level 4 -7.

Program: Bachelor of Physiotherapy (BPT)

Semester: Third

Course: Biomechanics - I

Course Code: 23A302P

L	T	P	Credits
0	0	2	1

COURSE LEARNING OBJECTIVE:

CLO1: The primary purpose of this paper is to give basic concept of axis and plane and related to human body.

CLO2: To give basic idea about different force and its application in human body.

CLO3: To makes student ready for future to practice as a qualified Physiotherapist.

COURSE OUTCOME

At the end of course candidate will able to

CO1: Define motion, axis, plane and its types in relation to human body.

CO2: Apply force in human body using different point of application.

CO3: Use angle of pulls of muscle concept in treating.

CO4: Use the concept of gravity, line of gravity, center of gravity, equilibrium, lever, pulley in human body.

CO5: Utilize the knowledge of spring, elasticity, pulley in treating.

CO6: Analysis posture and its deformities and correction using biomechanics knowledge.

1. Motion: definition, types of motion, plane and axis of motion, factor determining the kind and modification of motion.
2. Force - Definition, diagrammatic representation of force, point of application, classification of forces, concurrent, coplanar and co-linear forces, composition and resolution of forces, angle of pulls of muscle.
3. Gravity - Definition, line of gravity, Centre of gravity.
4. Equilibrium - Supporting base, types, and equilibrium in static and dynamic state.
5. Levers - Definition, function, classification and application of levers in physiotherapy & order of levers with example of lever in human body.
6. Pulleys - system of pulleys, types and application.
7. Elasticity - Definition, stress, strain, HOOKE'S Law.
8. Springs - properties of springs, springs in series and parallel, elastic materials in use.
9. Posture – dynamic and static posture, kinetic and kinematics of posture, analysis of posture, effect of age, pregnancy, occupation on posture.

Note: Student must maintain a logbook. The duly completed logbook should be submitted during practical examination.

Program: Bachelor of Physiotherapy (BPT)

Semester: Third

Course: Advanced Exercise Therapy – I

Course Code: 23A303P

L	T	P	Credits
0	0	4	2

COURSE LEARNING OBJECTIVE:

CLO1: To acquire the skills to practice advanced concepts like mobilization, PNF etc

CLO2: To skills in various physiotherapy technique like Stretching, resistance exercise etc.

CLO3: To build student as a qualified Physiotherapist and to justify their work.

COURSE OUTCOME

At the end of the course candidate will able to

CO1: Do Joint Mobilization to individual joint.

CO2: Do Stretching of individual and group muscles.

CO3: Apply Resisted exercises to individual and group muscles, open and closed kinematic exercises.

CO4: Demonstrate and perform PNF patterns to upper and lower limb.

CO5: Assess the muscle grade of upper & lower limb and trunk.

1. Joint Mobilisation to individual joint.
2. Stretching of individual and group muscles.
3. Resisted exercises to individual and group muscles, open and closed kinematic exercises.
4. PNF patterns to upper and lower limb.
5. MMT for upper limb, lower limb and trunk.

Program: Bachelor of Physiotherapy (BPT)
Semester: Third
Course: Principles of Bioelectrical Modalities – I
Course Code: 23A304P

L	T	P	Credits
0	0	4	2

COURSE LEARNNG OBJECTIVE

CLO1: To provide exposure to students & gain skilled knowledge of therapeutic agents used inrehabilitation.

CLO2: To acquire the skills to plot SD Curve using Stimulator

CLO3: To makes student ready for future to practice as a qualified Physiotherapist.

COURSE OUTCOME

At the end of the course candidate will able to

CO1: Apply bioelectrical principles knowledge in electro therapy.

CO2: Demonstrate electrotherapy instruments, principles of their functioning, usage, choice of dosage and safety implications for human beings.

CO3: Apply TENS, Iontophoresis technique etc.

CO4: Plot SD Curve, Chronaxie, Rheobase in graph.

1. Demonstration of Bioelectrical principle.
2. Demonstration of electrotherapy instruments, principles of their functioning, usage, choice of dosage and safety implications for human beings.
3. Plotting SD graph, diagnosis using electro diagnostic test – FG test and SD curve.
4. Stimulation of motor points, stimulation of individual muscle and group muscle, Iontophoresis.
5. Placement of electrodes in TENS with dosimeter for various indications.