VRM-303 CT Procedure and Imaging Process

Objective - Student will learn about the various procedure of CT scan and develop the understanding of various parameter used for CT scan procedure

UNIT – 1 Patient Preparation for CT, Patient Positioning for CT, Various CT protocols in plain and contrast for different areas of interest,

UNIT – 2 Data Acquiring Concepts, Basic concept of data acquisition. Data acquisition geometrics, Slip-Ring Technology, Design and Power Supply of a CT Room. Advantages of Slip-Ring Technology, CT Detector Technology, Characteristics of the Detector, List and describe the Types of Detectors,

UNIT – 3 CT scan of Brain (Plain)**,** CT scan of Brain (Plain + Contrast)**,** CT scan of Orbit (Plain)**,** CT scan of Temporal Bones (Axial)**,** CT scan of Para nasal Sinus (Coronal)**,** CT scan of Neck (Plain)**,** CT scan of Chest (Plain)**,** CT scan of H R C T Chest**,** CT scan of Abdomen and Pelvis (Plain)

UNIT - 4 Sequence of events after the signals leave the CT detectors, State the Algorithm, Explain the Fourier transform, Explain the Convolution, Explain the End Interpolation, Trace the History of Reconstruction Techniques, Identify the problems in CT, image reconstruction

Recommended books:

- Pocket Atlas of Sectional Anatomy, Computed Tomography and Magnetic Resonance Imaging
- Human sectional anatomy: atlas of body sections, CT and MRI images