

Ph.D. Anatomy Entrance Syllabus (2020-21)

General Anatomy:

- Anatomical Position Planes Terms of Relationship and Comparison Laterality Movement
- Integumentary System
- Fascias, Fascial Compartments, Bursae,
- Skeletal System - Cartilage, Bones and Joints
- Muscle Tissue - Skeletal Cardiac Smooth Muscle
- Cardiovascular System - Vascular Circuits Blood Vessels
- Lymphoid System
- Nervous System – Central, Peripheral, Somatic and Autonomic Nervous System

Histology :-

General

- Microscopy
- Cell structure
- Epithelium Glands
- Connective tissue
- Cartilage & Bone
- Muscular tissue
- Blood vessels
- Nervous tissue

System Based

- Skin
- Circulatory system
- Respiratory system
- Oral tissues
- Gastrointestinal tract
- Liver and pancreas
- Urinary system
- Endocrine system
- Male reproductive system
- Female reproductive system
- Central nervous system

Embryology

General

- Gametogenesis: Conversion of Germ Cells into Male and Female Gametes
- First Week of Development: Ovulation to Implantation
- Second Week of Development: Bilaminar Germ Disc
- Third Week of Development: Trilaminar Germ Disc
- Third to Eight Weeks: The Embryonic Period
- The Gut Tube and the Body Cavities
- Third Month to Birth: The Fetus and Placenta

System Based

- Cardiovascular System
- Respiratory System
- Digestive System
- Urogenital System
- Head and Neck
- Central Nervous System

Upper Limb

- Comparison Of Upper And Lower Limbs
- Bones Of Upper Limb - Clavicle Scapula Humerus Radius Ulna, Bones of Hand
- Subcutaneous Tissue and Fascia, Blood vessels, Lymphatic Drainage, Cutaneous and Motor Innervation of upper limb
- Pectoral and Scapular Regions - Anterior Axio-appendicular Muscles Posterior Axio-appendicular and Scapulohumeral Muscles Scapulohumeral (Intrinsic Shoulder) Muscles
- Axilla - Axillary Artery, Axillary Vein, Lymph Nodes and Brachial Plexus
- Arm - Muscles, blood vessels and Nerves of Arm
- Cubital Fossa
- Forearm - Compartments of Forearm, Muscles, Arteries, Veins and Nerves of Forearm
- Hand - Fascia and Compartments of Palm Muscles, Arteries Veins Nerves of Hand, Long Flexor Tendons and Tendon Sheaths in Hand
- Joints Of Upper Limb – Sternoclavicular, Acromioclavicular, Glenohumeral, Elbow, Proximal and Distal Radio-Ulnar Joint, Wrist, Intercarpal, Carpometacarpal, Intermetacarpal, Metacarpophalangeal and Interphalangeal Joints

Lower Limb

- Bones Of Lower Limb- Hip Bone, Femur, Tibia Fibula and Bones of Foot
- Subcutaneous Tissue and Fascia, Blood vessels Lymphatic Drainage, Cutaneous and Motor Innervation of Lower Limb
- Anterior Medial and Posterior Thigh Regions - Muscles, Neurovascular structures and then relationships
- Gluteal Regions - Muscles Neurovascular Structures and Relationships of Gluteal Region
- Popliteal Fossa
- Anterior Lateral and Posterior Compartment of Leg- Muscles, Neurovascular Structures and Relationships
- Foot - Skin Fascia Muscles Neurovascular Structures of Foot
- Joints of Lower Limb and foot

Thorax

- Thoracic Wall
- Breasts
- Viscera Of Thoracic Cavity - Pleurae, Lungs, and Tracheobronchial Tree
- Pericardium & Heart
- Mediastinum – Superior, Anterior, Middle and Posterior Mediastinum

Abdomen

- Regions and Planes
- Anterolateral Abdominal Wall - Fascia, Muscles, Neurovasculature bundle and its Internal Surface
- Inguinal Region, Spermatic Cord, Scrotum, and Testes
- Peritoneum and Peritoneal Cavity
- Abdominal Viscera - Esophagus, Stomach, Small Intestine, Large Intestine, Spleen, Pancreas, Liver, Biliary Ducts and Gallbladder
- Kidneys, Ureters, and Suprarenal Glands
- Diaphragm
- Posterior Abdominal Wall

Pelvis and Perineum

- Bones, Joints and Ligaments of Pelvic Girdle
- Pelvis- Cavity, Wall and Floor, Pelvic Fascia, Arteries, Veins, Nerves, Lymph Nodes & Peritoneal reflections
- Pelvic Viscera - Urinary Organs, Rectum Male and Female Internal Genital Organs
- Perineum - Fasciae, Male and Female Urogenital Triangle and Anal Triangle

Back

- Vertebrae
- Vertebral Column Joints, Movements, Curvatures, Vasculature and Nerves
- Muscles Of Back - Extrinsic and Intrinsic Back Muscles, Suboccipital and Deep Neck Muscles
- Vertebral Canal - Spinal Cord, Spinal Nerves and Nerve Roots, Vasculature of Spinal Cord Spinal Meninges and Cerebrospinal Fluid

Head and Neck

- Scalp
- Face - Facial artery and vein, muscles of facial expressions, nerve supply of face and Facial Nerve
- Parotid gland
- Cervical fascia
- Triangles of the Neck
- Cranial cavity, meninges and dural venous sinuses
- Eyelids and Lacrimal Apparatus
- Orbit and Eyeball
- Temporal and infratemporal fossa
- Muscles of mastication
- Temporomandibular Joint
- Submandibular and Sublingual salivary gland
- Suprahyoid muscles
- Thyroid and Parathyroid Glands, Trachea, and Esophagus
- Oral cavity and its contents
- Palate
- Nose and paranasal sinuses
- Pharynx and Palatine Tonsil
- Larynx

Brain

- Meninges of brain, subarachnoid space and cisterns.
- Cerebrum, Mid brain, Pons, Medulla oblongata and Cerebellum
- Thalamus
- Hypothalamus
- Basal ganglia
- Pineal body
- Blood supply of brain and cerebrovascular accidents
- Ventricles of brain
- Cerebrospinal fluid and its Circulation
- Cranial nerve nuclei & Functional columns
- Cranial nerve
- Ascending & descending tracts
- Special senses and neural pathways