

Subject Title:	KINESIOLOGY
Subject Code:	1PT1010204
Year:	Second Year
Pre-requisite Subject	- NONE -

Teaching Scheme (Hours)			Evaluation Scheme (Marks)					
Lecture	Practical	Total	Theory(T)		Practical(P)		Total Marks	
			University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	Theory	Practical
100	-	100	80	20	-	-	100	-

Subject Contents			
Sr. No.	Topic	Total Hours	Weight (%)
1	Mechanics of joint motion: Structure and types of joints and types of movements		
2	Mechanics of muscular action: Classification of muscles, line of pull, types of contractions, role of muscles and tendons, action of two joint motions, non customary action		
3	Skilled Movements: Rope climbing, cycling, running, ballistic and volitional movements		
4	Impetus: Impetus to external objects and receiving impetus		
5	Locomotion: Normal gait analysis: definition of gait, phases of normal gait, normal gait with kinetic and kinematics, abnormal pathological gaits, gait training		
6	Biomechanics of joints: Kinetics, kinematics and patho-mechanics of joint – hip , knee, ankle, foot, shoulder, elbow, wrist and hand		
7	Biomechanics of spinal column: Spinal curves, articulations, non contractile soft tissue of column, IV disc, ligaments, intrinsic equilibrium, movements of spinal column and muscle mechanics		
8	Mechanics of pelvic complex: Pelvis at rest, in standing body and in motion, patho mechanics of pelvis		
9	Mechanics of thorax: Movements between ribs and vertebrae, sternum and ribs, patho mechanics of respiration		
10	Postural strain and occupational hazards: Correct use of body mechanics at home, at school and work, recreation, particular application for patients, physiotherapists and other staff.		
11	Kinetics and kinematics of ADL : Supine to sitting, Sitting to standing, Squatting, Climbing up and down, pushing, pulling, overhead activities, walking, running, jogging		
Total Hours		100	