CO1.1-APPLIED ANATOMY AND PHYSIOLOGY

S.NO	TOPIC	OUTCOME
1.1.1	GENERAL ANATOMY	➢ After the completion of the TOPIC the student shall be able to know Know the levels of organization in the living world. ➢ Know the organization of the human body by cavities and anatomical terminology. ➢ Able to Understand the structure of matter and how it relates to cellular metabolism ➢ Can Understand the structure and function of a variety of cells contained in the human body. ➢ Can be able to Distinguish between groups of cells and tissues. ➢ Can Relate the components of the integumentary system to the levels of organization. ➢ Explain the structure and function of bones. ➢ Know the major divisions of the human skeleton. ➢ Learn a majority of the human bones by scientific name and location. ➢ Name, understand, and show by example the variety of joints in the human skeleton. ➢ Know the structure and function of muscles. ➢ Distinguish between the three types of muscle tissue. ➢ Learn the scientific names and locations of a select group of human muscles. ➢ Demonstrate and name muscle and joint actions ➢ After completion of the topic the student shall be able to ➢ Describe the structure and function of a neuron. ➢ Understand the steps involved in the transmitting of a nerve impulse. ➢ Explain several nerve pathways.

		➢ Demonstrate several reflex actions on another person. ➢ Understand the structure and function of the brain and spinal cord. ➢ Identify the various types of sensory receptors. ➢ List and understand the operation of the human senses. ➢ Relate the importance of hormones to the functioning of the human body. ➢ Describe the endocrine glands and the hormones they produce ➢ Know the general structure and function of the alimentary canal. ➢ List the organs of the digestive tract by anatomical location. ➢ Understand the mechanisms of breathing and alveolar gas exchange. ➢ Identify blood cells by type and function. ➢ Know the structure and function of the heart. ➢ Measure pulse and blood pressure. ➢ Distinguish between veins and arteries. ➢ Understand the body's defense mechanisms. ➢ Know the organs of the urinary system. ➢ Understand the process of waste removal in the human body. ➢ Know the male reproductive organs by name and function ➢ Know the female reproductive organs by name and function. ➢ Understand the female menstrual cycle. ➢ Understand the roles of various hormones in the reproductive cycle. ➢ Describe the stages of pregnancy and the birth process.

CO1.2 FUNDAMENTALS OF DIALYSIS

S.NO	TOPIC	OUTCOME
1.2.1	GENERAL ASSESSMENT	➢ After The Completion Of This Topic Student Will Be Able To Understand The General Vital Sign Assessment And Examination Of Patient. ➢ Student Will Be Able To Understand The Main Aim Of This Topic Is To Take Patients General Assessment Before, During And After The Dialysis. ➢ Student Will Be Able To Take All The Vital Signs And Their Normal Ranges.
1.2.2	INVESTIGATIONS RELATED TO DIALYSIS	➢ After Completion Of This Topic Student Will Be Able To Read And Understand The Investigations Report Of Patient. ➢ Student Will Be Able To Understand The Normal Ranges Of Components Or Electrolytes. ➢ Student Will Be Able To Understabd The Abnormalities And Diagnose The Problem Or Disease.
1.2.3	RENAL DISEASES	➢ After The Completion Of This Topic Student Will Be Able To Understand The Introduction, Causes, Symptoms, Preventions And Treatment Of All Renal Diseases. ➢ This Topic Contains Some Different Renal Diseases Such As Acute & Chronic Renal Failure, Urinary Tract Infection, Acute Nephritis And Nephrotic Syndrome. ➢ Student Will Be Able To Understand The Brief Description Of All Renal Diseases. ➢ Student Will Be Able To Diagnose These Diseases And To Discuss The Causes And Preventions And Treatment Of All The

		Diseases.
1.2.4	**EFFECT OF KIDNEY FAILURE ON CARDIOVASCULAR SYSTEM**	➢ After The Completion Of This Topic Student Will Be Able To Understand The Disease, Problems And Effects Of Renal Failure Or Dialysis On Cardiovascular System. ➢ Student Will Be Able To Diagnose And Understand The Cardiovascular Problems. ➢ Student Will Be Able To Treat The Patient With These Problems With Dialysis Or Any Other Medically Or Surgically Managements.
1.2.5	**EFFECT OF KIDNEY FAILURE ON NERVOUS SYSTEM**	➢ After the completion of this topic student will be able to understand the whole system in brief and their problems or diseases related to Nervous System. ➢ After the topic will be complete student will be able to understand the different or every disease whichare affected or caused due to renal failure. ➢ Student will be able to manage medically the problem or apply the surgically management as soon as possible provided.

1.2.6	**EFFECT OF KIDNEY FAILURE ON RESPIRATORY SYSTEM**	➢ After the completion of this topic student will be able to understand the system in brief. ➢ Student will be able to diagnose and identify the problem is related to Respiratory System. ➢ Student will be able to treat the problem medically and if patient is needy of surgically management he/she will be able to give patient as soon as possible.
1.2.7	**EFFECT OF KIDNEY FAILURE ON MUSCULOSKELETAL SYSTEM**	➢ After the completion of this topic student will be able to understand the system in detail. ➢ Student will be able to diagnose and identify the problems related to musculoskeletal system. ➢ After the completion of this topic student will be able to manage the problem medically and give the patient surgically management as soon as possible.
1.2.8	**PRINCIPLES AND TYPES OF DIALYSIS**	➢ After the completion of this topic student will be able to understand the introduction of dialysis that what is dialysis actually. ➢ Student will be able to understand the principles of Dialysis i.e., diffusion, Osmosis & Ultrafiltration on which dialysis work. ➢ Student will be able to understand the types of Dialysis and which one is better than the other. ➢ Stdents will be able to perform the procedures and understand the principles on which clearence is depend or excess water removal done.

1.2.9	**VASCULAR ACCESS FOR DIALYSIS**	➢ After the completion of this topic student will be able to identify that which kind of vascular access patient have. ➢ Student will be able to manage and take good care of vascular access of patient. ➢ Student will be able to use the access in dialysis and take the assessment of access. ➢ Student will be able to understand the diffwerent types of vascular access and how to use it.
1.2.10	**ANTICOAGULATION : PRINCIPLES AND PROBLEMS**	➢ After the completion of this topic student will be able to understand introduction and storage of blood and its components. ➢ Student will be able to understand the types of anticoagulalants and their principles and relatively problems. ➢ Student will be able to know the levels/ limits and duration of anticoagulant used in Dialysis. ➢ Student will be able o understand that how to use the anticoagulant in Dialysis in which proprtion.