Name : Fasle Subhan

I.D : 13795

Subject : Physiology II

Programme : Bs Dental Technology

Q NO1 :-

Ans :- ABO Blood Group System :-

The ABO blood group System is used to donate the presence of one, both, or neither of the A and B antigens on erythrocytes. In human blood transfusion it is the most important of the 38 different blood type (or group) classification systems currently recognized. A mismatch (very rare in modern medicine) in this, or any other serotype, can cause a potentially fatal

P - T - O

adverse reaction after a transfusion, or an unwanted immune response to an organ transplant. The associated anti-A and anti-B antibodies are usually IgM antibodies, produced in the first year of life by sensitization to environmental substances such as food, bacteria, and viruses.

Importance of ABO :-

Almost all normal healthy individual above 3-6 months of age have "naturally occuring Abs" to the ABO Ags that they lack. Abs termed naturally occuring because thought to arise without antigenic stimulation.

Q.NO 2 :-

Ans :- AB positive blood group type is known as the "universal recipient" because AB positive patient can recieve red blood cells from all blood types.

Q.NO3

Ans :- Cardiovascular System :-

Introduction :-

-> The Cardiovascular System is transport System of body.

-> It Comprises blood, heart, and blood vessels.

-> The System Supplies nutrients to and remove waste

P - T - O

Form various tissue of body.

→ The covering media is liquid in form of blood which flow in close tubular system.

Function of Cardiovascular System:-

→ Transport nutrients, hormones

→ Remove waste product

→ Gaseous exchange

→ Immunity

→ Blood vessel, Transport blood.

. Carries oxygen and Carbon dioxide.

. Also carries nutrients and wastes.

→ Heart pumps bloods through blood vessels.

Component of Cardiovascular System :-

1) Blood
2) Heart
3) Blood vessels.

(1) Blood :-

→ The blood : blood cells & plasma

→ blood cells.

1) Erythrocytes - Red blood cells
2) leucocytes
3) Thrombocytes.

- plasma is fluid portion

P - 1 - 0

(2) HEART :-

→ Heart is a four chamber, hollow Muscular organ.

Location :

→ Superior Surface of diaphragm

- left of the midline

→ Anterior to vertebral Column, posterior to Sternum.

(3) Blood vessels :-

→ A Closed network of tubes.

. There include

→ Arteries

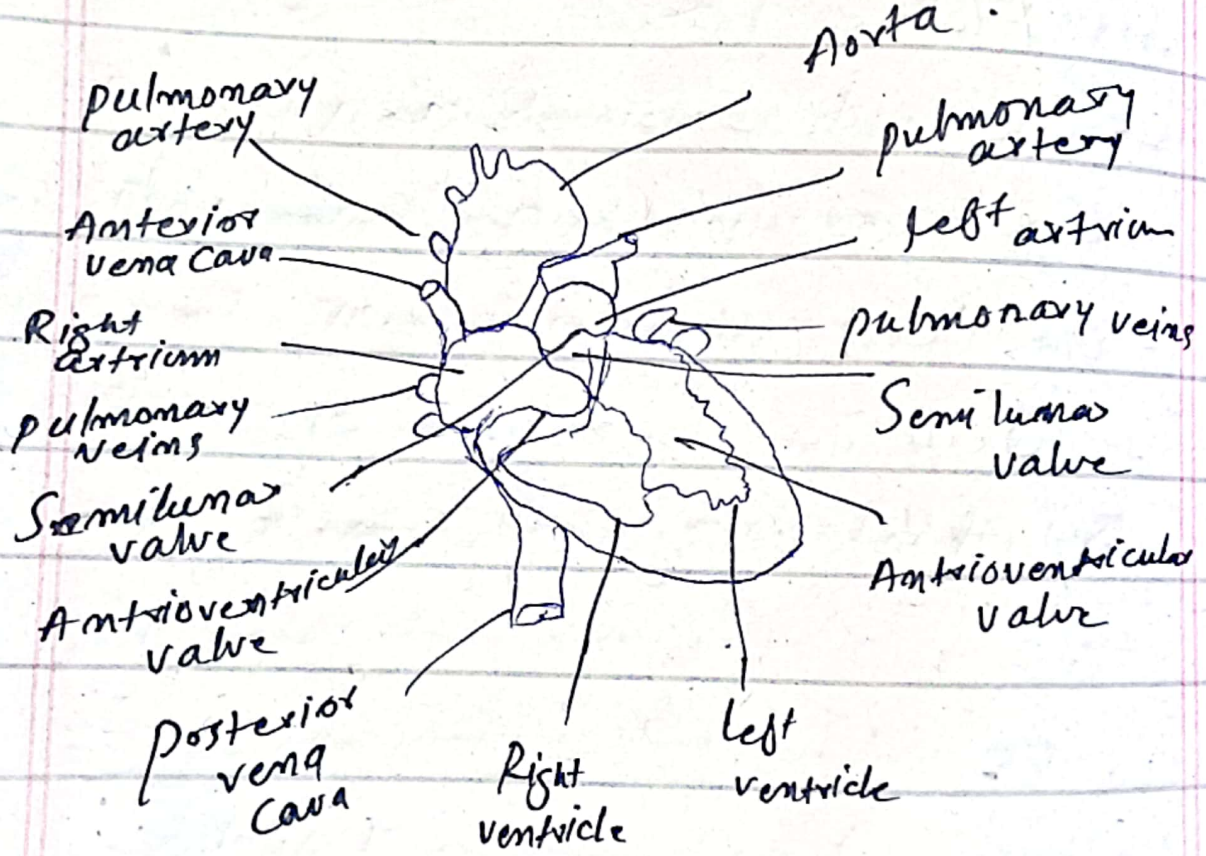
→ Capillaries

→ vein.

- Arteries (distributing channel).
→ Thick wall tubes
→ Elastic fibers
→ Circular Smooth muscles
- Cappillaries (distributing channel).
- one cell thick
- Serve the respiratory System
vein (distributing channel.).

P — T — O

Diagram of cardiovascular System :-



Q No 4:-

Ans:- Difference between Active And passive Immunity:-

Active Immunity:- Active immunity is developed due to the production of antibodies in one's own body.

→ produced inside of the body

→ Direction infection

→ Vaccination

→ over time (Typically Several weeks)

→ long term to life long.

P — T O

Passive Immunity :-

→ Passive Immunity is developed by antibodies that are produced outside and then introduced into the body.

→ Introduced from outside of the body

→ Breast milk

→ Injection

→ mother to baby through the placenta.

→ Immediatly

- Short - term.

- No -

Q No 5 :-

Ans :- Lymphatic System :-

Lymphatic System function :-

→ Transport Clean fluids back to the blood.

→ Drain excess fluid from tissue.

→ Remove "debris" from cell of body

→ Transport fats from digestive System.

Introduction :-

→ All body tissue are bathed in tissue fluid, Consisting of the diffusible Constituent of blood & waste material

P - T - 6

from cell. Some time fluid returnes to capillaries at their venous end the remainder defuses through the more permeable wall of the lymp capillaries, forming lymp.

→ Cardiovascular & lymphatic System both are supply fluid flow into the body. but both are different type of fluid.

→ Lymphatic System does not having closed circuit & central pump like heart.

It Consist of :-

→ Lymph

→ Lymph vessels

→ Lymph node

→ Lymp organ e.g. Spleen, Thymus.

→ Diffuse Lymphoid tissue e.g. Tonsil.