

**UNIT – 1 Introduction to Human Body:**

A) Introduction to human anatomy & Physiology: Terminology and General Plan of the Body, Body Parts and Areas, Terms of Location and Position.

B) Levels of structural organization & body systems: Body Cavities and Their Membranes, Dorsal cavity, Ventral cavity, Planes and Sections, Basic life processes, homeostasis.

**UNIT – 2 Cellular Level of Organisation:**

Introduction to cytology: Cells: Structure, function and location, Prokaryotic and eukaryotic cells, Cell organelles & Cell division.

Cell physiology: General principles of cell communication, transport across cell membrane, Active & Passive transport, mechanism of transport: Osmosis, Diffusion & Tonicity.

**UNIT - 3 Tissue Level of Organization:** Introduction to Histology: General introduction, Types, Structure, Location and Function, Classification of Tissues (Epithelial Tissue, Connective Tissue, Muscle Tissue, Nerve Tissue & Glandular tissue.),

The Integumentary System: Introduction, Structure and functions of the Skin, Subcutaneous, Tissue, Glands and physiology of the skin.

**UNIT – 4 Introduction to Body Fluids:** Body Fluid, blood, Composition of Blood - functions of blood, Hematological disorders and Blood Grouping.

Lymphatic System: Introduction to Lymphatic organs & tissues, Lymphatic vessels, lymph, circulation & functions of lymphatic system

**Recommended Books:**

- Anatomy and Physiology for Radiographers- C.A. Werrick
- Imaging Atlas of Human Anatomy – Jamie Weir et al (Mosby-Elsevier)
- An Atlas of Normal Radiographic Anatomy – Richard and Alwin.
- Ross and Wilson ANATOMY and PHYSIOLOGY in Health and Illness Eleventh Edition Anne