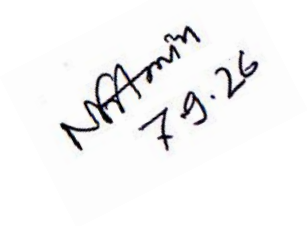
Topic distribution of Block III

Prof. Dr. Laila Anjuman Banu

General Histology

Lymphatic system	**Specific objectives** After completing this part of the Block, the residents should be able to: **(Knowledge)** • Define the common and important terms related to General Histology. • Identify specific tissue components in light microscopic view so that specific organs or tissues can be recognized by observing different combination patterns of tissue components • Describe the light and electron microscopic features (as applicable) of selected tissues and tissue components and correlate the structural features with specific functions. • Describe and explain the basic pathological changes occurring in cells and tissues and explain their implications. **(Skill)** • Identify and demonstrate different cells, cell components and tissues in sections under appropriate available microscopes. • Identify the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events in different forms of figures (eg, micrographs, realistic drawings, schematic drawings, flow charts) and models. • Draw and label the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events. • Solve other problems related to General Histology. **(Attitude)** • Put the equipment and materials in their proper locations after use. • Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall. • Demonstrate proper attitude for learning and teaching of General Histology using updated understanding of the philosophy and techniques of Medical Education.



Topic distribution of Block III

Human abdomen, pelvis and perineum

Male reproductive system

- Male internal genital organs: Vas deferens, seminal vesicle ejaculatory duct and prostate.
- Male urogenital triangle including the scrotum, testis epidydimis and spermatic cord

Specific objectives

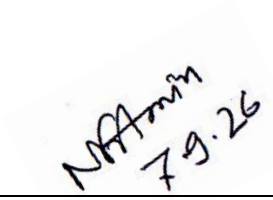
After completing this part of the Block, the residents should be able to do the following in relation related to Human Abdomen, Pelvis and Perineum:

(Knowledge)

- Define and differentiate between the important and common anatomical terms related to the region.
- Describe different anatomical structures of the region in terms of location, extent, parts, anatomical position, gross features and relations.
- Explain the principle (mode) of arterial supply and general plans of venous drainage and lymphatic drainage of the region (in terms of developmental origin if applicable).
- Describe the arterial supplies, venous drainages, lymphatic drainages as well as the sensory, somatomotor and secrectomotor nerve supplies of the individual organs and parts of the region (however, the details of the individual nerves and nerve plexuses are covered in Human Neuroanatomy of Block-4).
- Describe the origins, divisions, courses, branches, areas of supply and effects of blockage/ severing of the important arteries of the region, and explain them using anatomical logic.
- Describe the formations, terminations, tributaries, areas of drainage and effects of blockage/ severing of the important veins of the region, and explain them using anatomical logic.
- Describe the collateral circulations that may develop to compensate the blockage/ severing of the important vessels of the region and explain them using anatomical logic.
- Describe and explain the anatomy of the common physiological processes (including pregnancy, parturition and everyday activities) drawing functional correlations with the anatomical structures relevant to the region.
- Describe and explain the anatomical aspects of the common clinical procedures relevant to the region.
- Describe and explain the anatomical aspects of the common acquired disorders relevant to the region.
- Describe the normal development of different organs/parts of the region and the common and important developmental anomalies and explain the mechanisms involved in the normal and abnormal development.
- Explain the blood supply, nerve supply and lymphatic drainage of different organs / parts of the region from developmental black grounds.
- Describe and explain, structural and ultrastructural organizations and features (as applicable) of the important cells, tissue components, tissues and organs of the region, and correlate the structural features with specific functions.

(Skill)

- Identify different anatomical parts organs and structures of the region in cadavers /viscera /skeletons/bones /models/illustrations (including sectional views)/living bodies.
- Demonstrate the understanding of the relative orientation of different structures in various parts of this region by using models/skeletons/illustrations/living bodies/cadavers.
- Perform dissection on cadavers/viscera to reveal and identify important anatomical structures/parts/organs of the region.



Topic distribution of Block III

	• Draw and label important anatomical structures (including sectional views)/processes/phenomena of the region. • Identify structural /ultrastructural features of important cells, tissue components, tissues and organs as well as the important cellular and histological events in different forms of illustrations photomicrographs, electron (micrographs, realistic drawings, schematic drawings, flow charts of others) and in models. • Identify the normal structures/organs/parts of the region in diagnostic images and explain the implications of images in the common and important developmental and acquired disorders. • Demonstrate an understanding of the locations, orientations and participation of various anatomical structures in different common and important physiological activities of the region using living bodies models / illustrations. • Demonstrate the ability to solve common clinical problems in narrated and simulated cases by the application of the anatomical knowledge of to this region. • Identify different developmental stages, phenomena and mechanisms of the different organs/parts of the region in different forms of illustrations, models and specimens. • Identify common and important developmental anomalies of the region illustrations, models and specimens. • Identify common and important acquired clinical disorders of the region (that have anatomical implications) in illustrations, models and specimens. • Prepare histological slides important structures / organs of the region with routine /special stains (as instructed). **(Attitude)** • Behave sensibly in using laboratory equipment and materials in terms of appropriate use of manual, economical use of materials as well as carefulness and cleaniness. • Put the equipments and materials in their proper locations after use. • Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall. • Demonstrate the appropriate attitude towards a cadaver and human organs / parts while engaged in dissecting and demonstrating them. • Demonstrate the appropriate attitude towards learning and teaching of Human Abdomen, Pelvis and Perineum using updated understanding of the philosophy and techniques of Medical Education.

Note: The following aspects of the above topics should be covered in auditory, visual and tactile ways (as applicable)

- Topographic Anatomy (including surface anatomy)
- Sectional Anatomy & diagnostic images
- Functional & Clinical Anatomy
- Development & related anomalies Histology

Topic distribution of Block III

Prof. Dr. Nahid Farhana Amin

General Histology

Connective tissue

- General structure and function of connective tissue
- Embryonic connective tissue
- Connective tissue proper
- Connective tissue fibers
- Collagen fibres and fibrils
- Biosynthesis and degradation of
  - Collagen fibres
  - Reticular fibres
  - Elastic fibres

Extracellular matrix

Connective tissue cells

- Fibroblasts and myofibroblasts
- Macrophages
- Mast Cells
- Basophils
- Adipocytes
- Adult stem cells and pericytes
- Lymphocytes, plasma cells, and other cells of the immune system

Specific objectives

After completing this part of the Block, the residents should be able to:

(Knowledge)

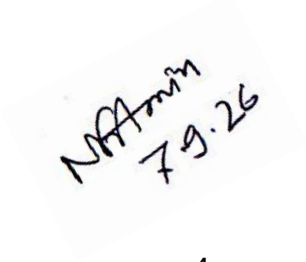
- Define the common and important terms related to General Histology.
- Classify tissues outlining the specific characteristics of different types and citing examples of each.
- Identify specific tissue components in light microscopic view so that specific organs or tissues can be recognized by observing different combination patterns of tissue components
- Describe the important tissue components (e.g., cells, fibres and ground substances) under appropriate available microscope and explain their distribution in the body in terms of functional significance.
- Describe the light and electron microscopic features (as applicable) of selected tissues and tissue components and correlate the structural features with specific functions.
- Describe and explain the basic pathological changes occurring in cells and tissues and explain their implications.

(Skill)

- Identify and demonstrate different cells, cell components and tissues in sections under appropriate available microscopes.
- Identify the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events in different forms of figures (eg, micrographs, realistic drawings, schematic drawings, flow charts) and models.
- Draw and label the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events.
- Solve other problems related to General Histology.

(Attitude)

- Put the equipment and materials in their proper locations after use.
- Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall.
- Demonstrate proper attitude for learning and teaching of General Histology using updated understanding of the philosophy and techniques of Medical Education.



Topic distribution of Block III

Human abdomen, pelvis and perineum

Posterior abdominal wall

- Fasciae of the posterior abdominal wall
- Muscles of the posterior abdominal wall
- Lumbar region including the renal angle and lumbar triangle
- Neurovascular and lymphatic organization of the posterior abdominal wall

Abdominal viscera

- Abdominal aorta and its branches
- Inferior vena cava and its tributaries

Neurovascular and lymphatic organization of the abdominal cavity.
Endocrine glands (Suprarenal gland)

Peritoneum and peritoneal cavity

- Extraperitorual (including retro peritoneal) and intraperitoneal structures.
- Peritoneal formations- pouches, recesses, spaces, gutters, ligaments, fasciae, sheaths, mesenteries and omenta.
- Subdivisions of the peritoneal cavity

Specific objectives

After completing this part of the Block, the residents should be able to do the following in relation related to Human Abdomen, Pelvis and Perineum:

(Knowledge)

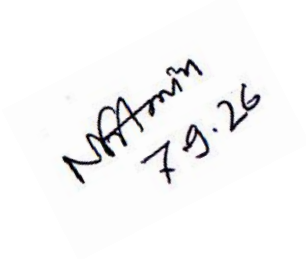
- Describe different anatomical structures of the region in terms of location, extent, parts, anatomical position, gross features and relations.
- Explain the principle (mode) of arterial supply and general plans of venous drainage and lymphatic drainage of the region (in terms of developmental origin if applicable).
- Describe the origins, divisions, courses, branches, areas of supply and effects of blockage/ severing of the important arteries of the region, and explain them using anatomical logic.
- Describe the formations, terminations, tributaries, areas of drainage and effects of blockage/ severing of the important veins of the region, and explain them using anatomical logic.
- Describe the collateral circulations that may develop to compensate the blockage/ severing of the important vessels of the region and explain them using anatomical logic.
- Describe the origins, insertions, actions, participation in movements, relations etc. (as applicable) of important individual and groups of muscles of the region and explain them using anatomical logic.
- Mention the locations of the important ossification centres in the bones of the region and outline their times of appearance and fusion with the shaft/body.
- Describe the various parts of the skeleton and bones of the region along with the important attachments and relations.
- Describe and explain the types, formations, functions structural features, and nerve supply of the joints of the region as well as the movements occurring at tem and the muscles and nerves responsible.
- Describe and explain the anatomy of the common physiological processes (including pregnancy, parturition and everyday activities) drawing functional correlations with the anatomical structures relevant to the region.
- Describe and explain the anatomical aspects of the common clinical procedures relevant to the region.
- Describe and explain the anatomical aspects of the common acquired disorders relevant to the region.
- Describe the normal development of different organs/parts of the region and the common and important developmental anomalies and explain the mechanisms involved in the normal and abnormal development.
- Explain the blood supply, nerve supply and lymphatic drainage of different organs / parts of the region from developmental black grounds.
- Describe and explain, structural and ultrastructural organizations and features (as applicable) of the important cells, tissue components, tissues and organs of the region, and correlate the structural features with specific functions.
- Describe and explain the planes and axes of the movements occurring at different joints of the region and correlate the movements with everyday activities.

Topic distribution of Block III

	(Skill) • Identify different anatomical parts organs and structures of the region in cadavers /viscera /skeletons/bones /models/illustrations (including sectional views)/living bodies. • Demonstrate the understanding of the relative orientation of different structures in various parts of this region by using models/skeletons/illustrations/living bodies/cadavers. • Demonstrate the understanding of the functional locations and orientations of individual bones of the region in the skeleton, thus emphasising the skeleton as a functional whole rather than a mere collection of bones. • Perform dissection on cadavers/viscera to reveal and identify important anatomical structures/parts/organs of the region. • Draw and label important anatomical structures (including sectional views)/processes/phenomena of the region. • Outline the surface projections of important structures organs of the region on the body surface. • Identify the normal structures/organs/parts of the region in diagnostic images and explain the implications of images in the common and important developmental and acquired disorders. • Demonstrate an understanding of the locations, orientations and participation of various anatomical structures in different common and important physiological activities of the region using living bodies models / illustrations. • Demonstrate the ability to solve common clinical problems in narrated and simulated cases by the application of the anatomical knowledge of to this region. • Identify different developmental stages, phenomena and mechanisms of the different organs/parts of the region in different forms of illustrations, models and specimens. • Identify common and important developmental anomalies of the region illustrations, models and specimens. • Identify common and important acquired clinical disorders of the region (that have anatomical implications) in illustrations, models and specimens. • Demonstrate the movements occurring at different joints of the region showing the corresponding planes and axes. **(Attitude)** • Demonstrate the appropriate attitude towards a cadaver and human organs / parts while engaged in dissecting and demonstrating them. • Put the equipments and materials in their proper locations after use. • Demonstrate the appropriate attitude towards learning and teaching of Human Abdomen, Pelvis and Perineum using updated understanding of the philosophy and techniques of Medical Education.

Note: The following aspects of the above topics should be covered in auditory, visual and tactile ways (as applicable)

- Topographic Anatomy (including surface anatomy)
- Sectional Anatomy & diagnostic images
- Functional & Clinical Anatomy
- Development & related anomalies Histology



Topic distribution of Block III

Dr. Latifa Nishat

General Histology

Tissue preparation

- Fixation and fixatives
- Dehydration
- Clearing
- Embedding
- Usual sectioning & cryosection
- Staining: different principles and applied aspects.
- Hematoxylin and eosin staining
- Other important staining procedures

Special Cell

Specific objectives

After completing this part of the Block, the residents should be able to:

(Knowledge)

- Describe the important methods of the study of tissues, from fixation to staining, and explain why specific methods are used for specific purposes
- Name the important materials used for common histologic techniques and explain their specific importance.

(Skill)

- Identify and demonstrate the use of available equipment and materials in histological tissue preparation, sectioning, staining and mounting and deal with the common problems arising during these procedures.
- Perform tissue preparation, sectioning, staining and mounting for routine microscopy (as well as for some important special staining) and explain the significance of various steps.
- Solve problems arising during work in the lab

(Attitude)

- Behave sensibly in using laboratory equipment and materials in terms of appropriate use of manual, economical use of materials as well as carefulness and cleanliness.
- Put the equipment and materials in their proper locations after use.
- Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall.
- Demonstrate proper attitude for learning and teaching of General Histology using updated understanding of the philosophy and techniques of Medical Education.

Topic distribution of Block III

Human abdomen, pelvis and perineum

Urinary system

- Kidney, ureter
- Urinary bladder
- **Pelvic viscera -** Terminal ureter, urinary bladder and urethra (male and female)

Specific objectives

After completing this part of the Block, the residents should be able to do the following in relation related to Human Abdomen, Pelvis and Perineum:

(Knowledge)

- Define and differentiate between the important and common anatomical terms related to the region.
- Describe different anatomical structures of the region in terms of location, extent, parts, anatomical position, gross features and relations.
- Explain the principle (mode) of arterial supply and general plans of venous drainage and lymphatic drainage of the region (in terms of developmental origin if applicable).
- Describe the arterial supplies, venous drainages, lymphatic drainages as well as the sensory, somatomotor and secrectomotor nerve supplies of the individual organs and parts of the region.
- Describe the origins, divisions, courses, branches, areas of supply and effects of blockage/ severing of the important arteries of the region, and explain them using anatomical logic.
- Describe the formations, terminations, tributeries, areas of drainage and effects of blockage/ severing of the important veins of the region, and explain them using anatomical logic.
- Describe the collateral circulations that may develop to compensate the blockage/ severing of the important vessels of the region and explain them using anatomical logic.
- Describe and explain the anatomical aspects of the common clinical procedures relevant to the region.
- Describe and explain the anatomical aspects of the common acquired disorders relevant to the region.
- Describe the normal development of different organs/parts of the region and the common and important developmental anomalies and explain the mechanisms involved in the normal and abnormal development.
- Explain the blood supply, nerve supply and lymphatic drainage of different organs / parts of the region from developmental black grounds.
- Describe and explain, structural and ultrastructural organizations and features (as applicable) of the important cells, tissue components, tissues and organs of the region, and correlate the structural features with specific functions.

(Skill)

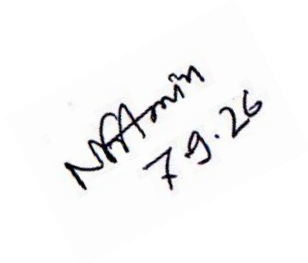
- Identify different anatomical parts organs and structures of the region in cadavers /viscera /skeletons/bones /models/illustrations (including sectional views)/living bodies.
- Demonstrate the understanding of the relative orientation of different structures in various parts of this region by using models/skeletons/illustrations/living bodies/cadavers.
- Perform dissection on cadavers/viscera to reveal and identify important anatomical structures/parts/organs of the region.
- Draw and label important anatomical structures (including sectional views)/processes/phenomena of the region.

Topic distribution of Block III

	• Identify structural /ultrastructural features of important cells, tissue components, tissues and organs as well as the important cellular and histological events in different forms of illustrations photomicrographs, electron (micrographs, realistic drawings, schematic drawings, flow charts of others) and in models. • Outline the surface projections of important structures organs of the region on the body surface. • Identify the normal structures/organs/parts of the region in diagnostic images and explain the implications of images in the common and important developmental and acquired disorders. • Demonstrate an understanding of the locations, orientations and participation of various anatomical structures in different common and important physiological activities of the region using living bodies models / illustrations. • Demonstrate the ability to solve common clinical problems in narrated and simulated cases by the application of the anatomical knowledge of to this region. • Identify different developmental stages, phenomena and mechanisms of the different organs/parts of the region in different forms of illustrations, models and specimens. • Identify common and important developmental anomalies of the region illustrations, models and specimens. • Identify common and important acquired clinical disorders of the region (that have anatomical implications) in illustrations, models and specimens. • Prepare histological slides important structures / organs of the region with routine /special stains (as instructed). **(Attitude)** • Put the equipments and materials in their proper locations. • Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall. • Demonstrate the appropriate attitude towards a cadaver and human organs / parts while engaged in dissecting and demonstrating them. • Demonstrate the appropriate attitude towards learning and teaching of Human Abdomen, Pelvis and Perineum using updated understanding of the philosophy and techniques of Medical Education.

NOTE: The following aspects of the above topics should be covered in auditory, visual and tactile ways (as applicable)

- Topographic Anatomy (including surface anatomy)
- Sectional Anatomy & diagnostic images
- Functional & Clinical Anatomy
- Development & related anomalies Histology



Topic distribution of Block III

Dr. Shafinaz Gazi

General Histology

Adipose tissue

Overview of adipose tissue

White adipose tissue

Function of white adipose tissue

- Differentiation of adipocytes
- Structure of adipocytes and adipose tissue
- Regulation of adipose tissue

Brown adipose tissue

Cartilage

- Overview of cartilage
- Hyaline cartilage
- Elastic cartilage
- Fibrocartilage
- Chondrogenesis and cartilage growth
- Repair of hyaline cartilage

Specific objectives

After completing this part of the Block, the residents should be able to:

(Knowledge)

- Define the common and important terms related to general histology.
- Identify specific tissue components in light microscopic view so that specific organs or tissues can be recognized by observing different combination patterns of tissue components
- Describe the important tissue components (e.g., cells, fibres and ground substances) under appropriate available microscope and explain their distribution in the body in terms of functional significance.
- Describe the light and electron microscopic features (as applicable) of selected tissues and tissue components and correlate the structural features with specific functions.
- Describe and explain the basic pathological changes occurring in cells and tissues and explain their implications.

(Skill)

- Identify and demonstrate different cells, cell components and tissues in sections under appropriate available microscopes.
- Identify the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events in different forms of figures (eg, micrographs, realistic drawings, schematic drawings, flow charts) and models.
- Draw and label the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events.
- Solve problems arising during work in the lab
- Solve other problems related to General Histology.

(Attitude)

- Behave sensibly in using laboratory equipment and materials in terms of appropriate use of manual, economical use of materials as well as carefulness and cleanliness.
- Put the equipment and materials in their proper locations after use.
- Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall.
- Demonstrate proper attitude for learning and teaching of General Histology using updated understanding of the philosophy and techniques of Medical Education.

Topic distribution of Block III

Human abdomen, pelvis and perineum

Female reproductive system

- Female internal genital organs: Ovaries, uterine tubes, uterus and vagina.
- Female urogenital triangle including the vulva and perineal body

Specific objectives

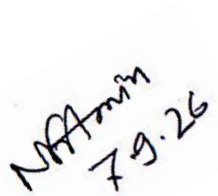
After completing this part of the Block, the residents should be able to do the following in relation related to Human Abdomen, Pelvis and Perineum:

(Knowledge)

- Define and differentiate between the important and common anatomical terms related to the region.
- Describe different anatomical structures of the region in terms of location, extent, parts, anatomical position, gross features and relations.
- Explain the principle (mode) of arterial supply and general plans of venous drainage and lymphatic drainage of the region (in terms of developmental origin if applicable).
- Describe the arterial supplies, venous drainages, lymphatic drainages as well as the sensory, somatomotor and secrectomotor nerve supplies of the individual organs and parts of the region (however, the details of the individual nerves and nerve plexuses are covered in Human Neuroanatomy of Block-4).
- Describe the origins, divisions, courses, branches, areas of supply and effects of blockage/ severing of the important arteries of the region, and explain them using anatomical logic.
- Describe the formations, terminations, tributaries, areas of drainage and effects of blockage/ severing of the important veins of the region, and explain them using anatomical logic.
- Describe the collateral circulations that may develop to compensate the blockage/ severing of the important vessels of the region and explain them using anatomical logic.
- Describe and explain the anatomy of the common physiological processes (including pregnancy, parturition) drawing functional correlations with the anatomical structures relevant to the region.
- Describe and explain the anatomical aspects of the common clinical procedures relevant to the region.
- Describe and explain the anatomical aspects of the common acquired disorders relevant to the region.
- Describe the normal development of different organs/parts of the region and the common and important developmental anomalies and explain the mechanisms involved in the normal and abnormal development.
- Explain the blood supply, nerve supply and lymphatic drainage of different organs / parts of the region from developmental black grounds.
- Describe and explain, structural and ultrastructural organizations and features (as applicable) of the important cells, tissue components, tissues and organs of the region, and correlate the structural features with specific functions.

(Skill)

- Identify different anatomical parts organs and structures of the region in cadavers /viscera /skeletons/bones /models/illustrations (including sectional views)/living bodies.
- Demonstrate the understanding of the relative orientation of different structures in various parts of this region by using models/skeletons/illustrations/living bodies/cadavers.



Topic distribution of Block III

	• Perform dissection on cadavers/viscera to reveal and identify important anatomical structures/parts/organs of the region. • Draw and label important anatomical structures (including sectional views)/processes/phenomena of the region. • Identify structural /ultrastructural features of important cells, tissue components, tissues and organs as well as the important cellular and histological events in different forms of illustrations photomicrographs, electron (micrographs, realistic drawings, schematic drawings, flow charts of others) and in models. • Outline the surface projections of important structures organs of the region on the body surface. • Identify the normal structures/organs/parts of the region in diagnostic images and explain the implications of images in the common and important developmental and acquired disorders. • Demonstrate an understanding of the locations, orientations and participation of various anatomical structures in different common and important physiological activities of the region using living bodies models / illustrations. • Demonstrate the ability to solve common clinical problems in narrated and simulated cases by the application of the anatomical knowledge of to this region. • Identify different developmental stages, phenomena and mechanisms of the different organs/parts of the region in different forms of illustrations, models and specimens. • Identify common and important developmental anomalies of the region illustrations, models and specimens. • Identify common and important acquired clinical disorders of the region (that have anatomical implications) in illustrations, models and specimens. • Prepare histological slides important structures / organs of the region with routine /special stains (as instructed). **(Attitude)** • Behave sensibly in using laboratory equipment and materials in terms of appropriate use of manual, economical use of materials as well as carefulness and cleaniness. • Put the equipments and materials in their proper locations after use. • Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall. • Demonstrate the appropriate attitude towards a cadaver and human organs / parts while engaged in dissecting and demonstrating them. • Demonstrate the appropriate attitude towards learning and teaching of Human Abdomen, Pelvis and Perineum using updated understanding of the philosophy and techniques of Medical Education.

NOTE: The following aspects of the above topics should be covered in auditory, visual and tactile ways (as applicable)

- Topographic Anatomy (including surface anatomy)
- Sectional Anatomy & diagnostic images
- Functional & Clinical Anatomy
- Development & related anomalies Histology

Topic distribution of Block III

Dr. Sharmin Akter Sumi

General Histology

Cardiovascular system

- Overview of the cardiovascular system

General features of arteries and veins

- Layers of vascular wall
- Vascular endothelium

Arteries

Large arteries (elastic arteries)

- Medium arteries (muscular arteries)
- Small arteries and arterioles

Capillaries

- Classification of capillaries
- Functional aspects of capillaries

Veins

- Arteriovenous shunts
- Venules and small veins
- Medium veins
- Large veins

Atypical blood vessels

Specific objectives

After completing this part of the Block, the residents should be able to:

(Knowledge)

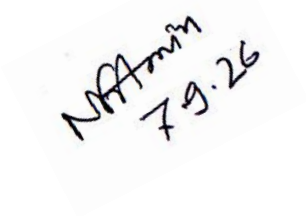
- Define the common and important terms related to general histology (CVS).
- Identify specific tissue components in light microscopic view so that specific organs or tissues can be recognized by observing different combination patterns of tissue components
- Describe the light and electron microscopic features (as applicable) of selected tissues and tissue components and correlate the structural features with specific functions.
- Describe and explain the basic pathological changes occurring in cells and tissues and explain their implications.

(Skill)

- Identify and demonstrate different cells, cell components and tissues in sections under appropriate available microscopes.
- Identify the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events in different forms of figures (eg, micrographs, realistic drawings, schematic drawings, flow charts) and models.
- Draw and label the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events.
- Solve problems arising during work in the lab.
- Solve other problems related to general histology (CVS).

(Attitude)

- Behave sensibly in using laboratory equipment and materials in terms of appropriate use of manual, economical use of materials as well as carefulness and cleanliness
- Put the equipment and materials in their proper locations after use.
- Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall.
- Demonstrate proper attitude for learning and teaching of General Histology using updated understanding of the philosophy and techniques of Medical Education.



Topic distribution of Block III

Human abdomen, pelvis and perineum

Abdominal viscera

- Overview of the abdominal viscera and digestive tract
- Oesophagus
- Stomach
- Small intestine- duodenum, jejunum and ileum
- Large Intestine- cecum and appendix, ascending, trans and descending colon and sigmoid colon.

Pelvic viscera

Rectum and anal canal

Specific objectives

After completing this part of the Block, the residents should be able to do the following in relation related to Human Abdomen, Pelvis and Perineum:

(Knowledge)

- Define and differentiate between the important and common anatomical terms related to the region
- Describe different anatomical structures of the region in terms of location, extent, parts, anatomical position, gross features and relations.
- Describe the collateral circulations that may develop to compensate the blockage/ severing of the important vessels of the region and explain them using anatomical logic.
- Describe and explain the anatomical aspects of the common clinical procedures relevant to the region.
- Explain the principle (mode) of arterial supply and general plans of venous drainage and lymphatic drainage of the region (in terms of developmental origin if applicable).
- Describe the arterial supplies, venous drainages, lymphatic drainages as well as the sendory, somatomoter and secrectomoter nerve supplies of the individual organs and parts of the region (however, the details of the individual nerves and nerve plexuses are covered in Human Neuroanatomy of Block-4).
- Describe the origins, divisions, courses, branches, areas of supply and effects of blockage/ severing of the important arteries of the region, and explain them using anatomical logic.
- Describe the formations, terminations, tributeries, areas of drainage and effects of blockage/ severing of the important veins of the region, and explain them using anatomical logic.
- Describe and explain the anatomical aspects of the common acquired disorders relevant to the region.
- Describe the normal development of different organs/parts of the region and the common and important developmental anomalies and explain the mechanisms involved in the normal and abnormal development.
- Explain the blood supply, nerve supply and lymphatic drainage of different organs / parts of the region from developmental black grounds.
- Describe and explain, structural and ultrastructural organizations and features (as applicable) of the important cells, tissue components, tissues and organs of the region, and correlate the structural features with specific functions.

(Skill)

- Identify different anatomical parts organs and structures of the region in cadavers /viscera /skeletons/bones /models/illustrations (including sectional views)/living bodies.
- Demonstrate the understanding of the relative orientation of different structures in various parts of this region by using models/skeletons/illustrations/living bodies/cadavers.
- Demonstrate the understanding of the functional locations and orientations of individual bones of the region in the skeleton, thus emphasising the skeleton as a functional whole rather than a mere collection of bones.
- Perform dissection on cadavers/viscera to reveal and identify important anatomical structures/parts/organs of the region.
- Draw and label important anatomical structures (including sectional views)/processes/phenomena of the region.

Topic distribution of Block III

	• Identify structural /ultrastructural features of important cells, tissue components, tissues and organs as well as the important cellular and histological events in different forms of illustrations photomicrographs, electron (micrographs, realistic drawings, schematic drawings, flow charts of others) and in models. • Outline the surface projections of important structures organs of the region on the body surface. • Palpate different bony, muscular and other prominences of the region on the living body. • Identify the normal structures/organs/parts of the region in diagnostic images and explain the implications of images in the common and important developmental and acquired disorders. • Demonstrate an understanding of the locations, orientations and participation of various anatomical structures in different common and important physiological activities of the region using living bodies models / illustrations. • Demonstrate the ability to solve common clinical problems in narrated and simulated cases by the application of the anatomical knowledge of to this region. • Identify different developmental stages, phenomena and mechanisms of the different organs/parts of the region in different forms of illustrations, models and specimens. • Identify common and important developmental anomalies of the region illustrations, models and specimens. • Identify common and important acquired clinical disorders of the region (that have anatomical implications) in illustrations, models and specimens. **(Attitude)** • Behave sensibly in using laboratory equipment and materials in terms of apropriate use of manual, economical use of materials as well as carefulness and cleaniness. • Put the equipments and materials in their proper locations after use. • Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall. • Demonstrate the appropriate attitude towards a cadaver and human organs / parts while engaged in dissecting and demonstrating them. • Demonstrate the appropriate attitude towards learning and teaching of Human Abdomen, Pelvis and Perineum using updated understanding of the philosophy and techniques of Medical Education.

NOTE: The following aspects of the above topics should be covered in auditory, visual and tactile ways (as applicable)

- Topographic Anatomy (including surface anatomy)
- Sectional Anatomy & diagnostic images
- Functional & Clinical Anatomy
- Development & related anomalies Histology

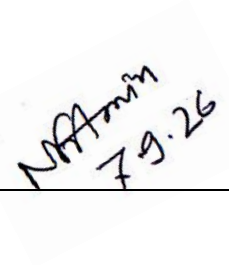
Topic distribution of Block III

Dr. Md. Mohiuddin Masum

General Histology

Microscopy

- Basic optics relevant to microscopy
- Conventional light microscopy and other optical systems:
  Polarising microscopy, phase-contrast microscopy, fluorescent microscopy
- Electron microscopy
- Atomic force microscopy
- Micrometry
- Camera lucida drawing under light microscope



Specific objectives

After completing this part of the Block, the residents should be able to:

(Knowledge)

- Define the common and important terms related to General Histology (microscopy)
- Identify specific tissue components in light microscopic view so that specific organs or tissues can be recognized by observing different combination patterns of tissue components.
- Describe the light and electron microscopic features (as applicable) of selected tissues and tissue components and correlate the structural features with specific functions.
- Define the common & important terms related to microscopy
- Explain the principles of optics in terms of their use in microscopy.
- Describe and explain the mechanisms of different important forms of microscopy

(Skill)

- Set a binocular conventional light microscope and focus histological slides at different magnifications.
- Demonstrate the use of important forms of microscopes available in the department.
- Draw, label and identify the different parts of an ordinary light microscope, explain its mechanism of image formation and demonstrate the use of its different parts.
- Identify and demonstrate different cells, cell components and tissues in sections under appropriate available microscopes.
- Perform microscopic measurement of tissue components under microscopes using manual micrometry and computer software.
- Identify the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events in different forms of figures (eg, micrographs, realistic drawings, schematic drawings, flow charts) and models.
- Draw and label the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events.

(Attitude)

- Put the equipment and materials in their proper locations after use.
- Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall.
- Demonstrate proper attitude for learning and teaching of General Histology using updated understanding of the philosophy and techniques of Medical Education.

Topic distribution of Block III

Human abdomen, pelvis and perineum

Overview: walls, cavities, regions and planes

Anterolateral abdominal wall

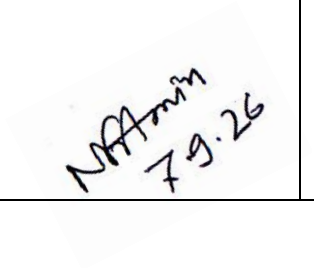
- Fasciae sheath and aponeuroses of the anterolateral abdominal wall
- Muscles of the anterolateral abdominal wall
- Neurovascular and lymphatic organisation of the anterolateral abdominal wall
- Internal surface of anterolateral abdominal wall
- Inguinal region, including the inguinal canal.

Specific objectives

After completing this part of the Block, the residents should be able to do the following in relation related to Human Abdomen, Pelvis and Perineum:

(Knowledge)

- Define and differentiate between the important and common anatomical terms related to the region.
- Describe different anatomical structures of the region in terms of location, extent, parts, anatomical position, gross features and relations.
- Explain the principle (mode) of arterial supply and general plans of venous drainage and lymphatic drainage of the region (in terms of developmental origin if applicable).
- Describe the arterial supplies, venous drainages, lymphatic drainages as well as the sensory, somatomotor and secrectomotor nerve supplies of the individual organs and parts of the region (however, the details of the individual nerves and nerve plexuses are covered in Human Neuroanatomy of Block-4).
- Describe the origins, divisions, courses, branches, areas of supply and effects of blockage/ severing of the important arteries of the region, and explain them using anatomical logic.
- Describe the formations, terminations, tributaries, areas of drainage and effects of blockage/ severing of the important veins of the region, and explain them using anatomical logic.
- Describe the collateral circulations that may develop to compensate the blockage/ severing of the important vessels of the region and explain them using anatomical logic.
- Describe the origins, insertions, actions, participation in movements, relations etc. (as applicable) of important individual and groups of muscles of the region and explain them using anatomical logic.
- Mention the locations of the important ossification centres in the bones of the region and outline their times of appearance and fusion with the shaft/body.
- Describe the various parts of the skeleton and bones of the region along with the important attachments and relations.
- Describe and explain the anatomical aspects of the common clinical procedures relevant to the region.
- Describe and explain the anatomical aspects of the common acquired disorders relevant to the region.
- Describe and explain, structural and ultrastructural organizations and features (as applicable) of the important cells, tissue components, tissues and organs of the region, and correlate the structural features with specific functions.
- **(Skill)**
- Identify different anatomical parts organs and structures of the region in cadavers /viscera /skeletons/bones /models/illustrations (including sectional views)/living bodies.
- Demonstrate the understanding of the relative orientation of different structures in various parts of this region by using models/skeletons/illustrations/living bodies/cadavers.
- Perform dissection on cadavers/viscera to reveal and identify important anatomical structures/parts/organs of the region.



Topic distribution of Block III

	• Draw and label important anatomical structures (including sectional views)/processes/phenomena of the region. • Identify structural /ultrastructural features of important cells, tissue components, tissues and organs as well as the important cellular and histological events in different forms of illustrations photomicrographs, electron (micrographs, realistic drawings, schematic drawings, flow charts of others) and in models. • Outline the surface projections of important structures organs of the region on the body surface. • Identify the normal structures/organs/parts of the region in diagnostic images and explain the implications of images in the common and important developmental and acquired disorders. • Demonstrate an understanding of the locations, orientations and participation of various anatomical structures in different common and important physiological activities of the region using living bodies models / illustrations. • Demonstrate the ability to solve common clinical problems in narrated and simulated cases by the application of the anatomical knowledge of to this region. • Identify different developmental stages, phenomena and mechanisms of the different organs/parts of the region in different forms of illustrations, models and specimens. • Identify common and important developmental anomalies of the region illustrations, models and specimens. • Identify common and important acquired clinical disorders of the region (that have anatomical implications) in illustrations, models and specimens. **(Attitude)** • Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall. • Demonstrate the appropriate attitude towards a cadaver and human organs / parts while engaged in dissecting and demonstrating them. • Demonstrate the appropriate attitude towards learning and teaching of Human Abdomen, Pelvis and Perineum using updated understanding of the philosophy and techniques of Medical Education.

NOTE: The following aspects of the above topics should be covered in auditory, visual and tactile ways (as applicable)

- Topographic Anatomy (including surface anatomy)
- Sectional Anatomy & diagnostic images
- Functional & Clinical Anatomy
- Development & related anomalies Histology

Topic distribution of Block III

Dr. Najnin Akhter

General Histology

Epithelial tissue

Overview of epithelial structure and functions

Classification of epithelium

Cell polarity

The apical domain and its modifications

- Microvilli
- Stereocilia
- Cilia

The lateral domain and its specializations in cell-to-cell adhesion

- Occluding junctions
- Anchoring junctions
- Communicating junctions
- Morphologic specialisations of the lateral cell surface

The basal domain and its specializations in cell-to– extracellular matrix adhesion

- Basement membrane structure and function
- Cell-to–extracellular matrix junctions
- Morphologic modifications of the basal cell surface

Glands

Epithelial cell renewal

Muscle tissue

Overview and classification of muscle

Skeletal muscle

- Myofibrils and myofilaments
- The contraction cycle
- Motor innervation
- Sensory innervation
- Development, repair, healing, and renewal

Specific objectives

After completing this part of the Block, the residents should be able to:

(Knowledge)

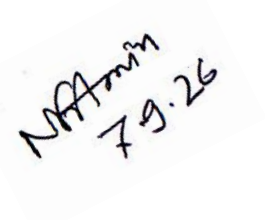
- Define the common and important terms related to General Histology (Epithelial tissue).
- Classify tissues outlining the specific characteristics of different types and citing examples of each.
- Define and classify glands outlining the specific characteristics of different types and citing examples of each.
- Describe the light and electron microscopic features (as applicable) of selected tissues and tissue components and correlate the structural features with specific functions.
- Describe and explain the basic pathological changes occurring in cells and tissues and explain their implications.

(Skill)

- Identify and demonstrate different cells, cell components and tissues in sections under appropriate available microscopes.
- Identify the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events in different forms of figures (eg, micrographs, realistic drawings, schematic drawings, flow charts) and models.
- Draw and label the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events.
- Solve other problems related to General Histology (epithelial tissue).

(Attitude)

- Put the equipment and materials in their proper locations after use.
- Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall.
- Demonstrate proper attitude for learning and teaching of General Histology using updated understanding of the philosophy and techniques of Medical Education.

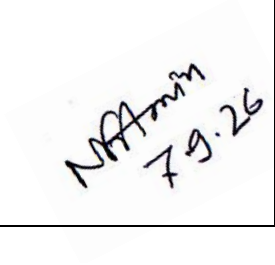


Topic distribution of Block III

Cardiac muscle • Structure of cardiac muscle • Injury and repair **Smooth muscle** • Structure of smooth muscle • Functional aspects of smooth muscle Renewal, repair, and differentiation	
Human abdomen, pelvis and perineum	
Diaphragm • Vessels and nerves of the diaphragm • Diaphragmatic apertures Actions of the diaphragm	**Specific objectives** After completing this part of the Block, the residents should be able to do the following in relation related to Human Abdomen, Pelvis and Perineum: **(Knowledge)** • Define and differentiate between the important and common anatomical terms related to the region • Describe different anatomical structures of the region in terms of location, extent, parts, anatomical position, gross features and relations. • Describe the collateral circulations that may develop to compensate the blockage/ severing of the important vessels of the region and explain them using anatomical logic. • Describe and explain the anatomical aspects of the common clinical procedures relevant to the region. • Explain the principle (mode) of arterial supply and general plans of venous drainage and lymphatic drainage of the region (in terms of developmental origin if applicable). • Describe the arterial supplies, venous drainages, lymphatic drainages as well as the sendory, somatomoter and secrectomoter nerve supplies of the individual organs and parts of the region (however, the details of the individual nerves and nerve plexuses are covered in Human Neuroanatomy of Block-4). • Describe the origins, divisions, courses, branches, areas of supply and effects of blockage/ severing of the important arteries of the region, and explain them using anatomical logic. • Describe the formations, terminations, tributeries, areas of drainage and effects of blockage/ severing of the important veins of the region, and explain them using anatomical logic. • Describe the origins, insertions, actions, participation in movements, relations etc. (as applicable) of important individual and groups of muscles of the region and explain them using anatomical logic. • Describe the origins, insertions, actions, participation in movements, relations etc. (as applicable) of important individual and groups of muscles of the region and explain them using anatomical logic. • Describe and explain the anatomical aspects of the common acquired disorders relevant to the region. • Describe the normal development of different organs/parts of the region and the common and important developmental anomalies and explain the mechanisms involved in the normal and abnormal development. • Explain the blood supply, nerve supply and lymphatic drainage of different organs / parts of the region from developmental black grounds.

Topic distribution of Block III

	• Describe and explain, structural and ultrastructural organizations and features (as applicable) of the important cells, tissue components, tissues and organs of the region, and correlate the structural features with specific functions. **(Skill)** • Identify different anatomical parts organs and structures of the region in cadavers /viscera /skeletons/bones /models/illustrations (including sectional views)/living bodies. • Demonstrate the understanding of the relative orientation of different structures in various parts of this region by using models/skeletons/illustrations/living bodies/cadavers. • Demonstrate the understanding of the functional locations and orientations of individual bones of the region in the skeleton, thus emphasising the skeleton as a functional whole rather than a mere collection of bones. • Perform dissection on cadavers/viscera to reveal and identify important anatomical structures/parts/organs of the region. • Draw and label important anatomical structures (including sectional views)/processes/phenomena of the region. • Identify structural /ultrastructural features of important cells, tissue components, tissues and organs as well as the important cellular and histological events in different forms of illustrations photomicrographs, electron (micrographs, realistic drawings, schematic drawings, flow charts of others) and in models. • Outline the surface projections of important structures organs of the region on the body surface. • Palpate different bony, muscular and other prominences of the region on the living body. • Identify the normal structures/organs/parts of the region in diagnostic images and explain the implications of images in the common and important developmental and acquired disorders. • Demonstrate an understanding of the locations, orientations and participation of various anatomical structures in different common and important physiological activities of the region using living bodies models / illustrations. • Demonstrate the ability to solve common clinical problems in narrated and simulated cases by the application of the anatomical knowledge of to this region. • Identify different developmental stages, phenomena and mechanisms of the different organs/parts of the region in different forms of illustrations, models and specimens. • Identify common and important developmental anomalies of the region illustrations, models and specimens. • Identify common and important acquired clinical disorders of the region (that have anatomical implications) in illustrations, models and specimens. **(Attitude)** • Behave sensibly in using laboratory equipment and materials in terms of apropriate use of manual, economical use of materials as well as carefulness and cleaniness. • Put the equipments and materials in their proper locations after use. • Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall.



Topic distribution of Block III

	• Demonstrate the appropriate attitude towards a cadaver and human organs / parts while engaged in dissecting and demonstrating them. • Demonstrate the appropriate attitude towards learning and teaching of Human Abdomen, Pelvis and Perineum using updated understanding of the philosophy and techniques of Medical Education.

NOTE: The following aspects of the above topics should be covered in auditory, visual and tactile ways (as applicable)

- Topographic Anatomy (including surface anatomy)
- Sectional Anatomy & diagnostic images
- Functional & Clinical Anatomy
- Development & related anomalies Histology

Topic distribution of Block III

Dr. Md. Zamilur Rahman

General Histology

Bone

- Overview of bone
- Bones and bone tissue
- General structure of bones
- Outer surface of bones
- Bone cavities
- Immature bone

Cells of bone tissue

- Osteoprogenitor cells
- Osteoblasts
- Osteocytes
- Bone-Lining cells
- Osteoclasts

Bone formation

- Intramembranous ossification
- Endochondral ossification
- Growth of endochondral bone
- Development of the osteonal (haversian system)
- Biologic mineralization and matrix vesicles

Joints types and examples

- Synovial fluid
- Synovial membrane
- Inter vertebral disk
- Synoviocytes

Specific objectives

After completing this part of the Block, the residents should be able to:

(Knowledge)

- Define the common and important terms related to General Histology.
- Classify tissues outlining the specific characteristics of different types and citing examples of each.
- Identify specific tissue components in light microscopic view so that specific organs or tissues can be recognized by observing different combination patterns of tissue components
- Describe the light and electron microscopic features (as applicable) of selected tissues and tissue components and correlate the structural features with specific functions.

(Skill)

- Identify and demonstrate different cells, cell components and tissues in sections under appropriate available microscopes.
- Identify the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events in different forms of figures (eg, micrographs, realistic drawings, schematic drawings, flow charts) and models.
- Draw and label the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events.
- Solve problems arising during work in the lab
- Solve other problems related to General Histology.

(Attitude)

- Put the equipment and materials in their proper locations after use.
- Demonstrate proper attitude for learning and teaching of General Histology using updated understanding of the philosophy and techniques of Medical Education.

Topic distribution of Block III

Human abdomen, pelvis and perineum

Abdominal viscera

- Liver
- Biliary ducts and gallbladder
- Pancreas

Specific objectives

After completing this part of the Block, the residents should be able to do the following in relation related to Human Abdomen, Pelvis and Perineum:

(Knowledge)

- Explain the principle (mode) of arterial supply and general plans of venous drainage and lymphatic drainage of the region (in terms of developmental origin if applicable).
- Describe the arterial supplies, venous drainages, lymphatic drainages as well as the sendory, somatomoter and secrectomoter nerve supplies of the individual organs and parts of the region (however, the details of the individual nerves and nerve plexuses are covered in Human Neuroanatomy of Block-4). Describe the origins, divisions, courses, branches, areas of supply and effects of blockage/ severing of the important arteries of the region, and explain them using anatomical logic.
- Describe the formations, terminations, tributeries, areas of drainage and effects of blockage/ severing of the important veins of the region, and explain them using anatomical logic.
- Describe the collateral circulations that may develop to compensate the blockage/ severing of the important vessels of the region and explain them using anatomical logic.
- Describe and explain the anatomy of the common physiological processes (including pregnancy, parturition and everyday activities) drawing functional correlations with the anatomical structures relevant to the region.
- Describe and explain the anatomical aspects of the common clinical procedures relevant to the region.
- Describe and explain the anatomical aspects of the common acquired disorders relevant to the region.
- Describe the normal development of different organs/parts of the region and the common and important developmental anomalies and explain the mechanisms involved in the normal and abnormal development.
- Explain the blood supply, nerve supply and lymphatic drainage of different organs / parts of the region from developmental black grounds.
- Describe and explain, structural and ultrastructural organizations and features (as applicable) of the important cells, tissue components, tissues and organs of the region, and correlate the structural features with specific functions.

(Skill)

- Identify different anatomical parts organs and structures of the region in cadavers /viscera /skeletons/bones /models/illustrations (including sectional views)/living bodies.
- Demonstrate the understanding of the relative orientation of different structures in various parts of this region by using models/skeletons/illustrations/living bodies/cadavers.
- Perform dissection on cadavers/viscera to reveal and identify important anatomical structures/parts/organs of the region.
- Draw and label important anatomical structures (including sectional views)/processes/phenomena of the region.
- Identify structural /ultrastructural features of important cells, tissue components, tissues and organs as well as the important cellular and histological events in different forms of illustrations photomicrographs, electron (micrographs, realistic drawings, schematic drawings, flow charts of others) and in models.

Topic distribution of Block III

	• Outline the surface projections of important structures organs of the region on the body surface. • Identify the normal structures/organs/parts of the region in diagnostic images and explain the implications of images in the common and important developmental and acquired disorders.

NOTE: The following aspects of the above topics should be covered in auditory, visual and tactile ways (as applicable)

- Topographic Anatomy (including surface anatomy)
- Sectional Anatomy & diagnostic images
- Functional & Clinical Anatomy
- Development & related anomalies Histology

Topic distribution of Block III

Prof. Dr. Khondker Manzare Shamim (Guest Teacher)

General Histology

Basic principles relevant to Microscopy

Histochemistry and cytochemistry

- Chemical composition of histologic samples
- Chemical basis of staining
- Enzyme digestion
- Enzyme histochemistry
- Immunocytochemistry
- Hybridization techniques
- Autoradiography

Specific objectives

After completing this part of the Block, the residents should be able to:

(Knowledge)

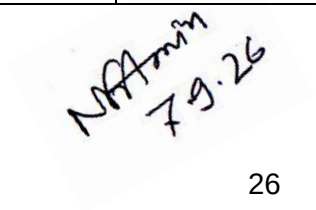
- Define the common and important terms related to General Histology.
- Define the common & important terms related to microscopy
- Explain the principles of optics in terms of their use in microscopy.
- Describe and explain the mechanisms of different important forms of microscopy
- Classify tissues outlining the specific characteristics of different types and citing examples of each.
- Identify specific tissue components in light microscopic view so that specific organs or tissues can be recognized by observing different combination patterns of tissue components.
- Name the important materials used for common histologic techniques and explain their specific importance.
- Describe and explain the basic pathological changes occurring in cells and tissues and explain their implications

(Skill)

- Identify and demonstrate different cells, cell components and tissues in sections under appropriate available microscopes.
- Perform microscopic measurement of tissue components under microscopes using manual micrometry and computer software.
- Identify the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events in different forms of figures (eg, micrographs, realistic drawings, schematic drawings, flow charts) and models.
- Draw and label the light and electron microscopic features of important cells, cell components, and tissues as well as the important cellular and histological events.
- Solve other problems related to General Histology.

(Attitude)

- Put the equipment and materials in their proper locations after use.
- Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall.
- Demonstrate proper attitude for learning and teaching of General Histology using updated understanding of the philosophy and techniques of Medical Education.



Topic distribution of Block III

Human abdomen, pelvis and perineum

Pelvis and Perineum

Introduction to the pelvis, including the types Pelvic girdle

- Bones and features of the pelvic girdle in males and females including measurements related to pregnancy)
- Pelvic inlet and outlet
- Orientations of the pelvic girdle in males and females
- Joints and ligaments of the pelvic girdle
- Explain the mechanisms of pelvis

Pelvic Cavity

- Walls and floor of the pelvic cavity
- Peritoneum and peritoneal cavity of the pelvis
- Pelvic fascia

Neurovascular lymphatic organization of the pelvis perineum

Perinium

- Fasciae and pouches of the urogenital triangle
- Features of the anal triangle
- Male urogenital triangle including the scrotum, testis epidydimis and spermatic cord
- Female urogenital triangle including the vulva and perineal body

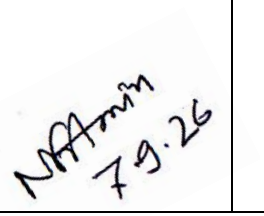
Aspects of the pelvis and perineum in relation to pregnancy and parturition

Specific objectives

After completing this part of the Block, the residents should be able to do the following in relation related to Human Abdomen, Pelvis and Perineum:

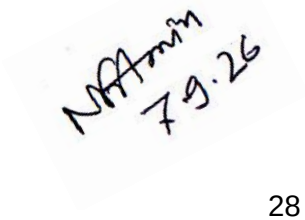
(Knowledge)

- Define and differentiate between the important and common anatomical terms related to the region.
- Describe different anatomical structures of the region in terms of location, extent, parts, anatomical position, gross features and relations.
- Explain the principle (mode) of arterial supply and general plans of venous drainage and lymphatic drainage of the region (in terms of developmental origin if applicable).
- Describe the arterial supplies, venous drainages, lymphatic drainages as well as the sendory, somatomoter and secrectomotor nerve supplies of the individual organs and parts of the region (however, the details of the individual nerves and nerve plexuses are covered in Human Neuroanatomy of Block-4).
- Describe the origins, divisions, courses, branches, areas of supply and effects of blockage/ severing of the important arteries of the region, and explain them using anatomical logic.
- Describe the formations, terminations, tributaries, areas of drainage and effects of blockage/ severing of the important veins of the region, and explain them using anatomical logic.
- Describe the collateral circulations that may develop to compensate the blockage/ severing of the important vessels of the region and explain them using anatomical logic.
- Describe the origins, insertions, actions, participation in movements, relations etc. (as applicable) of important individual and groups of muscles of the region and explain them using anatomical logic.
- Mention the locations of the important ossification centres in the bones of the region and outline their times of appearance and fusion with the shaft/body.
- Describe the various parts of the skeleton and bones of the region along with the important attachments and relations.
- Describe and explain the types, formations, functions structural features, and nerve supply of the joints of the region as well as the movements occurring at tem and the muscles and nerves responsible.
- Describe and explain the anatomy of the common physiological processes (including pregnancy, parturition and everyday activities) drawing functional correlations with the anatomical structures relevant to the region.
- Describe and explain the anatomical aspects of the common clinical procedures relevant to the region.
- Describe and explain the anatomical aspects of the common acquired disorders relevant to the region.
- Describe the normal development of different organs/parts of the region and the common and important developmental anomalies and explain the mechanisms involved in the normal and abnormal development.
- Explain the blood supply, nerve supply and lymphatic drainage of different organs / parts of the region from developmental black grounds.



Topic distribution of Block III

	• Describe and explain, structural and ultrastructural organizations and features (as applicable) of the important cells, tissue components, tissues and organs of the region, and correlate the structural features with specific functions. • Describe and explain the planes and axes of the movements occurring at different joints of the region and correlate the movements with everyday activities. **(Skill)** • Identify different anatomical parts organs and structures of the region in cadavers /viscera /skeletons/bones /models/illustrations (including sectional views)/living bodies. • Demonstrate the understanding of the relative orientation of different structures in various parts of this region by using models/skeletons/illustrations/living bodies/cadavers. • Demonstrate the understanding of the functional locations and orientations of individual bones of the region in the skeleton, thus emphasising the skeleton as a functional whole rather than a mere collection of bones. • Perform dissection on cadavers/viscera to reveal and identify important anatomical structures/parts/organs of the region. • Draw and label important anatomical structures (including sectional views)/processes/phenomena of the region. • Identify structural /ultrastructural features of important cells, tissue components, tissues and organs as well as the important cellular and histological events in different forms of illustrations photomicrographs, electron (micrographs, realistic drawings, schematic drawings, flow charts of others) and in models. • Outline the surface projections of important structures organs of the region on the body surface. • Identify the normal structures/organs/parts of the region in diagnostic images and explain the implications of images in the common and important developmental and acquired disorders. • Demonstrate an understanding of the locations, orientations and participation of various anatomical structures in different common and important physiological activities of the region using living bodies models / illustrations. • Demonstrate the ability to solve common clinical problems in narrated and simulated cases by the application of the anatomical knowledge of to this region. • Identify different developmental stages, phenomena and mechanisms of the different organs/parts of the region in different forms of illustrations, models and specimens. • Identify common and important developmental anomalies of the region illustrations, models and specimens. • Identify common and important acquired clinical disorders of the region (that have anatomical implications) in illustrations, models and specimens. • Prepare histological slides important structures / organs of the region with routine /special stains (as instructed). • Demonstrate several of the following abilities (as instructed) in relation to Human Abdomen, Pelvis and Perineum: • Demonstrate the movements occurring at different joints of the region showing the corresponding planes and axes.



Topic distribution of Block III

	(Attitude) • Behave sensibly in using laboratory equipment and materials in terms of apropriate use of manual, economical use of materials as well as carefulness and cleaniness. • Take proper safety measures for oneself and for the group as a whole while working in labs/dissection hall. • Demonstrate the appropriate attitude towards a cadaver and human organs / parts while engaged in dissecting and demonstrating them. • Put the equipments and materials in their proper locations after use. • Demonstrate the appropriate attitude towards learning and teaching of Human Abdomen, Pelvis and Perineum using updated understanding of the philosophy and techniques of Medical Education.

NOTE: The following aspects of the above topics should be covered in auditory, visual and tactile ways (as applicable)

- Topographic Anatomy (including surface anatomy)
- Sectional Anatomy & diagnostic images
- Functional & Clinical Anatomy
- Development & related anomalies Histology