PROGRAM AND COURSE OUTCOME

Program	Syllabus year
BPT – Bachelor of physiotherapy	2015 - 2016
MPT- Orthopaedics & traumatology	2015 – 2016
MPT – Neuro sciences	2015 – 2016
MPT – Cardio pulmonary sciences	2015 -2016
MPT – Womens health	2015 - 2016
BPT – Bachelor of physiotherapy	2019 - 2020
MPT- Orthopaedics & traumatology	2019 – 2020
MPT – Neuro sciences	2019 – 2020
MPT – Cardio pulmonary sciences	2019 – 2020
MPT – Womens health	2019 - 2020

BACHELOR OF PHYSIOTHERAPY DEGREE PROGRAM 2015 - 2016						
Upon completion of graduate program in physiotherapy, the student should:						
PO: 1- Acquire adequate knowledge of the basic medical subjects in the practice of physiotherapy						
PO:2- Develop skills and techniques for application of therapeutic massage, exercises, and electrotherapy modalities for the management of various medical and surgical conditions.						
PO:3- Develop proper attitude of care and concern in practice of physiotherapy.						
PO:4 - Demonstrate skill in teaching, management, research, guidance and counseling.						
PO:5 - Practices moral and ethical values.						
	First Year - Semester I	**PO: 1**	**PO: 2**	**PO: 3**	**PO: 4**	**PO: 5**
CO:101 & 151	Anatomy - I	**H**	**M**		**M**	
CO:103	Physiology - I	**H**				
CO:105	Biochemistry	**H**				
CO:111	English				**M**	
CO:113	Environmental Science					**M**
CO:115	Sociology				**L**	**H**
CO:117	Nursing and First Aid	**M**				**L**
CO:119	Basic Physics	**L**	**M**			
	First Year - Semester II					
CO: 102 & 152	Anatomy - II	**H**	**M**		**M**	
CO: 104	Physiology - II	**H**	**M**		**M**	
CO: 106 & 154	Massage and Basic Therapeutic Exercise	**M**	**H**	**L**	**L**	
CO: 108	Elementary and General Psychology				**M**	**H**
	Second Year - Semester III					
CO: 201 & 251	Therapeutic exercise	**M**	**H**	**L**	**H**	**L**
CO:203	Biomechanics - I	**H**	**M**		**M**	
CO: 205 & 253	Electrotherapeutics - I	**M**	**H**	**L**	**H**	**L**
CO: 207	Pharmacology, Pathology & Microbiology	**H**	**M**		**L**	
	Second Year - Semester IV					
CO: 202 & 252	Electrotherapeutics - II	**M**	**H**	**M**	**H**	

CO: 204	Biomechanics - II	**H**	**M**		**M**	
CO: 206	General Medicine, Surgery and Paediatrics	**H**	**M**		**L**	
	Third Year - Semester V					
CO: 301	Physiotherapy in General Surgery and Womens„ Health	**M**	**H**	**L**	**M**	**L**
CO: 303	Clinical Orthopaedics	**H**	**M**		**M**	
CO: 305 & 351	Physiotherapy in Orthopaedics	**M**	**H**	**M**	**H**	**M**
CO: 307	Community Medicine	**H**		**M**	**L**	**M**
	Third Year - Semester VI					
CO: 302	Clinical Neurology	**H**	**L**		**M**	
CO: 304 & 352	Physiotherapy in Neurology	**M**	**H**	**M**	**H**	**M**
CO: 306	Community Based Physiotherapy	**M**	**M**		**H**	**M**
	Fourth Year - Semester VII					
CO: 401	Clinical Cardio Respiratory Conditions	**H**	**L**		**M**	
CO: 403 & 451	Physiotherapy In Cardio Respiratory Conditions and Intensive Care Unit	**M**	**H**	**M**	**H**	**M**
CO : 405	Rehabilitation Medicine	**M**	**H**	**M**	**H**	**M**
CO : 407	Research Methodology and Biostatistics	**H**			**H**	
	Fourth Year - Semester VIII					
CO: 402 & 452	Physical Diagnosis and Therapeutics	**M**	**H**	**H**	**H**	**M**
CO: 406	Concepts in Ethics and Management of Health Care Delivery	**M**			**M**	**H**
CO: 404	Evidence based Physiotherapy	**M**	**H**	**M**	**H**	**M**
	Fifth Year - Semester IX					
CO:IN1551	Internship	**H**	**H**	**M**	**H**	**M**
	COURSE OUTCOME					
	First Year - Semester I					
CO:101 & 151	**Anatomy - I**					
CO:101 A	Demonstrate knowledge in human anatomy as in necessary for the study and practice of physiotherapy.					

CO: 101 B	Describe the structure of bones, joints, muscles, brain, cardio-pulmonary and nervous systems			
CO:103	**Physiology - I**			
CO: 103 A	Demonstrate an understanding of elementary human physiology			
CO: 103 B	Know the function of endocrine system, reproductive system, digestive system and muscular system			
CO:105	**Biochemistry**			
CO: 105 A	Demonstrate an understanding of elementary human biochemistry.			
CO: 105 B	understand the basis of normal human biochemical processes.			
CO:111	**English**			
CO: 111 A	Demonstrate efficiency to Speak and write grammatically correct sentences in English.			
CO: 111 B	Develop effective writing skills.			
CO: 111 C	Build fluency in English			
CO:113	**Environmental Science**			
CO:113A	Understand the problems and issues related to the environment			
CO:113B	Identify the influence of biohazards in the ecosystem			
CO:113C	Identify social issues and appreciate the role of therapist as a member of society			
CO:113D	The interdependence of individuals and society.			
CO:115	**Sociology**			
CO:115A	Understand the role of family and community in the development of behaviors.			
CO:115B	Develop a holistic outlook towards the structure of society and community resources.			
CO:115C	Identify the subtle influence of culture in the development of human personality. The role of beliefs and values as determinants of individual and group behaviors.			
CO:115D	Understand the social and economic aspects of community that influence the health of the people			
CO:115E	Learn to assess the social problems and participate in social planning.			
CO:115F	Identify social institutions and resources.			
CO:115G	Understand the significance of social interactions in the process of rehabilitation.			
CO:115H	Appreciate the role of therapist as a member of society and the interdependence of individuals and society.			
CO:115I	Demonstrate an understanding of the role of socio cultural factors as determinants of health and behaviors in health and sickness.			
CO:117	**Nursing and First Aid**			
CO:117A	Demonstrate and understand the principles of First aid			

CO:117B	Demonstrates skill in giving First aid treatment in emergencies that may be met in the community			
CO:119	**Basic Physics**			
CO:119A	Demonstrate understanding of physics applied in electrotherapeutics.			
CO:119B	Recognize and apply the knowledge of physics in handling equipments			
First Year - Semester II				
CO: 102 & 152	**Anatomy - II**			
CO:102A	Demonstrate knowledge in human anatomy as in necessary for the study and practice of physiotherapy.			
CO:102B	Describe the structure of bones, joints, muscles, brain, cardio-pulmonary and nervous systems			
CO: 104	**Physiology - II**			
CO:104A	Demonstrate an understanding of elementary human physiology			
CO:104B	Know the function of cardiovascular, musculoskeletal and nervous systems.			
CO: 106 & 154	**Massage and Basic Therapeutic Exercise**			
CO:106A	Analyse various types of massage techniques and their effects.			
CO:106B	Analyse various types of therapeutic exercise and movements.			
CO:106C	Know the clinical measurements available in rehabilitation process and interpret them.			
CO:106D	Interpret the Merits and demerits of manual muscle testing			
CO: 108	**Elementary and General Psychology**			
CO:108A	Recognize and help with the psychological factors involved in disability , pain, disfigurement, unconscious patients, chronic illness, death , bereavement and medical-surgical patients/conditions.			
CO:108B	understand the elementary principles of behavior for applying in the therapeutic environment			
CO:108C	understand specific psychological factors and effects in physical illness			
CO:108D	Develop holistic approach in their dealing with patients during admission, treatment, rehabilitation and discharge.			
	Second Year - Semester III			
CO: 201 & 251	**Therapeutic exercise**			
CO:201A	Understand principles, technique and effects of exercises as a therapeutic modality in the restoration of physical function.			
CO:201B	Know various types of therapeutic exercises, movements and their techniques			
CO:201C	Describe the effects and uses of exercises as a modality in restoration of			

	physical function			
CO:201D	Analyse and demonstrate the technique of various types of therapeutic exercises, movements and will be able to describe their effects and uses.			
CO:203	**Biomechanics - I**			
CO:203A	Demonstrate an understanding of the principles of biomechanics and kinesiology and their application in health and disease			
CO:203B	Analyse normal human movement from a global perspective, integrating biomechanics, muscle mechanics and motor control theory			
CO:203C	Experience quantitative methods of movement analysis in the laboratory sessions			
CO:203D	Apply analytic methods to specific example of normal human motor performance and use of these methods for evaluation and treatment of disorders of the musculo skeletal system.			
CO: 205 & 253	**Electrotherapeutics - I**			
CO:205A	Know the indications and contra indications of various types of electrotherapeutic currents			
CO:205B	Demonstrate a knowledge on application of electrotherapy on nerve lesions, facilitation of muscle contraction and pain relief by low frequency currents.			
CO:205C	Understand physiology of electrical stimulation on excitable tissue principles, techniques and effects of electrotherapy as a therapeutic modality in the restoration of physical function.			
CO: 207	**Pharmacology, Pathology & Microbiology**			
CO:207A	Understand the basic pharmacology of various common medication used and its effects on patients and during physiotherapy			
CO:207B	Demonstrate and understand the pathology and microbiology of common diseases that therapists would encounter in their daily practice.			
CO:207C	Understand how to protect themselves and their patients from infections during their interactions			
Second Year - Semester IV				
CO: 202 & 252	**Electrotherapeutics - II**			
CO:202A	Acquire knowledge of the physics of heat, sound and soft laser and their effects on tissues along with principles, techniques and effects of them as a therapeutic modality in restoration of physical function.			
CO:202B	Indications and contra indications of various types of electrotherapy, actinotherapy ,cryotherapy and describe their effects.			
CO:202C	Understand the physiology of electromagnetic field on excitable tissue, principles, techniques and effects of electrotherapy as a therapeutic modality in the restoration of physical function.			
CO: 204	**Biomechanics - II**			

CO:204A	Analyse normal human movement from a global perspective, integrating biomechanics, muscle mechanics and motor control theory			
CO:204B	understand the principles of biomechanics and their application in musculoskeletal function and dysfunction.			
CO:204C	Experience quantitative methods of movement analysis in the laboratory sessions			
CO: 206	**General Medicine, Surgery and Paediatrics**			
CO:206A	Demonstrate a general understanding of the diseases that therapists would encounter in their practice.			
CO:206B	Know the etiology and pathology, the patient‟s symptoms, the resultant functional disability and the limitations imposed by the disease on any therapy			
CO:206C	Understand the goals of pharmacological therapy in those diseases in which physical therapy will be an important component of over all management			
Third Year - Semester V				
CO: 301	**Physiotherapy in General Surgery and Womens„ Health**			
CO:301A	Identify disability and plan treatment for these disabilities due to pathology in cardio respiratory system and female reproductive system and evaluate and document them.			
CO:301B	Demonstrate skill in providing the treatment for the disabilities identified according to the clinical picture and rehabilitation need of the patient.			
CO:301C	Perform pre and post natal training and education of overall women‟s‟ health.			
CO: 303	**Clinical Orthopaedics**			
CO:303A	Demonstrate an understanding of orthopaedic conditions causing disability and their management.			
CO: 305 & 351	**Physiotherapy in Orthopaedics**			
CO:305 A	Identify disability and plan treatment for these disabilities due to pathology in musculoskeletal system, as well as evaluate and document them.			
CO:305 B	Demonstrate skill in providing the treatment for the disabilities identified according to the clinical picture and rehabilitation need of the patient.			
CO: 307	**Community Medicine**			
CO:307A	Understand the influence of social and environmental factors on the health of the individual and society.			
CO:307B	Understand the effects of the environment and the community dynamics on the health of the individual.			
Third Year - Semester VI				
CO: 302	**Clinical Neurology**			
CO:302A	Demonstrate an understanding of neurological conditions causing disability and their management.			

CO: 304 & 352	**Physiotherapy in Neurology**			
CO:304A	Understand the disability and plan treatment for these disabilities due to pathology in nervous system			
CO:304B	Demonstrate skill in providing the treatment for the disabilities identified according to the clinical picture and rehabilitation need of the patient.			
CO: 306	**Community Based Physiotherapy**			
CO:306A	Explain role of physiotherapy in health promotion in community and women‟s health.			
CO:306B	Demonstrate evaluation and training of geriatric population, sports personnel.			
CO:306C	Articulate the need of physiotherapy in a industrial set up and explain ergonomic assessment.			
Fourth Year - Semester VII				
CO: 401	**Clinical Cardio Respiratory Conditions**			
CO:401A	Demonstrate and understand the cardio thoracic conditions causing disability and their medical management.			
CO: 403 & 451	**Physiotherapy In Cardio Respiratory Conditions and Intensive Care Unit**			
CO:403A	Identify cardio respiratory dysfunction, understand and analyze the clinical problems of the described conditions.			
CO:403B	Undertake physiotherapeutic measures as preventive/restorative rehabilitative purposes for pulmonary/cardiac patient.			
CO : 405	**Rehabilitation Medicine**			
CO:405A	Demonstrate an understanding of the concept of team approach in rehabilitation and implementation with contributions from all members of the team, medical and surgical aspects of disabling conditions.			
CO:405B	Identify the residual potentials in patients with partial or total disability			
CO : 407	**Research Methodology and Biostatistics**			
CO:407A	Understand basic knowledge on Research Methodology and biostatistics.			
Fourth Year - Semester VIII				
CO: 402 & 452	**Physical Diagnosis and Therapeutics**			
CO:402A	Explain the concepts and principles of various approaches			
CO:402B	Demonstrate to assess patients, utilizing various principles			
CO:402C	Conclude physical diagnosis			
CO:402D	Analyze the patients problem			
CO:402E	Plan therapeutic interventions and justify the selection.			
CO:402F	Select appropriate scales and measures as outcome measures			
CO:402G	Employ advance therapeutics			

CO:402I	Understand problem solving strategies in clinical situations			
CO: 406	**Concepts in Ethics and Management of Health Care Delivery**			
CO:406A	understand the principles of physiotherapy profession and management concepts relevant to physiotherapy practice.			
CO: 404	**Evidence based Physiotherapy**			
CO:404A	Explain the need for practice of evidence based physiotherapy.			
CO:404B	Explain the method of finding evidences in the literature and use it for clinical practice.			
CO:404C	Conduct basic research in physiotherapy.			
Fifth Year - Semester IX				
CO:IN1551	**Internship**			
CO:IN1551A	Demonstrate the skill to evaluate, diagnose (physical diagnosis) and manage subjects under supervision of a faculty.			
CO:IN1551B	Demonstrate the records and relevant patient‟s information, treatment and follow up.			
CO:IN1551C	Demonstrate skill and presentation of a patient under his/ her during clinical meetings.			

Master of Physiotherapy (Orthopaedics and Traumatology) Degree Program 2015-2016								
At the end of the completion of Master of Physiotherapy, the Postgraduate will be able to:								
PO:1. Apply advanced knowledge of clinical science to problem solving								
PO:2. Gather and interpret information within a holistic framework.								
PO:3. Design, implement and monitor appropriate therapeutic programmes								
PO:4. Apply scientific principles to the concepts of health, illness, disability and promote health								
PO:5. Appraise the social and political context of health care								
PO:6 Undertake independent research projects								
PO:7. Promote Physiotherapy education								
First Year - Semester I								
		PO:1	PO:2	PO:3	PO:4	PO:5	PO:6	PO:7
CO:101	APPLIED ANATOMY	**H**						
CO:103	APPLIED PHYSIOLOGY AND BIOENERGETICS	**H**						
CO :105 & 151	PHYSICAL REHABILITATION-I	**H**	**M**	**H**	**M**			**M**
CO: 107	KINESIOLOGY-I	**H**			**M**			
First Year - Semester II								
CO:102	RESEARCH METHODOLOGY AND BIOSTATISTICS	**M**			**M**	**M**	**H**	**M**
CO:104&152	PHYSICAL REHABILITATION-II	**H**	**M**	**H**	**M**			**M**
CO:106	KINESIOLOGY-II	**H**			**M**			
Second Year - Semester 3								
CO:201 & 251	Physiotherapy In Orthopedic Conditions – I (Physical Diagnosis And Manual Medicine In Musculoskeletal Disorders)	**H**	**H**	**M**	**M**	**L**	**M**	**M**
CO:203 & 253	Physiotherapy In Orthopedic Conditions - II (Sports Physiotherapy)	**H**	**H**	**M**	**M**	**L**	**M**	**M**
Second Year - Semester 4								
CO:203& 252	Physiotherapy In Orthopedic Conditions-III (Disorders Of The Vertebral Column)	**H**	**H**	**M**	**M**	**L**	**M**	**M**
CO:204 & 256	Physiotherapy In Orthopedic Conditions-IV (Hand Rehabilitation)	**H**	**H**	**M**	**M**	**L**	**M**	**M**

CO: 258	Dissertation & Viva Voce					**L**	**H**	**H**
First Year - Semester I									
CO:10 1	APPLIED ANATOMY								
CO:10 1 A	Define, and describe the structure and function of skeletal and muscular system								
CO:10 1 B	Understand the joint structure and function of various regions of human body								
CO:10 1 C	Understand the functional anatomy of upper, lower extremity, trunk and other consideration of human movement								
CO:10 3	APPLIED PHYSIOLOGY AND BIOENERGETICS								
CO:10 3A	Explain the biology and chemistry of work physiology								
CO:10 3B	Correlate the energy transfer and physical activity								
CO:10 3C	Understand the relating factors of physiological supportive systems								
CO:10 3D	Describe exercise training and function								
CO:10 3E	Advice to the clients, with reference to weight control, age and health related aspects of exercise.								
CO :105 & 151	PHYSICAL REHABILITATION-I								
CO:10 5A	Understand clinical decision making and reasoning process								
CO:10 5B	Evaluate and analyze the physiological aspects of physical rehabilitation								
CO:10 5C	Identify and recognize the importance of evaluation in musculoskeletal neurological and cardiopulmonary conditions								
CO:10 5D	Understand the basic interpretation of relevant investigation and quantify the severity of impairments								
CO: 107	KINESIOLOGY-I								
CO:10 7A	Define, and describe the terminology and describe the normal Biomechanics and Pathomechanics of joints of human body.								
CO:10 7B	Do the mechanical analysis of human motion.								
CO:10 7C	Describe the anatomical and physiological aspects of human motion.								

CO:107D	Providing the student with the opportunity to experience quantitative methods of movement analysis in the laboratory sessions			
CO:107E	Applying these analytic methods to specific example of normal human motor performance			
First Year - Semester II				
CO:102	RESEARCH METHODOLOGY AND BIOSTATISTICS			
CO:102A	Understand the basic concepts of statistics and principles of scientific enquiry in planning and evaluating the results of physiotherapy practice			
CO:102B	Participate in and/or conduct descriptive, exploratory and survey studies in physiotherapy and evaluate and apply the results of research studies in health (i.e.) all related fields in the practice of physiotherapy			
CO:104&152	PHYSICAL REHABILITATION-II			
CO:104A	Make clinical decision and plan for effective treatment.			
CO:104B	To plan strategies for management of various musculoskeletal, neurological, cardio pulmonary problems and in various medical and surgical conditions.			
CO:106	KINESIOLOGY-II			
CO:106A	Define, and describe the terminology and describe the normal Biomechanics and Pathomechanics of joints of human body.			
CO:106B	Do the mechanical analysis of human motion.			
CO:106C	Describe the anatomical and physiological aspects of human motion.			
CO:106D	Providing the student with the opportunity to experience quantitative methods of movement analysis in the laboratory sessions			
CO:106E	Applying these analytic methods to specific example of normal human motor performance			
Second Year - Semester 3				
CO:201 & 251	Physiotherapy In Orthopedic Conditions – I (Physical Diagnosis And Manual Medicine In Musculoskeletal Disorders)			
CO:201A	Understand, interpret and Analyse, interpret theoretical/clinical findings and justify the selection of manipulative techniques that are required to fulfil therapeutic objectives.			
CO:201B	Understand and describe on the various manipulative skills (Mckenzie, cyriax, maitland, osteopath) and present the competency required to fulfil the therapeutic objectives			
CO:203 & 253	Physiotherapy In Orthopedic Conditions - II (Sports Physiotherapy)			

CO:203A	Understand, Analyse and interpret various sports injuries/ patho mechanics and apply appropriate therapeutic techniques on and of the field.			
CO:203B	Device/modify various exercises for sports personnel and prevent injuries by applying proper dynamics during play.			
CO:203C	Understand, predict and Analyse the effects of therapeutic modalities, indications and contra indications and precaution to ensure safety.			
CO:203D	Demonstrate skills of assessment and management in both acute and long standing injury conditions.			
CO:203E	Carry out research in a particular aspect/ specific event / biomechanical / physiological and other variables.			
Second Year - Semester 4				
CO:203& 252	Physiotherapy In Orthopedic Conditions-III (Disorders Of The Vertebral Column)			
CO:203A	Analyse, interpret and evaluate various levels of spinal cord injuries.			
CO:203B	Rationalise the treatment approach according to the management needed (medical / surgical) and to apply appropriate techniques.			
CO:203C	Compare the effect and efficacy of various approaches / techniques for research purposes.			
CO:204 & 256	Physiotherapy In Orthopedic Conditions-IV (Hand Rehabilitation)			
CO:204A	Analyse, interpret and evaluate various types of and injuries their functional importance.			
CO:204B	Rationalise various approaches for hand rehabilitation based on etiology of diseases, and to progress with rehabilitation.			
CO:204C	Discuss his role as an efficient team member along with other professionals such as occupational therapists for effective functional and vocational rehabilitation			

Master of Physiostherapy (Neuro Sciences) Degree Program 2015- 2016								
At the end of the completion of Master of Physiotherapy, the Postgraduate will be able to:								
PO:1. Apply advanced knowledge of clinical science to problem solving								
PO:2. Gather and interpret information within a holistic framework.								
PO:3. Design, implement and monitor appropriate therapeutic programmes								
PO:4. Apply scientific principles to the concepts of health, illness, disability and promote health								
PO:5. Appraise the social and political context of health care								
PO:6 Undertake independent research projects								
PO:7. Promote Physiotherapy education								
First Year - Semester I								
		PO:1	PO:2	PO:3	PO:4	PO:5	PO:6	PO:7
CO:101	APPLIED ANATOMY	**H**						
CO:103	APPLIED PHYSIOLOGY AND BIOENERGETICS	**H**						
CO :105 & 151	PHYSICAL REHABILITATION-I	**H**	**M**	**H**	**M**			**M**
CO: 107	KINESIOLOGY-I	**H**			**M**			
First Year - Semester II								
CO:102	RESEARCH METHODOLOGY AND BIOSTATISTICS	**M**			**M**	**M**	**H**	**M**
CO:104&152	PHYSICAL REHABILITATION-II	**H**	**M**	**H**	**M**			**M**
CO:106	KINESIOLOGY-II	**H**			**M**			
Second Year - Semester 3								
CO:201 & 251	Physiotherapy In Neurological Conditions – I (Evaluation Strategies Including Electrodiagnostics)	**H**	**H**	**M**	**M**	**L**	**M**	**M**
CO:203 & 253	Physiotherapy In Neurological Conditions – II (Therapeutic Strategies)	**H**	**H**	**M**	**M**	**L**	**M**	**M**
Second Year - Semester 4								
CO:203& 252	Physiotherapy In Neurological Conditions – III (Adult Neurology And Neurosurgery)	**H**	**H**	**M**	**M**	**L**	**M**	**M**

CO:204 & 256	Physiotherapy In Neurological Conditions – IV (Paediatric Neurology And Spinal Cord Lesions)	**H**	**H**	**M**	**M**	**L**	**M**	**M**
CO: 258	Dissertation & Viva Voce					**L**	**H**	**H**
First Year - Semester I								
CO:101	APPLIED ANATOMY							
CO:101 A	Define, and describe the structure and function of skeletal and muscular system							
CO:101 B	Understand the joint structure and function of various regions of human body							
CO:101 C	Understand the functional anatomy of upper, lower extremity, trunk and other consideration of human movement							
CO:103	APPLIED PHYSIOLOGY AND BIOENERGETICS							
CO:103A	Explain the biology and chemistry of work physiology							
CO:103B	Correlate the energy transfer and physical activity							
CO:103C	Understand the relating factors of physiological supportive systems							
CO:103D	Describe exercise training and function							
CO:103E	Advice to the clients, with reference to weight control, age and health related aspects of exercise.							
CO :105 & 151	PHYSICAL REHABILITATION-I							
CO:105A	Understand clinical decision making and reasoning process							
CO:105B	Evaluate and analyze the physiological aspects of physical rehabilitation							
CO:105C	Identify and recognize the importance of evaluation in musculoskeletal neurological and cardiopulmonary conditions							
CO:105D	Understand the basic interpretation of relevant investigation and quantify the severity of impairments							
CO: 107	KINESIOLOGY-I							
CO:107A	Define, and describe the terminology and describe the normal Biomechanics and Pathomechanics of joints of human body.							
CO:1	Do the mechanical analysis of human motion.							

07B				
CO:107C	Describe the anatomical and physiological aspects of human motion.			
CO:107D	Providing the student with the opportunity to experience quantitative methods of movement analysis in the laboratory sessions			
CO:107E	Applying these analytic methods to specific example of normal human motor performance			
First Year - Semester II				
CO:102	RESEARCH METHODOLOGY AND BIOSTATISTICS			
CO:102A	Understand the basic concepts of statistics and principles of scientific enquiry in planning and evaluating the results of physiotherapy practice			
CO:102B	Participate in and/or conduct descriptive, exploratory and survey studies in physiotherapy and evaluate and apply the results of research studies in health (i.e.) all related fields in the practice of physiotherapy			
CO:104&152	PHYSICAL REHABILITATION-II			
CO:104A	Make clinical decision and plan for effective treatment.			
CO:104B	To plan strategies for management of various musculoskeletal, neurological, cardio pulmonary problems and in various medical and surgical conditions.			
CO:106	KINESIOLOGY-II			
CO:106A	Define, and describe the terminology and describe the normal Biomechanics and Pathomechanics of joints of human body.			
CO:106B	Do the mechanical analysis of human motion.			
CO:106C	Describe the anatomical and physiological aspects of human motion.			
CO:106D	Providing the student with the opportunity to experience quantitative methods of movement analysis in the laboratory sessions			
CO:106E	Applying these analytic methods to specific example of normal human motor performance			
Second Year - Semester 3				
CO:201 & 251	Physiotherapy In Neurological Conditions – I (Evaluation Strategies Including Electrodiagnostics)			
CO:201A	Able to choose appropriate evaluation methods for various neurological impariments.			
CO:201B	Explain role of electrodiagnosis in evaluation of neurological condition.			

CO:201C	Demonstrate an understanding of documentation of different evaluation methods and use of different outcome measures.			
CO:203 & 253	Physiotherapy In Neurological Conditions – II (Therapeutic Strategies)			
CO:203A	Able to choose appropriate therapeutic methods for various neurological impairments.			
CO:203B	Explain role of biofeedback in neurological condition.			
CO:203C	Demonstrate an understanding of documentation of different therapy methods and their limitations.			
Second Year - Semester 4				
CO:203& 252	Physiotherapy In Neurological Conditions – III (Adult Neurology And Neurosurgery)			
CO:203A	Analyse, interpret and evaluate various neurological and neuro surgical conditions; and to analyse the reasons for development of specific clinical features in applied neurological conditions.			
CO:203B	Demonstrate various neurological therapeutic approaches - Rood, Bobath, MRP, PNF - on selective conditions.			
CO:203C	Evaluate the effects of various neuro - therapeutic techniques and prognosis.			
co:203d	Play efficient role in complete rehabilitation of neurological patient.			
CO:204 & 256	Physiotherapy In Neurological Conditions – IV (Paediatric Neurology And Spinal Cord Lesions)			
CO:204A	Elicit and evaluate primitive reflexes, analyse developmental mile stones, their pathological significance.			
CO:204B	Apply various neo-natal therapeutic approaches Neuro Developmental Techniques, Bobath, Rood.			

Master of Physiotherapy (Cardio pulmonary sciences) Degree Program 2015-2016								
At the end of the completion of Master of Physiotherapy, the Postgraduate will be able to:								
PO:1. Apply advanced knowledge of clinical science to problem solving								
PO:2. Gather and interpret information within a holistic framework.								
PO:3. Design, implement and monitor appropriate therapeutic programmes								
PO:4. Apply scientific principles to the concepts of health, illness, disability and promote health								
PO:5. Appraise the social and political context of health care								
PO:6 Undertake independent research projects								
PO:7. Promote Physiotherapy education								
First Year - Semester I								
		PO:1	PO:2	PO:3	PO:4	PO:5	PO:6	PO:7
CO:101	APPLIED ANATOMY	**H**						
CO:103	APPLIED PHYSIOLOGY AND BIOENERGETICS	**H**						
CO :105 & 151	PHYSICAL REHABILITATION-I	**H**	**M**	**H**	**M**			**M**
CO: 107	KINESIOLOGY-I	**H**			**M**			
First Year - Semester II								
CO:102	RESEARCH METHODOLOGY AND BIOSTATISTICS	**M**			**M**	**M**	**H**	**M**
CO:104&152	PHYSICAL REHABILITATION-II	**H**	**M**	**H**	**M**			**M**
CO:106	KINESIOLOGY-II	**H**			**M**			
Second Year - Semester 3								
CO:201 & 251	Physiotherapy In Cardiopulmonary Conditions-I (Cardiac Rehabilitation)	**H**	**H**	**M**	**M**	**L**	**M**	**M**
CO:203 & 253	Physiotherapy In Cardiopulmonary Conditions-II (Principles Of Fitness Testing And Training)	**H**	**H**	**M**	**M**	**L**	**M**	**M**
Second Year - Semester 4								
CO:203& 252	Physiotherapy in Cardio pulmonary conditions-III (Pulmonary Rehabilitation)	**H**	**H**	**M**	**M**	**L**	**M**	**M**
CO:204 &	Physiotherapy in Cardio pulmonary conditions-IV (Physiotherapy In Intensive Care Unit)	**H**	**H**	**M**	**M**	**L**	**M**	**M**

256									
CO: 258	Dissertation & Viva Voce					**L**	**H**	**H**
First Year - Semester I									
CO:101	APPLIED ANATOMY								
CO:101 A	Define, and describe the structure and function of skeletal and muscular system								
CO:101 B	Understand the joint structure and function of various regions of human body								
CO:101 C	Understand the functional anatomy of upper, lower extremity, trunk and other consideration of human movement								
CO:103	APPLIED PHYSIOLOGY AND BIOENERGETICS								
CO:103A	Explain the biology and chemistry of work physiology								
CO:103B	Correlate the energy transfer and physical activity								
CO:103C	Understand the relating factors of physiological supportive systems								
CO:103D	Describe exercise training and function								
CO:103E	Advice to the clients, with reference to weight control, age and health related aspects of exercise.								
CO :105 & 151	PHYSICAL REHABILITATION-I								
CO:105A	Understand clinical decision making and reasoning process								
CO:105B	Evaluate and analyze the physiological aspects of physical rehabilitation								
CO:105C	Identify and recognize the importance of evaluation in musculoskeletal neurological and cardiopulmonary conditions								
CO:105D	Understand the basic interpretation of relevant investigation and quantify the severity of impairments								
CO: 107	KINESIOLOGY-I								
CO:107A	Define, and describe the terminology and describe the normal Biomechanics and Pathomechanics of joints of human body.								
CO:107B	Do the mechanical analysis of human motion.								
CO:107C	Describe the anatomical and physiological aspects of human motion.								

CO:107D	Providing the student with the opportunity to experience quantitative methods of movement analysis in the laboratory sessions			
CO:107E	Applying these analytic methods to specific example of normal human motor performance			
First Year - Semester II				
CO:102	RESEARCH METHODOLOGY AND BIOSTATISTICS			
CO:102A	Understand the basic concepts of statistics and principles of scientific enquiry in planning and evaluating the results of physiotherapy practice			
CO:102B	Participate in and/or conduct descriptive, exploratory and survey studies in physiotherapy and evaluate and apply the results of research studies in health (i.e.) all related fields in the practice of physiotherapy			
CO:104&152	PHYSICAL REHABILITATION-II			
CO:104A	Make clinical decision and plan for effective treatment.			
CO:104B	To plan strategies for management of various musculoskeletal, neurological, cardio pulmonary problems and in various medical and surgical conditions.			
CO:106	KINESIOLOGY-II			
CO:106A	Define, and describe the terminology and describe the normal Biomechanics and Pathomechanics of joints of human body.			
CO:106B	Do the mechanical analysis of human motion.			
CO:106C	Describe the anatomical and physiological aspects of human motion.			
CO:106D	Providing the student with the opportunity to experience quantitative methods of movement analysis in the laboratory sessions			
CO:106E	Applying these analytic methods to specific example of normal human motor performance			
Second Year - Semester 3				
CO:201 & 251	Physiotherapy In Cardiopulmonary Conditions-I (Cardiac Rehabilitation)			
CO:201A	Understand, interpret, analyze the clinical findings related to cardiac problems and apply appropriate therapeutic techniques.			
CO:201B	Rationalise various treatment procedures related to cardiac problems in various phases of cardiac rehabilitation (Ischaemic heart disease, open-heart surgeries) and preventive cardiac rehabilitation			
CO:201C	Understand the problems, relevant assessment and evidence based physiotherapy in medical and general surgical conditions			

CO:203 & 253	Physiotherapy In Cardiopulmonary Conditions-II (Principles Of Fitness Testing And Training)			
CO:203A	Analyse interpret and evaluate normal people in community for their general overall fitness.			
CO:203B	Analyse interpret and evaluate patients for their general l fitness			
CO:203C	Plan appropriate fitness counselling depending upon individual variations.			
CO:203D	Create awareness and reach outs for health promotion in the community.			
Second Year - Semester 4				
CO:203& 252	Physiotherapy in Cardio pulmonary conditions-III (Pulmonary Rehabilitation)			
CO:203A	Evaluate clinical problems, pulmonary function tests and interpret their pathological significance, functional impairments.			
CO:203B	Apply various techniques to improve pulmonary function, drainage techniques to attain ventilation facilitation and chest clearance.			
CO:203C	Devise evidence based rehabilitation programmes appropriately for various pulmonary diseases and their progression.			
CO:204 & 256	Physiotherapy in Cardio pulmonary conditions-IV (Physiotherapy In Intensive Care Unit)			
CO:204A	Assess the ICU environment and identify the patients problems in different clinical conditions			
CO:204B	Handle patients in critical care effectively and maintain pulmonary function and chest hygiene.			
CO:204C	Analyse vital signs, systemic functions, x-rays, various breath sounds and select physiotherapeutic techniques appropriately.			

Master of Physiotherapy (Womens Health) Degree Program 2015-2016								
At the end of the completion of Master of Physiotherapy, the Postgraduate will be able to:								
PO:1. Apply advanced knowledge of clinical science to problem solving								
PO:2. Gather and interpret information within a holistic framework.								
PO:3. Design, implement and monitor appropriate therapeutic programmes								
PO:4. Apply scientific principles to the concepts of health, illness, disability and promote health								
PO:5. Appraise the social and political context of health care								
PO:6 Undertake independent research projects								
PO:7. Promote Physiotherapy education								
First Year - Semester I								
		PO:1	PO:2	PO:3	PO:4	PO:5	PO:6	PO:7
CO:101	APPLIED ANATOMY	**H**						
CO:103	APPLIED PHYSIOLOGY AND BIOENERGETICS	**H**						
CO :105 & 151	PHYSICAL REHABILITATION-I	**H**	**M**	**H**	**M**			**M**
CO: 107	KINESIOLOGY-I	**H**			**M**			
First Year - Semester II								
CO:102	RESEARCH METHODOLOGY AND BIOSTATISTICS	**M**			**M**	**M**	**H**	**M**
CO:104&152	PHYSICAL REHABILITATION-II	**H**	**M**	**H**	**M**			**M**
CO:106	KINESIOLOGY-II	**H**			**M**			
Second Year - Semester 3								
CO:201 & 251	Physiotherapy in Women‟s Health- I (clinical Sciences)	**H**	**H**	**M**	**M**	**L**	**M**	**M**
CO:203 & 253	Physiotherapy in Women‟s Health - II (Fitness and Women‟s Health)	**H**	**H**	**M**	**M**	**L**	**M**	**M**
Second Year - Semester 4								
CO:203& 252	Physiotherapy in Women‟s Health - III (Advanced physiotherapy intervention in Gynaecology	**H**	**H**	**M**	**M**	**L**	**M**	**M**
CO:204 & 256	Physiotherapy in Women‟s Health - IV (Advanced physiotherapy intervention in Obstetrics)	**H**	**H**	**M**	**M**	**L**	**M**	**M**

CO: 258	Dissertation & Viva Voce					**L**	**H**	**H**
First Year - Semester I								
CO:10 1	APPLIED ANATOMY							
CO:10 1 A	Define, and describe the structure and function of skeletal and muscular system							
CO:10 1 B	Understand the joint structure and function of various regions of human body							
CO:10 1 C	Understand the functional anatomy of upper, lower extremity, trunk and other consideration of human movement							
CO:10 3	APPLIED PHYSIOLOGY AND BIOENERGETICS							
CO:10 3A	Explain the biology and chemistry of work physiology							
CO:10 3B	Correlate the energy transfer and physical activity							
CO:10 3C	Understand the relating factors of physiological supportive systems							
CO:10 3D	Describe exercise training and function							
CO:10 3E	Advice to the clients, with reference to weight control, age and health related aspects of exercise.							
CO :105 & 151	PHYSICAL REHABILITATION-I							
CO:10 5A	Understand clinical decision making and reasoning process							
CO:10 5B	Evaluate and analyze the physiological aspects of physical rehabilitation							
CO:10 5C	Identify and recognize the importance of evaluation in musculoskeletal neurological and cardiopulmonary conditions							
CO:10 5D	Understand the basic interpretation of relevant investigation and quantify the severity of impairments							
CO: 107	KINESIOLOGY-I							
CO:10 7A	Define, and describe the terminology and describe the normal Biomechanics and Pathomechanics of joints of human body.							
CO:10 7B	Do the mechanical analysis of human motion.							
CO:10 7C	Describe the anatomical and physiological aspects of human motion.							
CO:10 7D	Providing the student with the opportunity to experience quantitative methods of movement analysis in the laboratory sessions							

CO:107E	Applying these analytic methods to specific example of normal human motor performance			
First Year - Semester II				
CO:102	RESEARCH METHODOLOGY AND BIOSTATISTICS			
CO:102A	Understand the basic concepts of statistics and principles of scientific enquiry in planning and evaluating the results of physiotherapy practice			
CO:102B	Participate in and/or conduct descriptive, exploratory and survey studies in physiotherapy and evaluate and apply the results of research studies in health (i.e.) all related fields in the practice of physiotherapy			
CO:104&152	PHYSICAL REHABILITATION-II			
CO:104A	Make clinical decision and plan for effective treatment.			
CO:104B	To plan strategies for management of various musculoskeletal, neurological, cardio pulmonary problems and in various medical and surgical conditions.			
CO:106	KINESIOLOGY-II			
CO:106A	Define, and describe the terminology and describe the normal Biomechanics and Pathomechanics of joints of human body.			
CO:106B	Do the mechanical analysis of human motion.			
CO:106C	Describe the anatomical and physiological aspects of human motion.			
CO:106D	Providing the student with the opportunity to experience quantitative methods of movement analysis in the laboratory sessions			
CO:106E	Applying these analytic methods to specific example of normal human motor performance			
Second Year - Semester 3				
CO:201 & 251	Physiotherapy in Women‟s Health- I (clinical Sciences)			
CO:201A	Able to understand the advanced Knowledge base in this clinical area			
CO:201B	Able to understand the altered physiology and pathophysiology and psychology of puberty, perinatal period and menopause.			
CO:201C	Able to analyze and interpret the clinical findings related to various problems in women‟s health.			
CO:203 & 253	Physiotherapy in Women‟s Health - II (Fitness and Women‟s Health)			
CO:203A	Able to analyze, interpret and evaluate normal people in community for their general overall fitness.			
CO:203B	Able to plan appropriate fitness counselling depending upon individual variation and create awareness in the community			

CO:203C	Able to appreciate the significance and knowledge of women‟s health to the wider community.			
Second Year - Semester 4				
CO:203& 252	Physiotherapy in Women‟s Health - III (Advanced physiotherapy intervention in Gynaecology			
CO:203A	Analyze interpret and evaluate appropriate exercise programs for women with specific needs.			
CO:203B	Rationalize the treatment approaches according to the management needed and handle patients effectively.			
CO:203C	Create awareness and carry out Research in this area.			
CO:204 & 256	Physiotherapy in Women‟s Health - IV (Advanced physiotherapy intervention in Obstetrics)			
CO:204A	Identify the Legal and safety issues associated with Antenatal exercise classes			
CO:204B	Assess and handle Mothers with specific physical needs and appreciation of a team approach to learning			
CO:204C	Evaluate and synthesis the research and professional literature in perinatal period.			

BACHELOR OF PHYSIOTHERAPY DEGREE PROGRAM 2019-20

Upon completion of graduate program in physiotherapy, the student should be able to:

PO: 1- Apply the acquired knowledge and skills in identifying and managing impairments, activity limitations and participatory restrictions of people with various health disorders

PO:2- Practice as an autonomous physiotherapist, who advocates effective communication, leadership and scientific clinical reasoning skills in delivering contemporary multidisciplinary health care needs of the community

PO:3- Demonstrate high standards of professional ethics, values, attitudes and social skills in healthcare delivery

PO:4 - Demonstrate the skills of lifelong learning to maintain high standards of professional care

	First Year - Semester I	**PO:1**	**PO:2**	**PO: 3**	**PO: 4**
CO:101 & 151	Anatomy - I	**H**	**M**		**M**
CO:103	Physiology - I	**H**			
CO:105	Biochemistry	**H**			
CO:107	English				**M**
CO:109	Environmental Science				
CO:111	Sociology for Health Sciences				**L**
CO:113	Emergency and First Aid	**M**			
	First Year - Semester II				
CO: 102 & 152	Anatomy - II	**H**	**M**		**M**
CO: 104	Physiology - II	**H**	**M**		**M**
CO: 106 & 154	Therapeutic Massage and Measurements	**M**	**H**	**L**	**L**
CO: 108	Elementary and General Psychology				**M**
	Second Year - Semester III				
CO: 201 & 251	Therapeutic exercise	**M**	**H**	**L**	**H**
CO:203 & 253	Biomechanics - I	**H**	**M**		**M**
CO: 205 & 255	Electrotherapeutics - I	**M**	**H**	**L**	**H**
CO: 207	Pharmacology, Pathology & Microbiology	**H**	**M**		**L**
	Second Year - Semester IV				

CO: 202 & 252	Electrotherapeutics - II	**M**	**H**	**M**	**H**
CO: 204 & 254	Biomechanics - II	**H**	**M**		**M**
CO: 206	General Medicine, Surgery and Paediatrics	**H**	**M**		**L**
CO: 256	Clinical Training - 1	**H**	**M**		**L**
	Third Year - Semester V				
CO: 301 & 351	Musculoskeletal conditions and Physiotherapy – I	**M**	**H**	**L**	**M**
CO: 303 & 353	Neurological conditions and Physiotherapy - I	**H**	**M**		**M**
CO: 305 & 355	Cardiorespiratory conditions and Physiotherapy – I	**M**	**H**	**M**	**H**
CO: 357	Clinical Training - 2	**H**		**M**	**L**
	Third Year - Semester VI				
CO: 302 & 352	Musculoskeletal conditions and Physiotherapy – II	**H**	**L**		**M**
CO: 304 & 354	Neurological conditions and Physiotherapy - II	**M**	**H**	**M**	**H**
CO: 306 & 356	Cardiorespiratory conditions and Physiotherapy – II	**M**	**M**		**H**
CO: 358	Clinical Training - 3	**M**	**M**		**H**
	Fourth Year - Semester VII				
CO: 401 & 451	Physiotherapy in General Surgery and Women's Health	**H**	**L**		**M**
CO: 403	Community Medicine	**M**	**H**	**M**	**H**
CO : 405	Community Physiotherapy	**M**	**H**	**M**	**H**
CO : 407	Research Methodology and biostatistics	**H**	**M**	**M**	**H**
CO : 453	Clinical Training - 4	**H**	**M**	**H**	**H**
	Fourth Year - Semester VIII				
CO: 402	Concepts in Ethics and Management of Health Care Delivery	**M**	**H**	**H**	**H**
CO: 404	Evidence based Physiotherapy	**M**	**H**	**H**	**M**
CO: 406 & 452	Physical diagnosis and Therapeutics	**M**	**H**	**M**	**H**
CO : 454	Clinical Training - 5	**M**	**H**	**H**	**H**
	Fifth Year - Semester IX				

CO:IN1551	Internship	**H**	**H**	**M**	**H**
	COURSE OUTCOME				
	First Year - Semester I				
CO:101 & 151	**Anatomy - I**				
CO:101 A	Enumerate the common anatomical terms				
CO: 101 B	Describe the anatomy of upper and lower extremity				
CO: 101 C	Explain the applied aspects of anatomy.				
CO:103	**Physiology - I**				
CO: 103 A	List different cell organelles, Describe functions of each				
CO: 103 B	List the functions of skin and describe temperature regulation				
CO: 103 C	Describe components of blood and their functions				
CO: 103 D	Describe the functioning of organ systems concerned with digestion and excretion				
CO: 103 E	Describe the functioning of organ systems concerned with hormonal secretion and reproduction				
CO: 103 F	Describe the functioning of the musculoskeletal system.				
CO:105	**Biochemistry**				
CO: 105 A	Demonstrate understanding of elementary human biochemistry				
CO: 105 B	Apply the knowledge of biochemistry in related areas of physiology				
CO:107	**English**				
CO: 107 A	Handle patients learn various subjects with the knowledge of English				
CO: 107 B	Understand the elementary principles of behavior for applying in the therapeutic environment				
CO:109	**Environmental Science**				
CO:109 A	Identify the influence of biohazards in the ecosystem				
CO:109 B	Identify social issues and appreciate the role of therapist as a member of society				
CO:111	**Sociology for Health Sciences**				
CO:111 A	Understand the basic concept of health in sociology,				
CO:111 B	Understand the sociological perspective on health, social causes and various aspects of community health.				
CO:111 C	Understand the interrelationship between society and health.				
CO:111 D	Understand the issues related to community health and the healthcare delivery system				
CO:113	**Emergency and First Aid**				
CO:113 A	Describe the principles of first Aid				
CO:113 B	Comprehend.and select method of providing First Aid				

First Year - Semester II			
CO: 102 & 152	**Anatomy - II**		
CO:102 A	Enumerate the common anatomical terms		
CO:102 B	Describe the anatomy of thorax, abdomen, central nervous system and cardio respiratory system		
CO:102 C	Explain the applied aspects of anatomy.		
CO: 104	**Physiology - II**		
CO:104 A	Describe the functioning and regulatory mechanisms of the circulatory system		
CO:104 B	Describe the functioning and regulation of respiratory system		
CO:104 C	Describe the various parts and list the functions of the nervous system		
CO:104 D	Give an overview of the functions of special sense organs		
CO: 106 & 154	**Massage and Basic Therapeutic Exercise**		
CO:106 A	Understand and apply physical principles of exercise therapy		
CO:106 B	Apply the principles of assessment in goniometry and manual muscle technique		
CO:106 C	Perform the soft tissue manipulations and will understand indications, contraindications, precautions, physiological effects and therapeutic uses of soft tissue manipulations.		
CO:106 D	Demonstrate various techniques and gain confidence in performing and applying these skills hands on and on models		
CO: 108	**Elementary and General Psychology**		
CO:108 A	Explain the psychosocial assessment of patients in various developmental stages		
CO:108 B	Explain the concept of stress and its relationship to health, sickness and profession		
CO:108 C	Apply ego defense mechanisms and learn counseling techniques to help those in need.		
CO:108 D	Understand the reasons for non compliance among patients and measures to improve compliance behavior.		
	Second Year - Semester III		
CO: 201 & 251	**Therapeutic exercise**		
CO:201 A	Undersand the principles, physiological effects and uses of various types of exercises and rationalise their selection as a therapeutic intervention.		
CO:201 B	Explain normal posture and postural deviations, evaluate and plan therapeutic exercises for postural deviations		
CO:201 C	Explain the normal gait cycle, gait deviations		

CO:201 D	Prepare patient for therapeutic exercises and demonstrate various types of exercises to extremities and trunk		
CO:201 E	Assess the muscle strength, posture and correct postural deviations		
CO:201 F	Train gait training using walking aids		
CO:201 G	Assess the range of motion of joints of extremity and trunk.		
CO:203 & 253	**Biomechanics - I**		
CO:203 A	Understand various physical principles and mathematical laws, principles of biomechanics and kinesiology of the human body for their application in health and disease.		
CO:203 B	Understand the structure, types, and functions of joints of the human body		
CO:203 C	Understand the structure, properties, biomechanical behavior and functions of biological tissues, peripheral nerve, and skeletal muscle.		
CO:203 D	Understand the structure, kinematics, and kinetics of joints of vertebral column, chest wall and temporomandibular joint.		
CO:203 E	Understand the effects of injury and disease on joints vertebral column, chest wall and temporomandibular joint		
CO:203 F	Analyse the characteristics of normal posture; causes,types and pathomechanics of postural deviations		
CO:203 G	Instructing the student to analyse normal human movement integrating biomechanics, muscle mechanics and joint functions.		
CO:203 H	Providing the student with the opportunity to experience quantitative and qualitative methods of movement analysis in the laboratory sessions using disarticulated bone, skeleton and on a partner.		
CO:203 I	Applying these analytic methods to be able to identify the stability and mobility functions during normal and pathomechanical situations.		
CO:203 J	Perform simulation of normal human motor performance on a partnerattributing to the regional function.		
CO: 205 & 255	**Electrotherapeutics - I**		
CO:205 A	Explain physics related to electrotherapy application and operation of instruments related to electrotherapy application.		
CO:205 B	Undersatnd the physiological and therapeutic effects of various Low frequency and Medium frequency currents		
CO:205 C	Undersatnd the physiology of Pain modulation and pain relief by Low and Medium frequency currents.		

CO:205 D	Comprehend the different types of nerve lesions and plan electrotherapy.		
CO:205 E	Prepare a model/ patient for low and medium frequency electrotherapy application		
CO:205 F	Demonstrate application of low and medium frequency application to stimulate muscles, pain modulation, electrodiagnosis using SD curve and FG testing		
CO:205 G	Demonstarte the application of direct current for therapeutic indication.		
CO: 207	**Pharmacology, Pathology & Microbiology**		
CO:207 A	Explain the types of drug and their mechanisms of actions, basic concepts,theories of pharmacology .		
CO:207 B	Apply the knowledge of pharmacology as an adjunct, limitation, contraindication for physiotherapy		
CO:207 C	Articulate the microbiology and pathology of common conditions dealt in Physiotherapy practice.		
Second Year - Semester IV			
CO: 202 & 252	**Electrotherapeutics - II**		
CO:202 A	Understands the physics background for the use of heat, sound and soft LASER as therapeutic modality		
CO:202 B	Explain the parameters, indications, contraindications, methods of application for high frequency current applications		
CO:202 C	Explain the parameters, indications, contraindications, methods of application for wax therapy, ultrasound and LASER		
CO:202 D	Explain the parameters, indications, contraindications, methods of application for ultraviolet and infrared radiations.		
CO:202 E	Demonstrate test and maintain highfrequency modalities		
CO:202 F	Select and apply the highfrequency and actinotherapy modalities, LASER. Waxbath and cryotherapy under supervision.		
CO: 204 & 254	**Biomechanics - II**		
CO:204 A	Explain the fundamental principles of biomechanics ,thekinematics and kinetics for extremity joint complexes.		
CO:204 B	Quantitatively apply biomechanical principles to simplified movements, such as projectiles and motion of the body segments in upper and lower extremities.		
CO:204 C	Apply biomechanics knowledge to systematically analyse more complex human movement,		

CO:204 D	The disease states of biological tissues as a result of various biomechanical stresses encountered by them.		
CO:204 E	Demonstrate the palpation of bony landmarks, muscles and soft tissues of the body		
CO:204 F	Assess and interpret the human movements		
CO:204 G	Assess and interpret the walking		
CO:204 H	Demonstrate the ability to identify movement dysfunctions due to pathological changes in the human body.		
CO: 206	**General Medicine, Surgery and Paediatrics**		
CO:206 A	Describe the clinical aspects of medical and surgical conditions commonly encountered in physiotherapy practice		
CO:206 B	Enlist the impairments and understand plan care by the medical and surgical fraternities		
CO:206 C	Explain medical, surgical and physiotherapeutic techniques in the management of medical and surgical conditions		
CO:206 D	Understand role of Physiotherapist in team management of specified medical and surgical conditions		
CO: 256	**Clinical Training - 1**		
CO:256 A	Describe infection control practices and patient safety practices in clinical setup		
CO:256 B	Indentify different documents and personal involved in patient care		
CO:256 C	Explain the common impairments handled by physiotherapists		
Third Year - Semester V			
CO: 301 & 351	**Musculoskeletal conditions and Physiotherapy – I**		
CO:301 A	Understand musculoskeletal trauma including fracture and soft tissue injuries, Chronic inflammatory and degenerative joint diseases.		
CO:301 B	Understand and identify patient problems and principles for physiotherapy management based on current evidence.		
CO:301 C	Understand the components of examination in order to make clinical judgments regarding patient/client management.		
CO:301 D	Communicate and educate the individual, family, community, and other professionals about therapy, health, prevention, and wellness to enhance post-operative physiotherapy outcomes.		
CO: 303 & 353	**Neurological conditions and Physiotherapy - I**		
CO:303 A	Explain the components of assessment for a patient with neurological dysfunction		
CO:303 B	List the impairments in cerebrovascular accident and motor neurone diseases.		

CO:303 C	Explain various framework of references used for planning and designing treatment for impairments due to neurological dysfunction		
CO:303 D	Demonstrate assessment and treatment for neurological dysfunctions		
CO:303 E	Plan and Demonstrte assessment and treatment for impairments in multiple sclerosis and motor neurone diseases		
CO: 305 & 355	**Cardiorespiratory conditions and Physiotherapy – I**		
CO:305 A	Understand the clinical aspects of respiratory conditions and chest physiotherapy techniques		
CO:305 B	Enlist the impairments and plan therapy accordingly		
CO:305 C	Explain physiotherapeutic techniques in the management of respiratory conditions and critical care		
CO:305 D	Demonstrate the chest physiotherapy techniques in various clinical conditions		
CO:305 E	Demonstrate the skills of evaluation and management in various respiratory conditions and critical care unit		
CO: 357	**Clinical Training - II**		
CO:357 A	i) Explain the components of basic assessment for a patient.		
CO:357 B	ii) List the impairments resulting in functional limitation and participation restriction.		
CO:357 C	iii) Demonstrate clinical observatory skill and the bed side manners, understanding of policy of the inpatient service and outpatient services.		
CO:357 D	iv) Understand the role of physiotherapy in various clinical conditions and the documentation of patient service.		
Third Year - Semester VI			
CO: 302 & 352	**Musculoskeletal conditions and Physiotherapy – II**		
CO:302 A	Explain the aetiology, epidemiology, pathogenesis and clinical presentation of common musculoskeletal disorders.		
CO:302 B	Perform an appropriate basic documentation of physical examination including history.		
CO:302 C	Appropriately select, modify as necessary active and passive treatment procedures commonly used in the management of musculoskeletal dysfunction.		
CO: 304 & 354	**Neurological conditions and Physiotherapy - II**		
CO:304 A	Explain common impairments in lesions of central and peripheral nervous system		

CO:304 B	Plan assessment and treatment for impairments in lesions of central and peripheral nervous system		
CO:304 C	Demonstrate assessment and treatment for impairments in lesions of central and peripheral nervous system		
CO:304 D	Common complications, limitations and contraindications for physiotherapy		
CO: 306 & 356	**Cardiorespiratory conditions and Physiotherapy – II**		
CO:306 A	Understand the clinical aspects of Cardiovascular and Chronic diseases		
CO:306 B	Enlist the impairments and plan therapy accordingly		
CO:306 C	Explain physiotherapeutic techniques in the management of Cardiovascular and Chronic diseases		
CO:306 D	Demonstrate the physiotherapy assessment and treatment techniques in various Cardiovascular impairments		
CO:306 E	Demonstrate the skills of evaluation and management in specific Chronic diseases		
CO: 358	**Clinical Training - 3**		
CO: 358 A	Explain subjective, components of objective assessment and their interpretation.		
CO: 358 B	Demonstrate skill in patient positioning, providing simple exercises and mobilization.		
CO: 358 C	Demonstrate skill in documentation and communication with patients, care givers and other members of the team.		
Fourth Year - Semester VII			
CO: 401 & 451	**Physiotherapy in General Surgery and Women's Health**		
CO:401 A	Understand the physical and physiological changes during pregnancy,the stages of labour,changes during puerperium.		
CO:401 B	Explain the arterial and venous diseases,		
CO:401 C	Comprehend the need of physiotherapy in women‟s health and general surgery.		
CO:401 D	Demonstrate the antenatal and postnatal exercises,exercises for abdominal surgeries		
CO: 403	**Community Medicine**		
CO:403 A	Explain the effects of environment and the community dynamics on the health of the individual		
CO:403 B	Apply the knowledge of community medicine to understand the need of the society in physiotherapy practice.		
CO : 405	**Community Physiotherapy**		

CO:405 A	i)The concept of team approach in rehabilitation and implementation with contributions from all members of the team, medical and surgical aspects of disabling conditions		
CO:405 B	ii) identify the residual potentials in patients with partial or total disability (temporary or permanent)		
CO:405 C	iii) explain role of physiotherapy in health promotion in community		
CO:405 D	iv) evaluate and train geriatric population, sports personnel.		
CO:405 E	v) articulate need of physiotherapy in a industrial set up and explain ergonomic assessment		
CO : 407	**Research Methodology and Biostatistics**		
CO:407 A	Explain various research designs		
CO:407 B	Explain the basic statistical tests		
CO:407 C	Demonstrate understanding of research outcomes in physiotherapy		
CO : 453	**Clinical Training - 4**		
CO:453 A	Understand appropriate goal setting and treatment planning.		
CO:453 A	Demonstrate skill in selection, handling and clinical application of equipments and gadgets for exercise performance.		
CO:453 A	Demonstrate skill in patient handling under supervision and time management in clinical area.		
Fourth Year - Semester VIII			
CO: 402	**Concepts in Ethics and Management of Health Care Delivery**		
CO:402 A	Know the professional standards of practicing physiotherapy in a ethical manner and dignity.		
CO:402 B	Comprehend the physiotherapy practice to prevent malpractice and uphold the professional ethics.		
CO:402 C	Analyse the various components and law suits for professional practice .to have standardization in physiotherapy practice.		
CO:402 D	Apply the codes of conduct to establish good rapport with client has well as employer to have reasonable professional conduct to maintain professionalism.		
CO:402 E	Demonstrate various ways of preventing conflicts and work issues related to physiotherapy practice to demo well ethical way of code of professional conduct to enrich in the profession,management principles and its application.		
CO:402 F	Comprehend various branches of management (Finance, HR, Marketing and Production)		
CO: 404	**Evidence based physiotherapy**		
CO:404 A	Formulate an answerable clinical question		
CO:404 B	Identify the research evidence by formulating effective search strategy		
CO:404 C	Appraise the evidence by using standardized tools		
CO:404 D	Apply the evidence in to clinical decision making Explain		
CO: 406 & 452	**Physical diagnosis and Therapeutics**		

CO:406 A	Explain the concept of clinical decision making in physiotherapy practice.		
CO:406 B	Use decision making concepts based on different frameworks of decision making models		
CO:406 C	Choose and administer outcome measures		
CO:406 C	Integrate the knowledge of treatment and skill for the assessment and treatment of a clinical condition		
CO : 454	**Clinical Training - 4**		
CO : 454 A	Demonstrate ability to rationalize goals set and therapy planned.		
CO : 454 B	Demonstrate ability to modify the assessment/treatment based on clinical situation		
CO : 454 C	Demonstrate skill in recording the findings and treatments in a precise manner based on principles of clinical decision making.		
Fifth Year - Semester IX			
CO:IN1551	**Internship**		
CO:IN1551A	Demonstrate the skill to evaluate, diagnose (physical diagnosis) and manage subjects under supervision of a faculty.		
CO:IN1551B	Demonstrate the records and relevant patient‟s information, treatment and follow up.		
CO:IN1551C	Demonstrate skill and presentation of a patient under his/ her during clinical meetings.		

Master of Physiotherapy (Orthopaedics and Traumatology) Degree Program 2019 -2020									
At the end of the completion of Master of Physiotherapy, the Postgraduate will be able to:									
PO:1. Apply the basic Physical, Clinical, and psycho social knowledge in clinical decision making.									
PO:2. Independently perform physiotherapy assessments using evidence-informed tests and measures to identify impairments, activity limitations and participatory restrictions of clients with various disorders.(Specialty specific)									
PO:3. Implement evidence-based physiotherapy interventions using client centered approach									
PO:4. Demonstrates high standards ethical and professional behavior in client management.									
PO:5. 5. Demonstrate effective communications in verbal and written formats, to facilitate the physiotherapists' roles in education, consultation, patient management, and developing professional relationships.									
PO:6 Design and carryout research project to contribute the knowledge base of the profession.									
PO:7. Display the skills of a reflective practitioner.									
PO:8 Design a plan for ongoing personal and professional development.									
COURSE NO	**COURSE NAME**	**PO:1**	**PO:2**	**PO:3**	**PO:4**	**PO:5**	**PO:6**	**PO:7**	**PO:8**
First Year - Semester I									
CO:101	Applied and Functional Anatomy - PMT 19CT 101	**H**	**M**			**L**	**M**		
CO:103	Physiology and Bioenergetics - PMT 19CT 103	**H**	**M**			**M**	**M**		
CO:105	Research Methodology and Biostatistics - PMT 19CT 105	**M**		**H**	**M**	**M**	**H**		**L**
CO:107 & 151	Physiotherapeutics - PMT 19CT 107	**H**	**H**	**M**	**L**	**H**	**M**	**H**	**M**
First Year - Semester II									
CO:102	Transferring Research to Practice - PMT19CT102	**M**	**H**	**M**			**H**		
CO:104 & 152	Clinical reasoning and manual therapy (articular) in musculoskeletal disorders of the extremities - POT19CT104 & POT19CL152	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**
CO:106 & 154	Manual therapy (soft tissue mobilization) and sports physiotherapy - POT19CT106 & POT19CL154	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**
Second Year - Semester III									
CO:201 & 251	Clinical reasoning and manual therapy in	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**

	vertebral column disorders including spinal cord injury - POT19CT201 & POT19CL251								
CO:203 & 253	Hand rehabilitation - POT19CT203 & POT19CL253	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**
Second Year - Semester IV									
CO:202	Physiotherapy Education - PMT19AE202			**H**	**H**		**H**	**L**	
CO: 252	Dissertation - POT19RP252			**H**			**H**	**H**	**M**

COURSE OUTCOME	
CO:101	**Applied and Functional Anatomy - PMT 19CT 101**
CO:101A	Define, and describe the structure and function of skeletal and muscular system
CO:101B	Understand the joint structure and function of various regions of human body
CO:101C	Understand the functional anatomy of upper and lower extremity, trunk and other consideration of human movement
CO:103	**Physiology and Bioenergetics - PMT 19CT 103**
CO:103A	Explain the biology and chemistry of work physiology
CO:103B	Correlate the energy transfer and physical activity
CO:103C	Understand the relating factors of physiological supportive systems
CO:103D	Describe exercise training and function
CO:103E	Advice to the clients, with reference to weight control, age and health related aspects of exercise.
CO:105	**Research Methodology and Biostatistics - PMT 19CT 105**
CO:105A	Understand the basic concepts of statistics and principles of scientific enquiry in planning and evaluating the results of physiotherapy practice
CO:105B	Participate in and/or conduct descriptive, exploratory and survey studies in physiotherapy and evaluate and apply the results of research studies in health (i.e.) all related fields in the practice of physiotherapy
CO:107 & 151	**Physiotherapeutics - PMT 19CT 107**
CO:107A	Clinical decision and plan for effective treatment.
CO:107B	Assess and plan strategies for management of various musculoskeletal, neurological, cardio pulmonary problems vascular problems, and in gynaecological and obstetric
CO:102	**Transferring Research to Practice - PMT19CT102**
CO:102A	Formulate clinical question
CO:102B	Conduct literature search through the common electronic database
CO:102C	Appraise the evidence using appropriate tools
CO:102D	Identify and appraise clinical practice guidelines and contextualize it for the local needs

CO:104 & 152	**Clinical reasoning and manual therapy (articular) in musculoskeletal disorders of the extremities - POT19CT104 & POT19CL152**
CO:104A	Understand kinesiology and patho kinesiology of the upper and lower limbs.
CO:104B	Understand and solve problems, take decisions related to evaluation and patient care with reasoning.
CO:104C	Demonstrate the skill in performing various kinds of joint evaluation and treatment specific to the concept and manual therapy, in extremities.
CO:104D	Understand skeletal trauma and degenerative joint diseases; identify patient problems and principles for physiotherapy management based on current evidence.
CO:104E	Communicate and educate the individual, family, community, and other professionals about therapy, health, prevention, and wellness to enhance physiotherapy outcomes.
CO:106 & 154	**Manual therapy (soft tissue mobilization) and sports physiotherapy - POT19CT106 & POT19CL154**
CO:106A	Understand trauma including soft tissue injuries, Chronic inflammatory and over use syndromes.
CO:106B	Understand the structure, function, pathomechanics of soft tissues and various techniques, their effects and clinical application under dysfunctional state.
CO:106C	Understand and identify patient problems and principles for sports related soft tissue management based on current evidence.
CO:106D	Understand the components of examination in order to make clinical judgments regarding patient/client management.
CO:106E	Communicate and educate the individual, community, and other professionals about therapy, health, prevention, and wellness to enhance physiotherapy outcomes.
CO:201 & 251	**Clinical reasoning and manual therapy in vertebral column disorders including spinal cord injury - POT19CT201 & POT19CL251**
CO:201A	Understand the kinesiology of vertebral column segments under normal and altered conditions.
CO:201B	Understand trauma including spinal cord injuries, deformities, infective and degenerative disorders of vertebral column.
CO:201C	Understand the components of examination in order to make clinical judgments regarding patient management.
CO:201D	Understand and identify patient problems and principles of manual therapy approaches for vertebral column disorders based on current evidence.
CO:203 & 253	**Hand rehabilitation - POT19CT203 & POT19CL253**
CO:203A	Understand kinesiology and patho kinesiology of the hand.
CO:203B	Understand and solve problems, take decisions related to evaluation and patient care with reasoning following various surgical procedures in hand.

CO:203C	Demonstrate the skill in performing various kinds of joint, sensory/sensibility, scar, wound, muscle and other evaluation and treatment specific to the concept and recommendations.
CO:203D	Understand skeletal trauma and soft tissue conditions of hand, identify patient problems and principles of physiotherapy management based on current evidence.
CO:203E	Understand his role as an efficient team member along with other professionals such as occupational therapists, orthotist for effective functional and vocational rehabilitation
CO:202	**Physiotherapy Education - PMT19AE202**
CO:202A	Explain adult learning principles
CO:202B	Formulate educational objectives and learning outcomes
CO:202C	Select appropriate teaching learning methods
CO:202D	Demonstrate teaching skills

Master of Physiotherapy (Neuro sciences) Degree Program 2019 -2020									
At the end of the completion of Master of Physiotherapy, the Postgraduate will be able to:									
PO:1. Apply the basic Physical, Clinical, and psycho social knowledge in clinical decision making.									
PO:2. Independently perform physiotherapy assessments using evidence-informed tests and measures to identify impairments, activity limitations and participatory restrictions of clients with various disorders.(Specialty specific)									
PO:3. Implement evidence-based physiotherapy interventions using client centered approach									
PO:4. Demonstrates high standards ethical and professional behavior in client management.									
PO:5. 5. Demonstrate effective communications in verbal and written formats, to facilitate the physiotherapists' roles in education, consultation, patient management, and developing professional relationships.									
PO:6 Design and carryout research project to contribute the knowledge base of the profession.									
PO:7. Display the skills of a reflective practitioner.									
PO:8 Design a plan for ongoing personal and professional development.									
COURSE NO	**COURSE NAME**	**PO: 1**	**PO: 2**	**PO:3**	**PO:4**	**PO:5**	**PO:6**	**PO:7**	**PO:8**
First Year - Semester I									
CO:101	Applied and Functional Anatomy - PMT 19CT 101	**H**	**M**			**L**	**M**		
CO:103	Physiology and Bioenergetics - PMT 19CT 103	**H**	**M**			**M**	**M**		
CO:105	Research Methodology and Biostatistics - PMT 19CT 105	**M**		**H**	**M**	**M**	**H**		**L**
CO:107 & 151	Physiotherapeutics - PMT 19CT 107	**H**	**H**	**M**	**L**	**H**	**M**	**H**	**M**
First Year - Semester II									
CO:102	Transferring Research to Practice - PMT19CT102	**M**	**H**	**M**			**H**		
CO:104 & 152	Evaluation strategies for neurological conditions including electrodiagnostics - PNU19CT104 & PNU19CL152	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**
CO:106 & 154	Therapeutic strategies for neurological conditions - PNU19CT106 & PNU19CL154	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**
Second Year - Semester III									

CO:201 & 251	Central and peripheral nervous system disorders - PNU19CT201 & PNU19CL251	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**
CO:203 & 253	Paediatric neurology, muscle disorders and spinal cord lesions - PNU19CT203 & PNU19CL253	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**
Second Year - Semester IV									
CO:202	Physiotherapy Education - PMT19AE202			**H**	**H**		**H**	**L**	
CO: 252	Dissertation - POT19RP252			**H**			**H**	**H**	**M**

COURSE OUTCOME	
CO:101	**Applied and Functional Anatomy - PMT 19CT 101**
CO:101A	Define, and describe the structure and function of skeletal and muscular system
CO:101B	Understand the joint structure and function of various regions of human body
CO:101C	Understand the functional anatomy of upper and lower extremity, trunk and other consideration of human movement
CO:103	**Physiology and Bioenergetics - PMT 19CT 103**
CO:103A	Explain the biology and chemistry of work physiology
CO:103B	Correlate the energy transfer and physical activity
CO:103C	Understand the relating factors of physiological supportive systems
CO:103D	Describe exercise training and function
CO:103E	Advice to the clients, with reference to weight control, age and health related aspects of exercise.
CO:105	**Research Methodology and Biostatistics - PMT 19CT 105**
CO:105A	Understand the basic concepts of statistics and principles of scientific enquiry in planning and evaluating the results of physiotherapy practice
CO:105B	Participate in and/or conduct descriptive, exploratory and survey studies in physiotherapy and evaluate and apply the results of research studies in health (i.e.) all related fields in the practice of physiotherapy
CO:107 & 151	**Physiotherapeutics - PMT 19CT 107**
CO:107A	Clinical decision and plan for effective treatment.
CO:107B	Assess and plan strategies for management of various musculoskeletal, neurological, cardio pulmonary problems vascular problems,and in gynaecological and obstetric
CO:102	**Transferring Research to Practice - PMT19CT102**
CO:102A	Formulate clinical question
CO:102B	Conduct literature search through the common electronic database
CO:102C	Appraise the evidence using appropriate tools

CO:102D	Identify and appraise clinical practice guidelines and contextualize it for the local needs
CO:104 & 152	**Evaluation strategies for neurological conditions including electrodiagnostics - PNU19CT104 & PNU19CL152**
CO:104A	Choose appropriate method of treatment for any neurological impairments.
CO:104B	Explain the role of electrodiagnosis in evaluation of neurological conditions.
CO:104C	Adept in documenting the test results.
CO:104D	Understand the results of evaluation methods for treatment planning.
CO:106 & 154	**Therapeutic strategies for neurological conditions - PNU19CT106 & PNU19CL154**
CO:106A	Demonstrate their understanding of different therapeutic approaches available for neurological rehabilitation.
CO:106B	Choose appropriate method of therapy for any neurological impairments.
CO:106C	Adept in documenting the prognosis.
CO:106D	Proficiently demonstrate their skill in handling the patients.
CO:201 & 251	**Central and peripheral nervous system disorders - PNU19CT201 & PNU19CL251**
CO:201A	Choose appropriate method of assessment and treatment for any neurological impairments.
CO:201B	Analyze, implement and monitor appropriate therapeutic interventions
CO:203 & 253	**Paediatric neurology, muscle disorders and spinal cord lesions - PNU19CT203 & PNU19CL253**
CO:203A	Understand Physiotherapy needs of paediatric neurological condition and plan management appropriately
CO:203B	Plan Physiotherapy management for patient with spinal cord lesion and recognize complications resulting from such lesions.
CO:203C	Demonstrate the skill in performing various kinds of joint, sensory/sensibility, scar, wound, muscle and other evaluation and treatment specific to the concept and recommendations.
CO:203D	Understand and plan Physiotherapy management for patient with various Muscle diseases appropriately
CO:202	**Physiotherapy Education - PMT19AE202**
CO:202A	Explain adult learning principles
CO:202B	Formulate educational objectives and learning outcomes
CO:202C	Select appropriate teaching learning methods

CO:202D	Demonstrate teaching skills

Master of Physiotherapy (Cardio Pulmonary Sciences)) Degree Program 2019 -2020									
At the end of the completion of Master of Physiotherapy, the Postgraduate will be able to:									
PO:1. Apply the basic Physical, Clinical, and psycho social knowledge in clinical decision making.									
PO:2. Independently perform physiotherapy assessments using evidence-informed tests and measures to identify impairments, activity limitations and participatory restrictions of clients with various disorders.(Specialty specific)									
PO:3. Implement evidence-based physiotherapy interventions using client centered approach									
PO:4. Demonstrates high standards ethical and professional behavior in client management.									
PO:5. 5. Demonstrate effective communications in verbal and written formats, to facilitate the physiotherapists' roles in education, consultation, patient management, and developing professional relationships.									
PO:6 Design and carryout research project to contribute the knowledge base of the profession.									
PO:7. Display the skills of a reflective practitioner.									
PO:8 Design a plan for ongoing personal and professional development.									
COURSE NO	**COURSE NAME**	**PO: 1**	**PO: 2**	**PO: 3**	**PO: 4**	**PO: 5**	**PO: 6**	**PO: 7**	**PO: 8**
First Year - Semester I									
CO:101	Applied and Functional Anatomy - PMT 19CT 101	**H**	**M**			**L**	**M**		
CO:103	Physiology and Bioenergetics - PMT 19CT 103	**H**	**M**			**M**	**M**		
CO:105	Research Methodology and Biostatistics - PMT 19CT 105	**M**		**H**	**M**	**M**	**H**		**L**
CO:107 & 151	Physiotherapeutics - PMT 19CT 107	**H**	**H**	**M**	**L**	**H**	**M**	**H**	**M**
First Year - Semester II									
CO:102	Transferring Research to Practice - PMT19CT102	**M**	**H**	**M**			**H**		
CO:104 & 152	Exercise testing and exercise prescription in Cardiac dysfunctions - PCS19CT104 & PCS19CL152	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**
CO:106 & 154	Exercise testing and exercise prescription in Pulmonary dysfunctions - PCS19CT106 & PCS19CL154	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**
Second Year - Semester III									
CO:201 & 251	Expertise Physiotherapy in Critical Care - PCS19CT201 & PCS19CL251	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**

CO:203 & 253	Fitness and health promotion in specific chronic diseases - PCS19CT203 & PCS19CL253						**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**
Second Year - Semester IV														
CO:202	Physiotherapy Education - PMT19AE202								**H**	**H**		**H**	**L**	
CO: 252	Dissertation - POT19RP252								**H**			**H**	**H**	**M**

COURSE OUTCOME	
CO:101	**Applied and Functional Anatomy - PMT 19CT 101**
CO:101A	Define, and describe the structure and function of skeletal and muscular system
CO:101B	Understand the joint structure and function of various regions of human body
CO:101C	Understand the functional anatomy of upper and lower extremity, trunk and other consideration of human movement
CO:103	**Physiology and Bioenergetics - PMT 19CT 103**
CO:103A	Explain the biology and chemistry of work physiology
CO:103B	Correlate the energy transfer and physical activity
CO:103C	Understand the relating factors of physiological supportive systems
CO:103D	Describe exercise training and function
CO:103E	Advice to the clients, with reference to weight control, age and health related aspects of exercise.
CO:105	**Research Methodology and Biostatistics - PMT 19CT 105**
CO:105A	Understand the basic concepts of statistics and principles of scientific enquiry in planning and evaluating the results of physiotherapy practice
CO:105B	Participate in and/or conduct descriptive, exploratory and survey studies in physiotherapy and evaluate and apply the results of research studies in health (i.e.) all related fields in the practice of physiotherapy
CO:107 & 151	**Physiotherapeutics - PMT 19CT 107**
CO:107A	Clinical decision and plan for effective treatment.
CO:107B	Assess and plan strategies for management of various musculoskeletal, neurological, cardio pulmonary problems vascular problems,and in gynaecological and obstetric
CO:102	**Transferring Research to Practice - PMT19CT102**
CO:102A	Formulate clinical question
CO:102B	Conduct literature search through the common electronic database
CO:102C	Appraise the evidence using appropriate tools
CO:102D	Identify and appraise clinical practice guidelines and contextualize it for the local needs
CO:104 & 152	**Exercise testing and exercise prescription in Cardiac dysfunctions - PCS19CT104 & PCS19CL152**

CO:104A	Evaluate the clinical impairments in Cardiac conditions and role in Cardiac rehabilitation
CO:104B	Understand, interpret, analyze the clinical meaures related to cardiac problems
CO:104C	Demonstrate the skill in performing various kinds of joint evaluation and treatment specific to the concept and manual therapy,in extremities.
CO:104D	Rationalize various exercise testing and training protocols in various cardiac dysfunctions including preventive cardiac rehabilitation
CO:104E	Understand the problems, relevant assessment and evidence based physiotherapy in medical and general surgical conditions
CO:106 & 154	**Exercise testing and exercise prescription in Pulmonary dysfunctions - PCS19CT106 & PCS19CL154**
CO:106A	Evaluate the clinical impairments in pulmonary conditions and role in Pulmonary rehabilitation
CO:106B	Understand interpret, analyze the clinical meaures related to pulmonary problems
CO:106C	Rationalise various evidence based exercise testing and training protocols in various pulmonary dysfunctions including palliative care
CO:201 & 251	**Expertise Physiotherapy in Critical Care - PCS19CT201 & PCS19CL251**
CO:201A	Assess the ICU environment and identify the patients problems in different clinical conditions
CO:201B	Analyse vital signs, systemic functions, x-rays, various breath sounds and select physiotherapeutic techniques appropriately
CO:201C	Manage patients in critical care effectively and maintain pulmonary function and chest hygiene
CO:201D	Develop effective rapport and solve clinical issues along with ICU team
CO:203 & 253	**Fitness and health promotion in specific chronic diseases - PCS19CT203 & PCS19CL253**
CO:203A	Assess and identify the fitness levels in different types of individuals in the community
CO:203B	Analyse the level of fitness and plan training accordingly.
CO:203C	Manage patients with chronic health conditions effectively and maintain their fitness level.
CO:203D	Able to rationalise various evidence based exercise testing and training in fitness and health promotion.
CO:202	**Physiotherapy Education - PMT19AE202**
CO:202A	Explain adult learning principles

CO:202B	Formulate educational objectives and learning outcomes
CO:202C	Select appropriate teaching learning methods
CO:202D	Demonstrate teaching skills

Master of Physiotherapy (Women's Health) Degree Program 2019 -2020									
At the end of the completion of Master of Physiotherapy, the Postgraduate will be able to:									
PO:1. Apply the basic Physical, Clinical, and psycho social knowledge in clinical decision making.									
PO:2. Independently perform physiotherapy assessments using evidence-informed tests and measures to identify impairments, activity limitations and participatory restrictions of clients with various disorders.(Specialty specific)									
PO:3. Implement evidence-based physiotherapy interventions using client centered approach									
PO:4. Demonstrates high standards ethical and professional behavior in client management.									
PO:5. 5. Demonstrate effective communications in verbal and written formats, to facilitate the physiotherapists' roles in education, consultation, patient management, and developing professional relationships.									
PO:6 Design and carryout research project to contribute the knowledge base of the profession.									
PO:7. Display the skills of a reflective practitioner.									
PO:8 Design a plan for ongoing personal and professional development.									
COURSE NO	**COURSE NAME**	**PO: 1**	**PO: 2**	**PO: 3**	**PO: 4**	**PO: 5**	**PO: 6**	**PO: 7**	**PO: 8**
First Year - Semester I									
CO:101	Applied and Functional Anatomy - PMT 19CT 101	**H**	**M**			**L**	**M**		
CO:103	Physiology and Bioenergetics - PMT 19CT 103	**H**	**M**			**M**	**M**		
CO:105	Research Methodology and Biostatistics - PMT 19CT 105	**M**		**H**	**M**	**M**	**H**		**L**
CO:107 & 151	Physiotherapeutics - PMT 19CT 107	**H**	**H**	**M**	**L**	**H**	**M**	**H**	**M**
First Year - Semester II									
CO:102	Transferring Research to Practice - PMT19CT102	**M**	**H**	**M**			**H**		
CO:104 & 152	Physiotherapy in pelvic floor dysfunction - POG19CT104 & POG19CL152	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**
CO:106 & 154	Fitness and women's health - POG19CT106 & POG19CL154	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**
Second Year - Semester III									

CO:201 & 251	Advanced physiotherapy intervention in gynaecology - POG19CT201 & POG19CL251	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**
CO:203 & 253	Advanced physiotherapy intervention in obstetrics - POG19CT203 & POG19CL253	**M**	**H**	**M**	**L**	**H**	**M**	**M**	**M**
Second Year - Semester IV									
CO:202	Physiotherapy Education - PMT19AE202			**H**	**H**		**H**	**L**	
CO: 252	Dissertation - POT19RP252			**H**			**H**	**H**	**M**

COURSE OUTCOME	
CO:101	**Applied and Functional Anatomy - PMT 19CT 101**
CO:101A	Define, and describe the structure and function of skeletal and muscular system
CO:101B	Understand the joint structure and function of various regions of human body
CO:101C	Understand the functional anatomy of upper and lower extremity, trunk and other consideration of human movement
CO:103	**Physiology and Bioenergetics - PMT 19CT 103**
CO:103A	Explain the biology and chemistry of work physiology
CO:103B	Correlate the energy transfer and physical activity
CO:103C	Understand the relating factors of physiological supportive systems
CO:103D	Describe exercise training and function
CO:103E	Advice to the clients, with reference to weight control, age and health related aspects of exercise.
CO:105	**Research Methodology and Biostatistics - PMT 19CT 105**
CO:105A	Understand the basic concepts of statistics and principles of scientific enquiry in planning and evaluating the results of physiotherapy practice
CO:105B	Participate in and/or conduct descriptive, exploratory and survey studies in physiotherapy and evaluate and apply the results of research studies in health (i.e.) all related fields in the practice of physiotherapy
CO:107 & 151	**Physiotherapeutics - PMT 19CT 107**
CO:107A	Clinical decision and plan for effective treatment.
CO:107B	Assess and plan strategies for management of various musculoskeletal, neurological, cardio pulmonary problems vascular problems,and in gynaecological and obstetric
CO:102	**Transferring Research to Practice - PMT19CT102**
CO:102A	Formulate clinical question
CO:102B	Conduct literature search through the common electronic database
CO:102C	Appraise the evidence using appropriate tools
CO:102D	Identify and appraise clinical practice guidelines and contextualize it for the local needs

CO:104 & 152	**Physiotherapy in pelvic floor dysfunction - POG19CT104 & POG19CL152**
CO:104A	Understand the advanced Knowledge base in this clinical area
CO:104B	Understand the altered physiology and pathophysiology of Pelvic Floor Dysfunction.
CO:104C	Analyze and interpret the clinical findings related to various problems in Pelvic Floor health.
CO:106 & 154	**Fitness and women's health - POG19CT106 & POG19CL154**
CO:106A	Analyze, interpret and evaluate normal people in community for their general overall fitness.
CO:106B	Plan appropriate fitness counseling depending upon individual variation and create awareness in the community
CO:106C	To appreciate the significance and knowledge of women's health to the wider community.
CO:201 & 251	**Advanced physiotherapy intervention in gynaecology - POG19CT201 & POG19CL251**
CO:201A	Analyze interpret and evaluate appropriate exercise programs for women with specific needs.
CO:201B	Rationalize the treatment approaches according to the management needed and handle patients effectively.
CO:201C	Create awareness and carry out Research in this area.
CO:203 & 253	**Advanced physiotherapy intervention in obstetrics - POG19CT203 & POG19CL253**
CO:203A	Identify the Legal and safety issues associated with Antenatal exercise classes
CO:203B	Assess and handle Mothers with specific physical needs and appreciation of a team approach to learning
CO:203C	An ability to evaluate and synthesis the research and professional literature in perinatal period.
CO:202	**Physiotherapy Education - PMT19AE202**
CO:202A	Explain adult learning principles
CO:202B	Formulate educational objectives and learning outcomes
CO:202C	Select appropriate teaching learning methods
CO:202D	Demonstrate teaching skills