

HUMAN ANATOMY AND PHYSIOLOGY-I, BP-101(T)

UNIT-III (Body fluids and blood)

CLASS:8

TOPIC – Lymphatic organs and tissues, lymphatic vessels

- In short thoracic duct receives lymph from left part of body. That's why it is also called as left lymphatic duct. Finally, it drains the lymph in to left subclavian vein and left jugular vein

It is 1.2 cm long and receives lymph from:

b) Right lymphatic duct:

It is primarily divided into:

- right jugular trunk
right sub clavian trunk
right broncho mediastinal trunk
- It receives lymph from right side of the body part that's why it is known as right lymphatic duct.
- It drains lymph in to right subclavian vein and right jugular vein.

1) Primary lymphatic organs:

- The primary lymphatic organs are:
 - ✓ red bone marrow and
 - ✓ thymus gland.
- They are primary lymphatic organs because they produce b and t cells.
- The b - Lymphocyte cells and t-lymphocyte cells are the important cell for immune response.
- The haemopoietic stem cells in red bone marrow produce b-cells and pre-t cells. pre-t cells than migrate to the thymus gland and become mature t-cells.

Location:

- It is bi-lobed lymphatic organs and located in the mediastinum posterior to the sternum and between the lungs

Anatomy:

- Thymus gland is large in infants and it reaches its maximum size at 10 – 12 years with 40gms of weight.
- Thymus gland consist two lobes and each lobe is covered by the connective tissue
- layer known as capsule.
- The extended part of the capsule layer inside the lobes is known as trabeculae which divides the lobes in to lobules.
- The lobule consists of outer dark and inner light region.
The dark region is known as cortex and it is composed by tightly packed lymphocytes, epithelial cells and macrophages.
In the cortex the migrated pre t cells from the red bone marrow get mature here.
The inner lighter region medulla consists of epithelial cells and more widely scattered (dotted, spotted) lymphocytes.

IMPORTANT QUESTIONS:

2M QUESTIONS:

1. Define blood.
2. Classify blood groups.
3. What is haemoglobin.
4. Define Artery and Vein.
5. Define: 1. blood Pressure 2. Hematopoiesis 3. Erythropoiesis 4. Anaemia.
6. Explain blood transfusion.
7. Explain reticulo-Endothelial System.
8. Define blood coagulation and enlist its pathways.
9. What is lymph.

5M QUESTIONS:

- 1) Write about coagulation of blood.
- 2) Explain the process of haemoglobin formation in brief.
- 3) Write about composition and functions of blood.
- 4) Write a note on anemia with its types.
- 5) Write an explanatory note on lymphatic system.
- 6) Discuss about ABO blood group system.

10M QUESTIONS:

- 1) Write about coagulation of blood.
- 2) Write about composition and functions of blood.
- 3) Write an explanatory note on lymphatic system.
- 4) Discuss about ABO blood group system.