#### 1. About the Department :

The Department of Physiotherapy started with Undergraduate Course during the academic year 2023-2024 . The department provides excellent learning in Physiotherapy, through its qualified and dedicated faculty aided by well-equipped laboratories and abundant books in the library catering to the needs of students. The department offers BPT course and the intake is 50 students. Semester system which is choice based credit system is in implementation.On 29th November 2019, our institution was upgraded as Deemed to be University. Under University status, the academic year started from 2023-2024 onwards. A new and a new Undergraduate course BPT was introduced.

Apart from teaching, the department is engaged in assessing the student's progress from time to time by conducting periodical tests. The students whose performance is poor are counselled to overcome their deficiencies. The students are given assignments to improve their conceptual understanding. The department also organizes group discussions under the supervision of faculty members to improve their communication skills. Students are encouraged to deliver seminar lectures in class rooms by choosing a topic of their interest under the guidance of a faculty member. The level of improvement in students is constantly monitored by the above said methods and if necessary group counseling is called for to enhance the standards of students.

The faculty members are interested in adopting themselves to modern methods of teaching by attending to various Seminars, Work-Shops and pursuing the latest changes in the subject by going through scientific journals and internet explorers. Extension lectures from eminent persons belonging to various institutions of high repute are arranged periodically to enhance the knowledge of the subject. The department meetings are held very frequently during which latest trends in the subject are discussed thoroughly and elaborately.

The unique feature of the department is well equipped, well furnished and spacious laboratories. The department has rare collection of books for reference and even for the advanced studies. The department is provided with generator facility in case of power failure. The department is enriched by advanced teaching aids like Overhead projector, LCD projector and other audio, video devices for teaching purpose.

Courses offered :

1.Bachelor of Physiotherapy



# BPT (Bachelor of Physiotherapy) First-year, 1<sup>st</sup> Semester

# COURSE TITLE - English - Semester I

#### **COURSE CODE-BPT**

#### SYLLABUS

Unit 1 (SHORT STORY)	ТЕХТ	A Snake in the Grass - RK Narayan				
	Reading Comprehension	Satavahana Kingdom, pages 6 & 7				
	Grammar	Spelling Rules, Framing Interrogatives				
	Vocabulary	Content and Structural / Grammatical Words				
	Pronunciation	Reading out a passage properly with punctuation pointers (Classroom activity)				
	Language Games	Tongue Twisters (Classroom activity)				
	Conversation Practice	Talking about weather, pages 13 & 14 (Classroom activity)				
	Soft Skills	Effective Communication, pages 14 & 15				
Unit 2 (POETRY)	ТЕХТ	If You Forget Me – Pablo Neruda				
	Reading Comprehension	The Elagandala Fort, pages 39 & 40				
	Grammar	Verb forms				
	Vocabulary	Tense forms				
	Pronunciation	Tone Groups (Classroom activity)				
	Language Games	Euphemisms / Indianisms, pages 57 & 58				
		(Classroom activity)				
	Conversation Practice	Baking a cake (Classroom activity)				

# COURSE TITLE- Basic computers and information science

# COURSE CODE -BPT

# SYLLABUS

The students will be able to appreciate the role of computer technology. The course has focus on computer organization, computer operating system and software, and MS windows, Word processing, Excel data worksheet and PowerPoint presentation. Topics to be covered under the subject are as follows:

# UNIT-1

1. Introduction to computer: Introduction, characteristics of computer, block diagram of computer, generations of computer, computer languages.

2. Input output devices: Input devices(keyboard, point and draw devices, data scanning devices, digitizer, electronic card reader, voice recognition devices, vision-input devices),output devices(monitors, pointers, plotters, screen image projector, voice response systems).

3. Introduction of windows: History, features, desktop, taskbar, icons on the desktop, operation with folder, creating shortcuts, operation with windows (opening, closing, moving, resizing, minimizing and maximizing, etc.).

4. Introduction to MS-Word: introduction, components of a word window, creating, opening and inserting files, editing a document file, page setting and formatting the text, saving the document, spell **checking**, **printing the document file**, **creating and editing of table**, **mail merge** 

# UNIT-2

1. Processor and memory: The Central Processing Unit (CPU), main memory.

2. Storage Devices: Sequential and direct access devices, magnetic tape, magnetic disk, optical disk, mass storage devices.

3. Introduction to Excel: introduction, about worksheet, entering information, saving workbooks and formatting, printing the worksheet, creating graphs.

4. Introduction to power-point: introduction, creating and manipulating presentation, views, formatting and enhancing text, slide with graphs

# UNIT-3

1.Introduction of windows: History, features, desktop, taskbar, icons on the desktop, operation with folder, creating shortcuts, operation with windows (opening, closing, moving, resizing, minimizing and maximizing, etc.).

2. Introduction of Operating System: introduction, operating system concepts, types of operating system.

3. Computer networks: introduction, types of networks (LAN, MAN, WAN, Internet, Intranet), network topologies (star, ring, bus, mesh, tree, hybrid), components of network

#### UNIT-4

1.Introduction to MS-Word: introduction, components of a word window, creating, opening and inserting files, editing a document file, page setting and formatting the text, saving the document, spell checking, printing the document file, creating and editing of table, mail merge.

2. Internet and its Applications: definition, brief history, basic services (E-Mail, File Transfer Protocol, telnet, the World Wide Web (WWW)), www browsers, use of the internet

3. Application of Computers in clinical settings

# COURSE TITLE- Fundamentals of Health care delivery System in India -1 COURSE CODE- BPT

#### SYLLABUS

UNIT-1

#### SECTION-A

Introduction to healthcare delivery system
Healthcare delivery system in India at primary, secondary and tertiary care

#### UNIT-2

3.Community participation in healthcare delivery system 4.Health system in developed countries.

UNIT-3 5.Private Sector 6.National Health Mission

UNIT-4 7.National Health Policy 8.Issues in Health Care Delivery System in India

# COURSE TITLE- PSYCHOLOGY COURSE CODE -BPT

#### Unit 1

Introduction to Psychology

Describe Schools: Structuralism, functionalism, behaviourism, Psychoanalysis.

Describe Methods: Introspection, observation, inventory and experimental method

Describe in brief four Branches: pure psychology and applied psychology

Describe importance of study of Psychology to physiotherapy

Growth and Development.

Heredity and environment

Emotions.

#### Unit 2.

Sensations

Perception,

Illusion & Hallucinations.

Attention

Motivation

Learning

Unit 3.

Intelligence

Intelligence

Frustration & conflict

Stress

Personality

Personality

Defence mechanism

Psychological problems of patients

Unit 4

Social psychology Social psychology

Attitude

Clinical psychology

# Recommended Text Books:

1. Morgan C.T. & King R.A. Introduction to Psychology– recent edition [Tata McGraw-Hill publication]

2. Munn N.L. Introduction to Psychology [Premium Oxford, I.B.P. publishing.]

3. Clinical Psychology –Akolkar 4. Hurlock EB. Development psychology. McGraw-Hill;

# **Recommended reference books**

1. Psychology Indian continent edition Raron RA mishra 2018

2. Abnormal Psychology Sarason IG Sarason BR Prentice Hall India

3. Introduction to psychology Atkinson RL Hilgard ER 2019

4. Development a lifespan approach Johnson ML 2020 Pearson education

5. Abnormal psychology an integrative approach Thomson brooks / Cole publishing

6. Theories of councelling and psychotherapy a case approach Murdock nl person education New Zealand

7. Theories of personality. Hall CS, Lindzey G Wiley and sons inc

Define Scope of Anatomy

• Discuss the Anatomical Position and anatomical Terminology common anatomical terminologies (Groove, tuberosity, trochanters

etc.)

• Identify Anatomical positions of body, axes, and planes

Bones

• Discuss Composition, Functions, Classification based on Morphology,

• Describe Development and Structure; Formation / Development of Bones esp. Long Bones; Parts of Long Bones

Discuss the Blood Supply of Bones

#### Cartilage:

• Describe Types and Features of cartilage

Joints:

- Define and state types
- Discuss the features of fibrous, Cartilaginous & Synovial joints, sub-types of synovial joints
- Explain the movements of joints, factors permitting and limiting these movement
- Discuss blood supply of joints; applied aspects.

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#### Muscles:

• Discuss Comparative Feature of Skeletal, Smooth and Cardiac Muscles, parts & structure of Skeletal Muscle including fascicular

#### architecture

• Describe Blood supply and nerve supply of Skeletal Muscle; Motor Unit

• Discuss the Types of Skeletal Muscles based on their action i.e. Agonists, Antagonists, Fixators, Synergists, Origin & Insertion,

Tendon; Isometric & Isotonic contractions; Applied Aspects

Muscles:

• Discuss Comparative Feature of Skeletal, Smooth and Cardiac Muscles, parts & structure of Skeletal Muscle including fascicular

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• Discuss the Types of Skeletal Muscles based on their action i.e. Agonists, Antagonists, Fixators, Synergists, Origin & Insertion,

Tendon; Isometric & Isotonic contractions; Applied Aspects

General Embryology:

• Describe Ovum, Spermatozoa, fertilization and formation of the Germ layers and their derivations. Development of skin, Fascia,

blood vessels, lymphatic, (outline only details not required).

• Discuss Development of bones, axial and appendicular skeleton and muscles, Neural tube, brain vessels and spinal cord, Develop-

ment of brain and brain stem structures

Integumentary System:

· Discuss the Structure of skin and its appendages

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UNIT 2: Musculo Skeletal Anatomy of Upper Extremity

• Identify Osteology: Clavicles, Scapula, Humerus, Radius, Ulna, Carpals, Metacarpals, and Phalanges.

• Identify Soft parts: Breast, pectoral region, axilla, front of arm, back of arm, cubital fossa, front of fore arm, back of fore arm,palm, dorsum of hand, muscles, nerves, blood vessels and lymphatic drainage of upper extremity.

• Explain Shoulder girdle, shoulder joint, elbow joints, radio ulnar joint, wrist joint and joints of the hand.

• Discuss Arches of hand, skin of the palm and dorsum of hand.

Unit 3: Thorax:

Cardio-vascular system

Describe Mediastinum: Divisions and contents Pericardium

• Describe Thoracic Wall: position, shape and parts of the heart; conducting System

• Describe blood Supply and nerve supply of the heart; names of the blood vessels and their distribution in the body – region wise.

Respiratory system

• Outline the respiratory passages, Pleura and lungs: position, parts, relations, blood supply and nerve supply; Lungs – emphasize on

bronchopulmonary segments.

• Describe Diaphragm: Origin, insertion, nerve supply and action, openings in the diaphragm.

• Describe Intercostal muscles and Accessory muscles of respiration: Origin, insertion, nerve supply and action.

UNIT 4: Musculo Skeletal Anatomy of Lower Extremity

• Identify Osteology: Hip bone, femur, tibia, fibula, patella, tarsals, metatarsals and phalanges.

• Identify Soft parts: Gluteal region, Anterior, posterior, medial and lateral aspects of the thigh (Femoral triangle, femoral canal and

inguinal canal), medial side of the thigh (Adductor canal), lateral side of the thigh, popliteal fossa, anterior and posterior compart-

ment of leg, sole of the foot, lymphatic drainage of lower limb, venous drainage of the lower limb, arterial supply of the lower

limb, arches of foot, skin of foot.

• Discuss Joints of the lower limb: Hip Joint, Knee joint, Ankle and joint, joints of the foot.

Practicals:

1. Identify the parts of bones (Upper limb, lower limb and spine)

2. Identify the muscles of extremities, trunk and face on a dissected human body/3 D models.

3. Identify the surface markings of joints, fascia, ligaments and muscles of extremities, trunk and face on a mode

# COURSE TITLE - Physiology – I COURSE CODE: BPT

# Syllabus

# Unit – I General Physiology

- 1) Concept of Homeostasis definition, feedback loops, main components in the process of homeostasis, blood glucose homeostasis.
- 2) Cell Structure and functions Nucleus, mitochondria, lysosomes, peroxisomes, cell membrane, endoplasmic reticulum
- 3) Transport across the membrane a) Passive–diffusion and Osmosis, b) Active– primary and secondary c) Bulk transport – endocytosis and exocytosis
- 4) Blood and body fluids
- 5) Blood groups.

# Unit – II Digestive system

- 1) Digestive system Introduction
- 2) Salivary glands secretion and function
- 3) Stomach parts and Structure, Gastric glands functions of gastric juice
- 4) Pancreatic juice composition, functions, and regulation, Bile composition, functions of bile and bile salts
- 5) Succus entericus and GI movements
- 6) Deglutition and vomiting

# **Unit- III Cardiovascular and Endocrine System**

- 1) Introduction structure and specialized conducting system of the heart
- 2) Properties of cardiac muscle
- 3) Heart sounds, ECG
- 4) Cardiac cycle
- 5) Cardiac output Definition, and factors regulating cardiac output
- 6) Arterial blood pressure Definition, measurement, and factors maintaining BP
- 7) Heart Rate
- 8) Systematic and pulmonary circulation
- 9) Cardiovascular changes during exercises
- 10)Introduction to the endocrine system Hormes
- 11)Pituitary gland Anterior and posterior, Gigantism, Acromegaly, Diabetes Insipidus, and dwarfism
- 12)Thyroid glands hormones and disorders
- 13)Parathyroid glands hormones and disorders
- 14)Endocrine functions adrenal cortex, and adrenal medulla

#### Unit – IV Respiratory system and Nerve-muscle physiology

- 1) Introduction functions and muscles of RS
- 2) Mechanism of respiration
- 3) Transport of respiratory gases
- 4) Surfactant and spirometry
- 5) Lung volume and capacities
- 6) Hypoxia and disorders of the respiratory system
- 7) Introduction to the nerve-muscle physiology
- 8) Structure of neurons and function of nerve
- 9) Nerve injury Degenerative and regenerative
- 10)Neuroglia central and peripheral
- 11) Muscle Classification and functions
- 12)Nerve Muscle junctions

Practicals:

- Blood Pressure Measurement
- Pulse Rate
- Body Temperature
- Oxygen Saturation
- Respiratory Rate
- Differentiate Blood Cells
- Determine Blood cell counts
- Determine Blood Groups
- Calculate Bleeding and Clotting time
- > Observe the procedures of common blood investigations
- Intrepet normal ECG wave pattern
- > Differentiate heart sounds including murmurs

#### **Reference books:**

- 1. "Textbook of Medical Physiology" by Indu Khurana
- 2. "Essentials of Medical Physiology" by K. Sembulingam and Prema Sembulingam
- 3. "Textbook of Physiology" by A.K. Jain
- 4. "Concise Medical Physiology" by Sujit K. Chaudhuri
- 5. "Human Physiology" by C.C. Chatterjee
- 6. "Medical Physiology for Undergraduate Students" by Indu Khurana
- 7. "Textbook of Physiology" by H. R. Chandramouli

# **COURSE TITLE – BIOCHEMISTRY**

CODE - BPT

#### Unit I – Basics of Biochemistry

- H<sup>+</sup>, Acids, Bases and Buffers: Equilibriumconstant, dissociation of water, H+concentration, pH, acids-strongand weak, bases, titrationbehavior, Henderson-Hesselbach equation, buffers, pHmeasurement, physiological buffers.
- 2. Cellanditscomponents:Organelles,functions,membranestructure,transportacrossmembranes,<br/>ionophores, membrane proteins, transporters.

# **Unit II – Chemistry of Biomolecules**

#### 1. Carbohydrates:

Classification, important monos accharides, stereoisomerism, anomerism. Re action with acids, amines, oxidizing agents, reducing agents. Os azones, Disaccharides, polys accharides.

- **2. Lipids:**Definition,classification,natureoffattyacids,triacylglycerol,saponificat ionandiodine number, rancidity, antioxidants, complexlipids, steroids.energitics, Lipolysis.
- 3. Aminoacids, peptides, proteins: Structure of 20 amino acids, grouping isomerism, charge properties, ninhydrin reaction, peptide bond, examples of peptides, Proteins –classification, Structure-primary, secondary, tertiary

and quaternary forms, denaturation.

- 4. NucleicAcidsincludingproteinsynthesis:History,bases,nucleosides,nucleotides.DNAandgene.TypesofRNAs,Nucleotides coenzymes.
- **5. Haemoglobin:** Structureand functions ofhaemoglobin, Hb derivatives, degradationofHb, Jaundice, Haemoglobinopathies

# **Unit III – Nutrition and Energy Requirements**

# 1. Vitamins:

History, Vitamins A, D, E and K.B-complex vitamins – thiamine, riboflavin, niacin, pyridoxine, folic acid, pantothenic acid, biotin, B-12, VitaminC.Brief account of chemistry, source, requirements, deficiency diseases, biochemical functions, Hypervitaminosis.

# 2. Mineralmetabolism:

Bulk and trace elements. Sodium, potassium, Calcium, Phosphorous, Iron.Brief account of iodine, magnesium, copper, zinc, fluoride, manganese, selenium and molybdenum.

# 3. Nutrition:

Distributionofenergyindietaryfactors,Nitrogenbalance,Proteinquality, Kwashiorkarand Marasmus.Protein supplimentation, Recommended dietaryallowance and dietplanning.

# 4. EnergyMetabolism:

Calorimetry, basalmetabolism, specific dynamicaction, energy requirements under dif ferent conditions. Hormonal influence.

# Unit -IV-Enzymology and Immunology:

 Enzymes: History, catalyst, classification, efficiency, specificity, basic account of mechanismof action. Factors affecting enzyme activity. Units of measurement, Inhibitors – competitive, non- competitive, examples.Coenzymes, proenzymes, isoenzymes,Clinical enzymology, normal values.

# 2. Immunology:

Innate&acquiredimmunity,humoral&cellmediatedimmunity,antigen&antibod

#### Practicals:

Reactionsofmonosaccharides.

Reactionsofdisaccharides.

Reactionsofpolysaccharides.

Identificationofunknowncarbohydrate.

Colorreactionsofproteinsandaminoacids.

Precipitationreactionsofproteins.

Identificationofunknownproteins.

Preparationofpatientsforgenerallaboratoryinvestigations

Specimencollection&processing-anticoagulants

&urinepreservatives

Preanalyticalvariations:variationsrelatedtosamplecollection,postcollectionvariation.

#### **ReferenceBooks:**

BiochemistrybyU.Sathyanrayana TextbookofBiochemistryforMedicalstudentsbyD.M.Vasudevan TextbookofBiochemistryforMedicalstudentsbyDr.MD.Rafi

# COURSE TITLE - HUMANPHYSIOLOGY-2

# COURSE CODE – BPT -102

# SYLLABUS:

Unit 1: Nervous System

• Describe Organisation of CNS – central and peripheral nervous system. • Describe Functions of nervous system.

Synapse: Functional anatomy, classification, Synaptic transmission. Properties •

#### ies

Sensory receptors: function, Classification and properties.

The Ascending tracts – Posterior column tracts, Lateral spinothalamic tract and the anterior spinothalamic tract – their origin, course, termination and functions. The trigeminal pathway

• Discuss Sensory cortex. Somatic sensations: crude touch, fine touch tactile localization, tactile discrimination, stereo gnosis vibration sense,

• Describe kinaesthetic sensations. Pain sensation: mechanism of pain. Cutaneous pain –slow and fast pain, hyperalgesia. Deep pain. Visceral pain – referred pain.

• Describe Motor Cortex. Motor pathway:

The descending tracts – pyramidal tracts, extrapyramidal tracts – origin, course, termination and functions. Upper motor neuron and lower motor neuron. Paralysis, monoplegia, paraplegia, hemiplegia and quadriplegia. • Describe Muscle tone – definition, and properties hypotonia, atonia and hypertonia. UMNL and LMNL •

Discuss Spinal cord Lesions: Complete transection and Hemi section of the spinal cord.

Describe Cerebellum: Functions. Cerebellar ataxia. • Describe Posture and Equilibrium: Postural reflexes – spinal, medullary, midbrain and cerebral reflexes. •

Describe Functions of Thalamus and Hypothalamus: Nuclei. Thalamic syndrome •

Describe Reticular Formation and Limbic System: Components and Functions.

• Describe Structures and functions of Basal Ganglia. Parkinson's disease • Describe Cerebral Cortex: Lobes. Brodmann's areas and their functions. Higher functions of cerebral cortex – learning, memory and speech.

• Describe Formation, composition, circulation and functions of CSF Lumbar puncture and its significance. Blood brain barrier. Hydrocephalus. • Describe Features and actions of parasympathetic and sympathetic nervous system

#### Unit 2:Renal System

• Describe the functions of renal system. Nephrons – cortical and juxtamedullary. Juxta-glomerular apparatus. Glomerular membrane. Renal blood flow and its regulation. Functions of kidneys.

• Discuss the Mechanism of Urine Formation: Glomerular Filtration: Mechanism of glomerular filtration. GFR – normal value and factors affecting. Renal clearance. Inulin clearance. Creatinine clearance.

• Explain Tubular Reabsorption: Reabsorption of Na+, glucose, HCO3-, urea and water. Filtered load. Renal tubular transport maximum. Glucose clearance: TmG.

Renal threshold for glucose.

• Discuss the Mechanism of concentrating and diluting the Urine: Counter-current mechanism. Regulation of water excretion. Diuresis. Diuretics.

• Describe Mechanism of micturition. Cystometrogram. Atonic bladder, automatic bladder.

Describe Acid-Base balance

#### Unit 3: Reproductive System

• Discuss the physiology of reproductive organs. Sex determination. Sex differentiation. Disorder

• Describe Male Reproductive System: Functions of testes. Pubertal changes in males. Spermatogenesis. Testosterone: action. Regulation of secretion. Semen.

• Describe Female Reproductive System: Functions of ovaries and uterus. Pubertal changes in females. Oogenesis. Hormones: oestrogen and progesterone-action. Regulation of secretion.

• Describe Menstrual Cycle: Phases. Ovarian cycle. Uterine cycle. Hormonal basis. Menarche. Menopause.

• Describe Pregnancy: Pregnancy tests. Physiological changes during pregnancy. Functions of placenta. Lactation. Contraception methods

#### Unit 4: Physiology Of Exercise

• Explain the Effects of acute and chronic exercise on respiratory, cardio vascular and musculoskeletal system

# PRACTICAL:

Perform the following clinical examination procedures

- Elicit superficial and deep tendon reflexes
- Determine muscle tone
- Examination of sensory system
- Examination of motor systems
- Examination of cranial nerves

#### **Recommended text Books**

1. Text book of Physiology –Anand & Manchanda, Tata McGraw Hill.

- 2. Human Physiology Vol. 1 & 2, Chatterjee. CC, Calcutta. Medical Allied.
- 3. Concise Medical Physiology. Chaudhari, S.K, New Central Agency, Calcutta.

- 4. Principles of Anatomy and Physiology. Tortora & Grabowski –Harper Collins.
- 5. Text book of Practical Physiology Ghai Jaypee

#### **Recommended Reference Books:**

- 1.Text book of Medical Physiology –Guyton Arthur (Mosby.)
- 2.Best & Taylor's Physiological Basis of Medical Practice

UNIT 1: Musculo Skeletal Anatomy of Lower Extremity

• Identify Osteology: Hip bone, femur, tibia, fibula, patella, tarsals, metatarsals and phalanges.

• Identify Soft parts: Gluteal region, Anterior, posterior, medial and lateral aspects of the thigh (Femoral triangle, femoral canal and

inguinal canal), medial side of the thigh (Adductor canal), lateral side of the thigh, popliteal fossa, anterior and posterior compart-

ment of leg, sole of the foot, lymphatic drainage of lower limb, venous drainage of the lower limb, arterial supply of the lower

limb, arches of foot, skin of foot.

• Discuss Joints of the lower limb: Hip Joint, Knee joint, Ankle and joint, joints of the foot.

Unit 2: Musculo skeletal anatomy of trunk & pelvis:

• Identify Osteology: Cervical, thoracic, lumbar, sacral and coccygeal vertebrae and ribs.

• Discuss Soft tissue: Pre and Para vertebral muscles, intercostal muscles, anterior abdominal wall muscles, Inter-vertebral disc.

• Describe Pelvic girdle and muscles of the pelvic floor.

Unit 3: Abdomen:

• Describe Peritoneum: Parietal peritoneum, visceral peritoneum, folds of peritoneum, functions of peritoneum.

• Describe large blood vessels of the gut.

• Identify Location, size, shape, features, blood supply, nerve supply and functions of the following: stomach, liver, spleen, pancreas,

kidney, urinary bladder, intestines, and gall bladder.

• Describe Pelvis: Position, shape, size, features, blood supply and nerve supply of the male and female reproductive system.

Endocrine glands:

• Describe Position, shape, size, function, blood supply and nerve supply of the following glands: Hypothalamus and pituitary gland,

thyroid glands, parathyroid glands, Adrenal glands, pancreatic islets, ovaries and testes, pineal glands, thymus.

Musculo Skeletal Anatomy of Head and Neck:

• Identify Osteology: Mandible and bones of the skull.

• Identify Soft parts: Muscles of the face and neck and their nerve and blood supplyextra ocular muscles, triangles of the neck.

Unit-4 : Neuro Anatomy

• Discuss Organization of Central Nervous system - Spinal nerves and autonomic nervous system mainly pertaining to cardiovascular, respiratory and urogenital system (Cranial nerves, Peripheral nervous system, Peripheral nerve, Neuromuscular junction,

Sensory end organs , Central Nervous System, Spinal segments and areas, Brain Stem , Cerebellum , Inferior colliculi , Superior

Colliculi , Thalamus , Hypothalamus , Corpus striatum , Cerebral hemisphere , Lateral ventricles ,Blood supply to brain , Basal

Ganglia, The pyramidal system , Pons, medulla, extra pyramidal systems , Anatomical integration

Practicals:

- Identify the joints of extremities, trunk and face on a dissected human body/3 D models
- 2. Identify the surface of joints, fascia, muscles and ligaments of extremities, trunk and face of a model.
- 3. Identify the gross structure of heart, lungs,brain and spinal cord on a dissected human body and 3D models

#### COURSE TITLE – BIOCHEMISTRY -2

#### **COURSE CODE -BPT -103**

#### SYLLABUS

UNIT 1 .Enzymes -

1. Definition, Active site, Cofactor (Coenzyme, Activator), Proenzyme. Classification with examples, Factors effecting enzyme activity, Enzyme inhibition and significance, Isoenzymes, Diagnostic enzymology (clinical significance of enzymes)

2. Nucleotide and Nucleic acid Chemistry - 1. Nucleotide chemistry: Nucleotide composition, functions of free nucleotides in body

UNIT 2. Nucleic acid (DNA and RNA) chemistry: Difference between DNA and RNA,

Structure of DNA (Watson and Crick model), Functions of DNA.

Structure and functions of tRNA, rRNA, mRNA.

UNIT 3. Vitamins - 1. Definition, classification according to solubility,

2. Individual vitamins - Sources, Coenzyme forms, functions, RDA, digestion, absorption and transport, deficiency and toxicity.

3. Mineral Metabolism1. Definition, Sources, RDA, Digestion, absorption, transport, excretion, functions, disorder of Individual minerals - Calcium, phosphate, iron, Magnesium, fluoride, selenium, molybdenum, copper. Phosphate, calcium and iron in detail.

**UNIT 4**. Clinical Biochemistry - 1. Normal levels of blood and urine constituents, Relevance of blood and urine levels of Glucose, Urea, Uric acid, Creatinine, Calcium, Phosphates, pH and Bicarbonate. Liver function tests, Renal function tests

# **Recommended Text Books**

1. Textbook of Biochemistry- Chatterjee M.N.-Jaypee Brothers.

2. Textbook of Biochemistry for Medical Students Vasudeval D.M. Jaypee Brothers.

3. Clinical Biochemistry- metabolic & Clincial aspects- Marshall & Bangert- Churchill Linvingstone.

4. Biochemistry Southerland-Churchill Livingstone.

#### **Recommended Reference**

books 1. Drugs in Sports: David R. Mottram and Sally Gunnel E. &F.N.Span.

2. Normal and Therapeutic Nutrition Robison H. Cortinne et al; Mac Millian Publish Company, New York.

3. Physiological Chemistry. By Harpar

#### **COURSE TITLE – FUNDAMENTALS OF EXERCISE MODALITIES -2**

#### COURSE CODE -BPT -104

#### **SYLLABUS**

**Unit 1:** Muscle testing • Discuss the Principles & Aims, Indications & Limitations, and Techniques of MMT for group & individual testing • Demonstrate Manual Muscle testing procedure • Perform MMT for upper limb, lower limb spine and face muscles

**Unit 2:** Classification of therapeutic exercise • Classify therapeutic exercises: Technique, effects, therapeutic use

Demonstrate Active Movements

• Discuss active movements in terms of Definition of strength, power & work, endurance, muscle actions, causes of decreased muscle performance,

• Explain the Physiological adaptation to training: Strength & Power, Endurance.

• Demonstrate Free exercise: Classification, principles, techniques, indications, contraindications, effects and uses

Demonstrate Active Assisted Exercise:

• Discuss the principles, techniques, indications, contraindications, effects and uses Assisted-Resisted Exercise: principles, techniques, indications, contraindications, effects and uses

**UNIT 3 •** Demonstrate Resisted Exercise: • Discuss the principles, indications, contraindications, precautions &techniques, effects and uses

Types of resisted exercises: Manual and Mechanical resistance exercise, Isometric exercise, Dynamic exercise: Concentric and Eccentric, Dynamic exercise: Constant versus variable resistance, Isokinetic exercise, Open-Chain and Closed-Chain exercise

• Demonstrate Passive Movements • Discuss Causes of immobility, Classification of Passive movements, Specific definitions related to passive movements, Principles of giving passive movements, Indications, contraindications, effects of uses,

Techniques of giving passive movements Demonstrate Mobilization exercises of the joint's region-wise- passive, active

**Unit 4** • Classify various types of soft tissue manipulation techniques.

• Discuss Physiological effects, therapeutic effects and contraindications of soft tissue manipulation.

• Describe effleurage, stroking, kneading, petrissage, deep friction, vibration and shaking etc.

• Perform effleurage, stroking, kneading, petrissage, deep friction, vibration and shaking etc.

# PRACTICAL

1.Demonstrate the relaxed passive movement of joints of upper limb and lower limb on human model

2. Instruct the patient to perform of the active mobilisation exercises of joints of upper limb and lower limb on human model

3. Perform passive mobilisation exercises of different joints region wise on self / human model

4. Demonstrate the testing of muscle strength/ function region wise – upper limb, lower limb and trunk on human model

5. Perform all the soft tissue manipulative techniques region wise – upper limb, lower limb, neck, back and face on human model

6. Demonstration ONLY [ to be shown to the student by the teacher]

# **Recommended Text Books**

1. Principle of Exercise Therapy -Gardiner - C.B.S. Delhi

2. Practical Exercise Therapy - Hollis - Blackwell Scientific Publications.

3. Therapeutic Exercises Foundations and Techniques - Kisner and Colby -F.A. Davis.

4. Principles and practices of therapeutic massage – Sinha 3rd edition. Jaypee brothers Delhi 5. Margaret Hollis-Textbook of Massage.

6. Muscle testing and functions - Kendall - Williams & Wilkins.

7. Daniels and Worthingham's - Muscle testing - Hislop & Montgomery - W.B. Saunders.

8. Measurement of Joint Motion: A Guide to Goniometry - Norkins& White - F.A. Davis.

# **Recommended reference books**

1. Therapeutic Exercises - Basmajian - Williams and Wilkins.

2. Licht SH, editor. Massage, manipulation, and traction. E. Licht;

3. World Health Organization; Global Strategy on Diet, Physical Activity and Health

4. McArdle WD, Katch FI, Katch VL. Exercise physiology: nutrition, energy, and human performance. Lippincott Williams & Wilkins; 2010.

# Course Title: Fundamentals of Electro Physical Agents -2

#### Course Code BPT-105

# SYLLABUS

Unit-1

#### Faradic current:

Biophysics, principles, therapeutic uses, indications, contra-indications, operational skills of equipment and patient preparation

#### Interrupted direct current:

Biophysics, principles, therapeutic uses, indications, contra-indications, operational skills of equipment and patient preparation

#### Unit -2

# Infrared rays:

Wavelength, frequency, types and sources of IRR generation techniques of irradiation.

Physiological and therapeutic effects indications, contraindications, precautions, Operational skills of equipment and patient Preparation

# Unit 3

# **Electrical Reactions and Electro-Diagnostic Tests**

Electrical stimuli and normal behavior of nerve and muscle tissue. Types of lesions and development of reaction of degeneration.

# Unit 4

Faradic/Intermittent direct current test. S.D. Curve and its application. Chronaxie, Rheobase and pulse ratio

# PRACTICAL

1) Locate and stimulate different motor points region wise including the upper & lower limb, trunk face. On human model

2) Demonstrate the application of special techniques of low frequency current including Faradic foot bath, faradism under pressure

3) Demonstrate the plotting of strength duration curve and find out Chronaxie and Rheobase.

4) Demonstrate the techniques of application of various types of IR lamps to various body regions

#### **Recommended Text Books**

1.Electro therapy Explained: Principles & Practice Low& Reed, Butterworth Heinemann.

2. Claytons Electro therapy, Forster & Palastange Baillier Tinda

#### **Recommended reference books**

1. Principles & Practice of Electrotherapy, Kahn, Churchill Livingstone

- 2. Clinical electrotherapy Currier and nelson
- 3. Therapeutic Heat & Cold, Lehmann, Willians& Wilkins.

# **Course Title – Sociology**

# Course code BPT 106

# SYLLABUS

Unit -1

#### 1. Introduction:

- a) Meaning, Definition and Scope of Sociology
- b) Its relation to Anthropology, Psychology, Social Psychology
- c) Methods of Sociological Investigations. Case Study, social survey, questionnaire, Interview and opinion poll methods.
- d) Importance of its study with special reference to Health Care Professionals.

# 2. Social Factors in Health and Disease Situations:

- a) Meaning of Social Factors
- b) Role of social factors in health and illness.

#### 3.Socialization:

- c) Meaning and Nature of Socialization
- d) Primary, Secondary and Anticipatory socialization
- e) Agencies of Socialization.

# Unit-2

#### 4. Social Groups:

- a) Concepts of social groups, influence of formal and informal groups on health and sickness.
- b) The role of primary groups and secondary groups in the hospital and rehabilitation setup.

# 5. Family:

- a) The family, meaning and definitions.
- b) Functions of types of family
- c) Changing family patterns
- Influence of family on the individual's health, family and nutrition, the effects of sickness in the family and psychosomatic disease and their importance to physiotherapy.

#### 6. Community:

- a) Rural Community: Meaning and features Health Hazards of ruralities, health hazards to tribal community.
- b) Urban community: Meaning and features Health hazards of urbanities.

# Unit -3

# 7. Culture and Health:

- a) Concept of Health
- b) Concept of Culture
- c) Culture and Health
- d) Culture and Health Disorders

# 8. Social Change

- a) Meaning of Social changes.
- b) Factors of social changes.
- c) Human adaptation and social change.
- d) Social change and stress.
- e) Social change and deviance.
- f) Social change and health programme
- g) The role of social planning in the improvement of health and rehabilitation

#### Unit -4

# 9. Social problems of disabled: Consequences of the following social problems in relation to sickness and disability, remedies to prevent these problems.

- a) Population explosion
- b) Poverty and unemployment
- c) Beggary
- d) Juvenile delinquency
- e) Prostitution
- f) Alcoholism
- g) Problems of women in employment
- h) Geriatric Problems
- i) Problems of underprivileged.

#### 10. Social security

a) Social security and social legislation in relation to the disabled. (2 classes)

#### 11. Social Worker

- a) Meaning of social work
- b) The role of medical social worker.

# Course Title - Fundamentals of Health care Delivery system

# Course Code BPT 107

# Syllabus:

# UNIT-1

1.National Health Programme- Background objectives, action plan, targets, operations, achievements and constraints in various National Heath Programme.

2.Health scenario of India- past, present and future

#### UNIT-2

3 Introduction to the profession of physiotherapy role of physiotherapy in national health issues and the expectations of society from physiotherapists

4 The concepts of health and disease, risk factors, and the role of health promotion and disease prevention

5 Explore the corporatization of health care.

# UNIT-3

6. Identify the globalisation of health care.

7. Assess the prospects of new health care reform.

8 Understand various types of health services professionals and their training, practice requirements, and practice settings.

#### UNIT-4

9 Differentiate between primary care and specialty care, and identify the causes of the imbalance between primary care and specialty care

10 Study the role of health care financing and its impact on the delivery of health care.

11 Understand the basic concept of insurance and how general insurance terminology applies to health insurance.

# COURSE TITLE - ENGLISH -2

# COURSE CODE – BPT -108

#### SYLLABUS

Unit 1 (Story)	TEXT	After the Sunset – BhoopalRTI, page 71				
	Reading Comprehension					
	Grammar	Degrees of Comparison 84, Voice				
	Vocabulary	Conjunctions, 100				
	Conversation Practice	Talking about Sports and Games, page 33 (Classroom Activity)				
	Soft Skills	Creativity, page 104, Work Ethics, 126				
Unit 2 (Poem)	TEXT	Be the Best– Douglas Malloch				
	Reading Comprehension	Good Governance, page 131				
	Grammar	Common errors, 131-134				
	Vocabulary	Idioms and Phrases				
	Pronunciation	Rhythm (Classroom Activity)				
	Language Games	Word Jumble (Classroom Activity)				
Conversation Practice		About Social Media, pages 142 & 143 (Classroom Activity)				

# COURSE TITLE: Basic computers and information science

#### COURSE CODE - BPT – 109

#### SYLLABUS

#### UNIT-1

1. Introduction of windows: History, features, desktop, taskbar, icons on the desktop, operation with folder, creating shortcuts, operation with windows (opening, closing, moving, resizing, minimizing and maximizing, etc.).

2. Introduction to MS-Word: introduction, components of a word window, creating, opening and inserting files, editing a document file, page setting and formatting the text, saving the document, spell **checking**, **printing the document file**, **creating and editing of table**, **mail merge**.

#### UNIT-2

3. Introduction to Excel: introduction, about worksheet, entering information, saving workbooks and formatting, printing the worksheet, creating graphs.

4. Introduction to power-point: introduction, creating and manipulating presentation, views, formatting and enhancing text, slide with graphs.

#### UNIT-3

5. Introduction of Operating System: introduction, operating system concepts, types of operating system.

6. Computer networks: introduction, types of networks (LAN, MAN, WAN, Internet, Intranet), network topologies (star, ring, bus, mesh, tree, hybrid), components of network.

#### UNIT-4

7. Internet and its Applications: definition, brief history, basic services (E-Mail, File Transfer Protocol, telnet, the World Wide Web (WWW)), www browsers, use of the internet

8. Application of Computers in clinical settings.

# **Course Structure**

# 1. Course Structure

# CBCS SYLLABI FOR BACHELOR OF PHYSIOTHERAPY

SEMEST	ER – I						
CODE	COURSE TITLE	COURSE TYPE	HPW	CREDITS	Internal Marks	External Marks	Total Marks
BPT104	English-I	AECC-I	2	2	15	35	50
BPT105	Information Technology	SEC	4	4	30	70	100
BPT106	Psychology	SEC	4	4	30	70	100
BPT107	Fundamentals of Health Care Delivery System In India-1		6	6	50	0	50
BPT101	Human Anatomy I	CC1 - A	5	5	30	70	100
BPT102	Human Physiology I	CC1 – B	5	5	30	70	100
BPT103	Biochemistry	CC1 - C	6	6	30	70	100
BPT101	Anatomy Lab	CC1 - A - P	3	1.5	15	35	50
BPT102	Physiology Lab	CC1 - B - P	3	1.5	15	35	50
BPT103	Biochemistry Lab	CC1 - C - P	4	2	15	35	50
	Clinic Orientation/Seminars		2	2	15	35	50
	TOTAL		44	39	275	525	800

SEMESTER – II							
CODE	COURSE TITLE	COURSE TYPE	HPW	CREDITS	Internal Marks	External Marks	Total Marks
BPT105	English-II	AECC-II	2	2	15	35	50
BPT104	Fundamentals of Electro Physical Agents	SEC	6	6	30	70	100
BPT106	Sociology	SEC	4	4	30	70	100
BPT107	Fundamentals of Health Care Delivery System In India-2		4	4	50	0	50

BPT101	Human Anatomy II	CC2 - A	5	5	30	70	100
BPT102	Human Physiology II	CC2 – B	5	5	30	70	100
BPT103	Fundamentals of exercise Modalities	CC2 - C	6	6	30	70	100
BPT101	Human Anatomy II Lab	CC2 – A – P	3	1.5	15	35	50
BPT102	Human Physiology Lab	CC2 - B - P	3	1.5	15	35	50
BPT103	Fundamentals of exercise Modalities Lab	СС2 – С – Р	4	2	15	35	50
BPT104	Fundamentals of Electro Physical Agents Lab	SEC-LAB	4	2	15	35	50
	Clinic Orientation/Seminars		2	2	15	35	50
	TOTAL		48	41	290	490	850

4.BOS Chairperson – Dr.Pavan Kumar Talapuru, BPT, MSPT ( Sports ), DPT (USA), Ph.D.HCMA (IIMK)- Professor & Dean

5.HOD- Dr. Yenamala Gayathri ,BPT,MPT,(Ph.D)- Associate professor

# 6.BOS members

# Co-external members -

Dr. K.Madhavi,BPT,MPT,Ph.D-Professor & Principal- SVIMS College of physiotherapy

Dr. Naveen Kumar Balne, BPT, MPT-Faculty -NIMS college of physiotherapy

# **Co-Internal members**

Dr.Pavan Kumar Talapuru, BPT, MSPT ( Sports ), DPT (USA), Ph.D.HCMA (IIMK)

-Professor & Dean

Dr.Yenamala Gayathri, BPT, MPT, MAPHC, (Ph.D)-Associate Professor

Dr.Nishath Afreen, BPT, MPT-Assistant Professor

Dr.B.Rishika, BPT, MPT-Assistant Professor

Dr.K.Sai Kumar, BPT-Clinical Demonstrator

6.DRC - Dr.Pavan Kumar Talapuru,BPT, MSPT ( Sports ), DPT (USA), Ph.D.HCMA (IIMK) - Professor & Dean

# 7.Faculty –

Dr.Pavan Kumar Talapuru,BPT, MSPT ( Sports ), DPT (USA), Ph.D.HCMA (IIMK)- (Professor and Dean)

Dr.Yenamla Gayathri, BPT, MPT, MAHPC, (Ph.D) - HOD (Associate Professor)

Dr.Nishath Afreen, BPT, MPT (Assistant Professor)

Dr.B.Rishika, BPT, MPT (Assistant Professor)

Dr.K.Sai Kumar, BPT, (Clinical demonstrator)

# 8.Non-Teaching staff

9.Facilities-

Well Infrastructured Library

Out Patient Department

10.Seminars /Conferences/Workshops/FDPs

Two Day National Conference 0n "Recent Advances in Pharmacy, Physiotherapy and Allied Health sciences" on 24 th and 25 th November 2023

11. Publications

a)Books

b)Articles

12.Department Journal

13.Patents

14.Lab Equipment

#### Anatomy Lab -

**Disarticulated Bone set** 

Specimen/model for soft parts

Anatomy Software and Vitual Anatomy in models

#### Physiology Lab-

Microscopes

Westergren's pipette for ESR onstand

Wintrobe's pipette for ESR and PCV withstand

Hemoglobin meter

Hemocytometer

Tuning fork time marker

Sphygmomanometer

Stethescopes

Spirometer

Clinical Themometer

Tuning fork

#### **PhysiotherapyLab**

Parallel bar

**Blood Pressure Apparatus** 

Stepper

Shoulder wheel

Dumbells

Weight cuffs

Resistive bands with different colors

Ultrasound therapy unit 1 MHz and 3 MHz

Paraffin wax bath unit

**TENS Machines** 

Muscle Stimulators

Infrared lamp

Hydrocollator

Coldpack Unit

Gym Ball

15.Research Scholars

a)with fellowship

b)without fellowship

16.Scholars Awarded

17.Course Intake – 50 per batch

#### 18. Achievements of Faculty -

**Dr. PAVAN KUMAR TALUPURU** BPT, MSPT (Sports), DPT (USA), Ph.D.HCMA (IIMK)-**Professor &Dean** 

#### Achievements:

 Recently Completed Health Care Management & Analytics (HCMA) from Indian Institute of Management (IIMK)- 2022 -23

#### Additional certifications:

- Qualified BCCI SSSM-1 course in September-2016.
- Qualified Level-1 Physiotherapist course conducted byNCA/BCCI in 2008.

• Certified Life Saver with training in Advanced Basic Life Support programme conducted byNCA/BCCI in 2019.

• Certified Dynamic Taping Practitioner in July 2019.

• Certified Level-1 &2 Dry Needling Practitioner by The Dry Needling Institute in 2016.

• Certified Level-1 &2 Neuro Myoskeltal Dry Needling Practitioner by The Dry Needling Institute in 2019.

- Certified Level-1 &2 M2T- Blade ( IASTM ) Practitioner.
- Certified Kinesio Taping Practitioner.
- Basic Level course in "Pilates A Gate Core Stability" in 2014.

• Certified BarefootRx Rehab Specialist by EBFA (Evidence Based Fitness Academy) in 2016.

- Certified Level-1 Cupping Kinetic Practitioner.
- Certified in "Advanced Manual therapy with Postural Respiration".
- Certified for a course on "Dynamic Stability and Exercise" in 2019.

• Participated as a Guest Speaker at "3rd IHFA International Conference on Sports injuries and Rehabilitation", held on 8- 9 June 2019, to deliver a talk on my valuable insights into development of Hand Grip Strength Norms in Indian Cricket players.

• Attended workshop on Art of Manipulation (CAMT) Basic course from New Delhi in September2016 • Attended workshop on "Fascial patterns, Dysfunction and Management" (StecoMethod) in June-2016.

• Attended workshop on "The Pre and Post- Natal" by Dr. Snigdha Mehta inApril-2016. • Attended Workshop on "Dry Needling and Spinal Manipulation Part 1" in July 2015.

 Attended Hands-on Workshop regarding "Cardiac Rehabilitation" in September 2013.
Attended Workshop on 'MULLIGAN CONCEPT' Mobilisation with Movement, NAGS, SNAGS etc in March and April 2012.

• Attended a CME Programme on MACKENZIE'S Principles of Manual Therapy,in 2003.

• Attended workshop on "MANUAL THERAPY IN CLINICAL REASONING PERSPECTIVE" (for 3 months) in 2002.

#### **Research Publications** -

Kumar TP, Kulandaivelan S, Yadav A, Vasu P. Test retest reliability and consistency of electronic Jamar hand-grip dynamometer in Cricket players. IOSR-J Sports Phys Educ. 2016;3(3):49–53.

• Talupuru PK, Kulandaivelan S, Alrashdi NZ, Ateef M, Haripriya U. Effect of age on hand grip strength in professional cricket players. Indian Journal of Health and Wellbeing 2016;7(7):746-48.

• Talupuru PK, Kulandaivelan S, Haripriya U, Singh V. Effect of BMI on hand grip strength in elite cricket players. Int J Physiotherapist Res.2016;4(5):1696–700.

# **Professional Memberships:**

• Life time member of Indian Association of Physiotherapy (IAP) with Registration No.10188.

• Life time member of Indian Association of Sports Physiotherapy (IASP). • Life time member of federation of Indian Manual Therapist Association (MFIMT)

# Dr.Yenamala Gayathri BPT,MPT, (Ph.D)- Associate Professor- HOD

# Additional Certifications and Achievements:

Resource person-workshop conducted on Musculoskeletal injuries- Physiotherapy Management for **CHAI foundation**,(Catholic health Association of India) Hyderabad,in Feb-2024

Certificate of appreciation from ReLive Physiotherapy and rehabilitation unit in Ramesh Cardiac Hospitals,Guntur for **Post CABG Cardiac Rehabilitation** in september-2023

Guest speaker in HINDU college of management,Guntur in women's health Care management in Oct-2023

Paper presentation in Role of Physiotherapy in Cardio-thoracic Rehabilitation, in Ramesh Cardiac Hospitals,Guntur,in November -2023

Conducted **Community health care programme for disabled children** under TRUSTEE FOUNDATION in Guntur in the year 2022

Paper presentation at Saveetha college of Physiotherapy, Chennai, on Neuro physio conclave- and Won the first prize ward in Oct- 2022 on the world stroke day.

Certified Care giving skills Training for Families of children with Developmental Delays or Disabilities from **W.H.O** -**Health Emergencies Programme**(World Health Organisation)in October-2022

Protect Training in Occupational health and safety from **W.H.O-Health Emergencies Programmes**(World health Organisation)in October-2022 Attended workshop-Spinal manipulation Techniques from Academy of Orthopaedics manual Physical therapy (AOMPT)in Feb-2019

Participation certification in MOCON-19, **Maldivian Orthopedic conference** in the year 2019.

Certified trainer in **Enraf-Nonius** equipment application, **Republic of Maldives** in the year 2019.

Resource person -Tapping Workshop conducted in Maldives national University, **Maldives** in 2020

Resource Person -Workshop on Developmental Delay in Cerebral palsy Children-IGM hospital, **Maldives** in Nov-2020

Resource Person for Mulligan concepts workshop in Ministry of Health IGM Hospital-Republic of **Maldives** in October-2021

Attended workshop in Hydrotherapy in IGM hospital, Maldives in 2021

Neuro muscular Dry needling certified in the year 2015 from springs health care, Hyderabad.

Certified as **Ergonomist** in 30<sup>th</sup> April-2014

Taping and dry needling certified-physio foundation India, Hyderabad.

Certified clinical pilates instructor from the year 2015

Certified NDT and bobath instructor during the year 2016

Certified Therapist for sports injuries from Alison's in the year 2024

Certified for **Basics of sports Medicine** in the year 2024 from Alisons online course.

Attended Online work shop on *Physical Fitness and how to Avoid Injuries* and training safety in the year 2024

Online Certification on *Treatment and movement of life in Physical therapy* in 2024

# Professional Memberships:

Life time member of **Indian Association of Physiotherapy** (IAP) with Registration No-35037

**Membership in Maldives Allied health sciences** with Registration.No-MAHC/CPT/2012/2002-Republic of Maldives.

# Dr.B.Rishika, BPT, MPT - Assistant Professor

#### Conferences and Seminars attended:

- > CPD Certified **Pelvic Floor Rehab Therapy** in December 2023.
- Faculty Development Workshop, Apollo Institute of Medical Sciences and Research in September 2023.
- Recon -2023 Interdisciplinary Approach For The Management and Rehabilitation of Vestibular Disorders, Yashoda Hospitals in August 2023.
- > International Physio Conference, MNR university in July 2023.
- > CPD Certified **Biomechanical Cupping Therapy**, in June 2023.
- Workshop on Cardiopulmonary Rehabilitation conducted in KIMS Hospitals - November 2022.
- International Congress On Advanced Physical therapy, Rehabilitation and Research - 2021.
- > Hands on Workshop on **Cancer Rehabilitation** in March 2020.
- > Advanced Geriatric Concepts in January 2020.
- Postural Analysis and Corrective Effective Strategies held at Apollo Hospitals in December 2018.
- National Workshop on Cognizance of Stroke Disability and Management held at Hyderabad in October 2011.
- Workshop on Spinal Manual Therapy, (McKenzie Approach) held at Mahabubnagar in September 2010.
- Workshop on physiotherapy in Intensive Care Unit held at Mahabubnagar in March 2007.
- All India Intercollege Physiotherapy Conference held at SRM college of Physiotherapy, Chennai in June 2007.

# Online Courses:

- > Anatomy Specialization from University of Michigan- December 2022.
- > Physiopedia Orientation Course November 2021.
- > Cancer Rehabilitation 2021 by **Tata Memorial Hospital**.
- Designing your personal weight loss plan from Case Western Reserve University – 23/01/2021.
- Diabetes:The essential facts from University of Copenhagen. 22/01/2021
- Managing your health: The Role of Physical Therapy and Exercise from University of Toronto. 11/01/2021
- Identifying and Responding to Developmental Delay in Young Children from Stanford University School of Medicine. 19/12/2020

- Learning how to learn: Powerful mental tools to help you master tough subjects from McMaster University, UC San Diego. 13/11/2020.
- Type 2 Diabetes management from Stanford University School of medicine. 10/11/2020
- COVID 19 : Training for Healthcare Workers from Stanford University School of medicine. 8/11/2020
- Body Language- Key to professional success from IIT Madras. Sep-Oct 2020
- Stress Management from IIT Kharagpur Sep-Oct 2020.
- PostNatal Rehab Practitioner from International Institute of Pelvic floor Research, Rehabilitation and Education . 21,22 /9/2020
- > Psychological First Aid from **John Hopkins University**. 19/9/2020
- World Record certificate of attendance by Assist World Records in attending most number of international webinars during covid 19 pandemic lockdown period. 8/9/2020
- > Science of Exercise from University of Colorado. 2/9/2020
- > **The Science of Well-being** from Yale University .31/7/2020.
- COVID 19: Tackling Novel Corona virus from London school of hygiene and tropical medicine. 27/3/2020
- COVID 19 : Operational Planning Guidelines by World Health Organisation 23/3/2020.

## Volunteer Work:

Awarded with Green Belt for volunteer work for contribution to the Physiopedia site since January 2022.

## Professional Memberships:

Member of **Indian Association of Physiotherapy** (IAP) with Registration No L-40427

# Dr.Sai Kumar ,BPT

Neuro-Development Techniques(NDT) - Bobath in Hemiplegics - 9/July/2023

19. Achievements of students -

A. Out of 75 poster presentations in the , 11 posters were presented by students of Physiotherapy studying in 1<sup>st</sup> year, 1<sup>st</sup> semester in Two Day National Conference 0n "Recent Advances in Pharmacy, Physiotherapy and Allied Health sciences" held in Chaitanya Deemed to be University on 24 and 25 November 2023.

- Advancements in Physiotherapy for Osteoarthirtis Management by Ambica Shilvane
- > Robotics for Upper Limb Rehabilitation in Physiotherapy by Muskan Sultana
- > Virtual Reality in Enhancing Physiotherapy Rehabilitation by Zikriya
- A Comprehensive Exploration and Understanding of Pain by Abhinav, G.Gopi Chand
- > Women's Health by Firdous Sultana and Bushra
- > Cervical Spondylosis by B.Pavitra
- > Low Back Pain by Chalam Charla Samyukta
- A Comprehensive Guide to Post Operative Physiotherapy Management by Arjumand
- > Periarthritis Shoulder by Syeda Sara Unnisa and Sumayya Naaz
- > Parkinson's Disease by Sumanah

B. Mohammad Faisal Khan from BPT 1<sup>st</sup> year 1<sup>st</sup> semester won 1<sup>st</sup> prize in Flying kite competition in the Sankranthi event held on 11 January 2024.

C. Mohammad Faisal Khan, Eslavath Gopi, Mohammad Hissamuddin represented the University in cricket match held in Vidya Jyothi Institute of Technology.

D. Mohammad Faisal Khan, Eslavath Gopi, Mohammad Hissamuddin, Bhukya Prakash represented the University in cricket match conducted in JBIT.

#### 20.Collaberations -

MOU

21. Alumni Coordination cell

# 22.Photo Gallery































23.Contact information