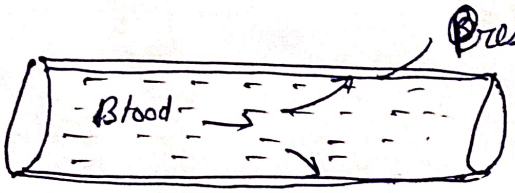
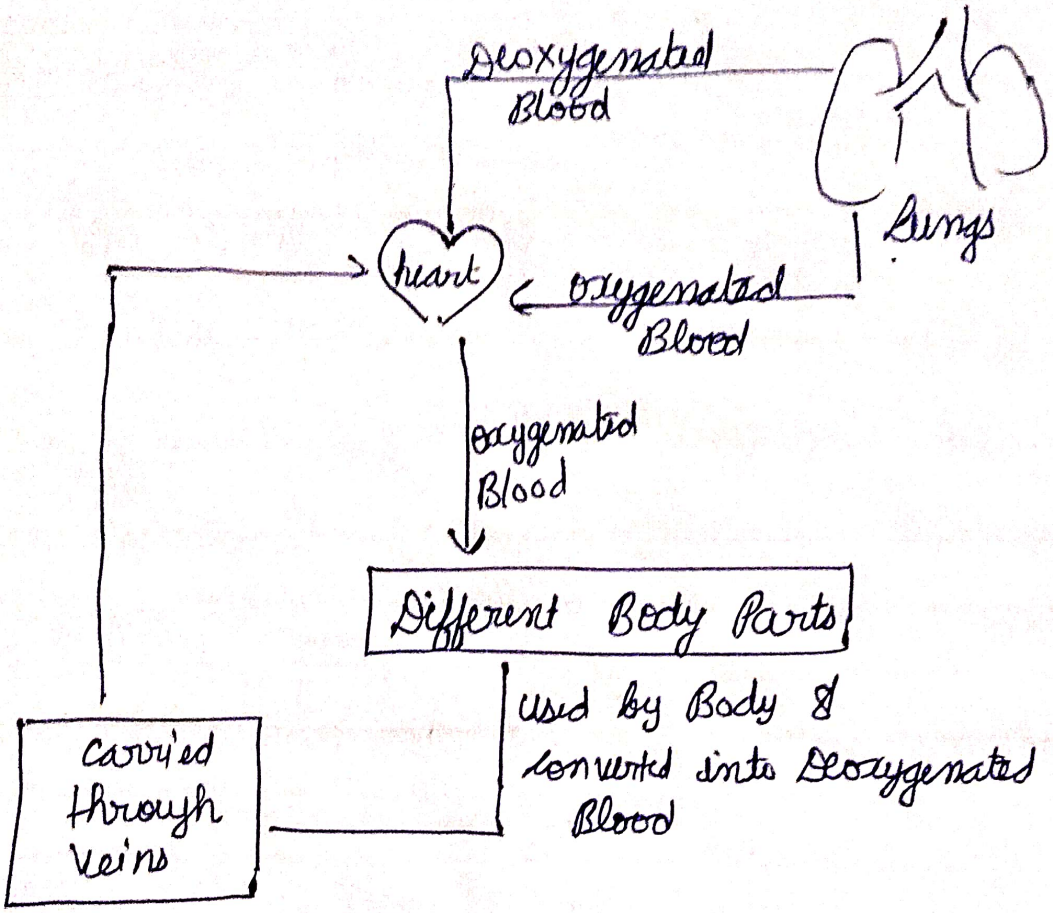
HEMODYNAMICS

The Study of flow Rate of Blood in our Body is called hemodynamics.

* Blood flow through different Veins, arteries and Capillaries to the different Parts of Body.
* Blood Exerts some pressure on walls of the artery and Veins known as Blood Pressure.



* Deoxygenated Blood from Body do ♡ carried by Veins and oxygenated blood from ♡ to body is carried by arteries.
* Deoxygenated blood is purified through lungs at Process of inhalation and blood get oxygenated and Purified.

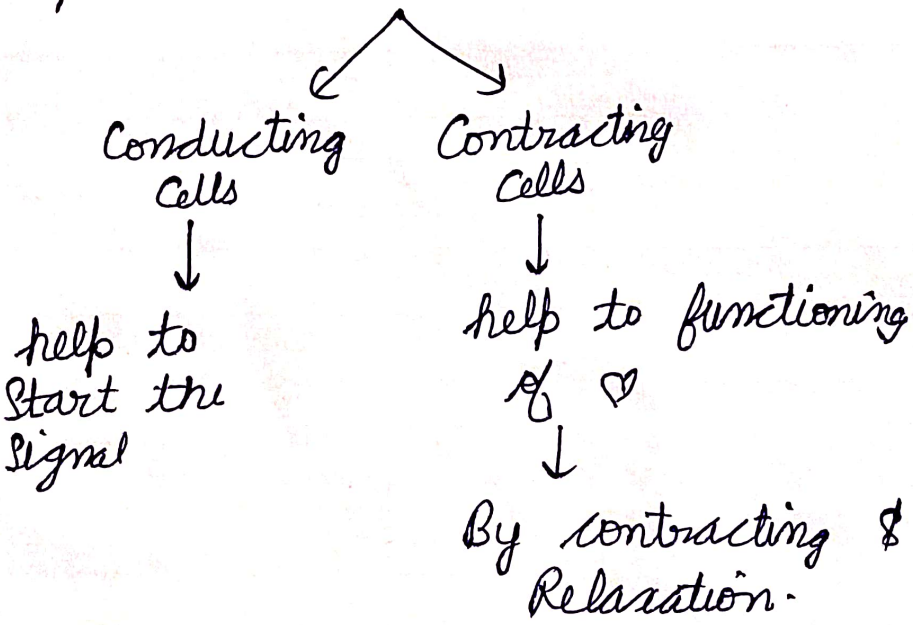


- ♡ carry pumping of Blood to whole body by contracting and Relaxation process
- Different Nodes (in ♡) like AN Node, SA Node, Purkinje fibre and bundle of his helps in contractility of ♡.
- ♡ follow Automaticity (works automatically)

#ELECTROPHYSIOLOGY

The Process of functioning of ♡ through electrical Action Potential in fraction of seconds.

* Cells present in ♡ help to generate action potential.



⇒ Conduction Cells Consists :-

- AV Node (Atrioventricular)
- SA Node
- Bundle of his

⇒ Contraction Cells :- Purkinje fibre

Conduction of Conducting Cells :-

In cells Normal Potential is -60mv (Polarisation)

↓

When Impulse generated at -55 mv

↓

Na^{++} Enters & C^{++} also Enters (Rapid depolarization) (from -60 to +10)

↓

K^+ channel opens and move outward to cells

↓

Ca^{++} Channels closed ← +10 → 0mv (Plateau Phase)

↓

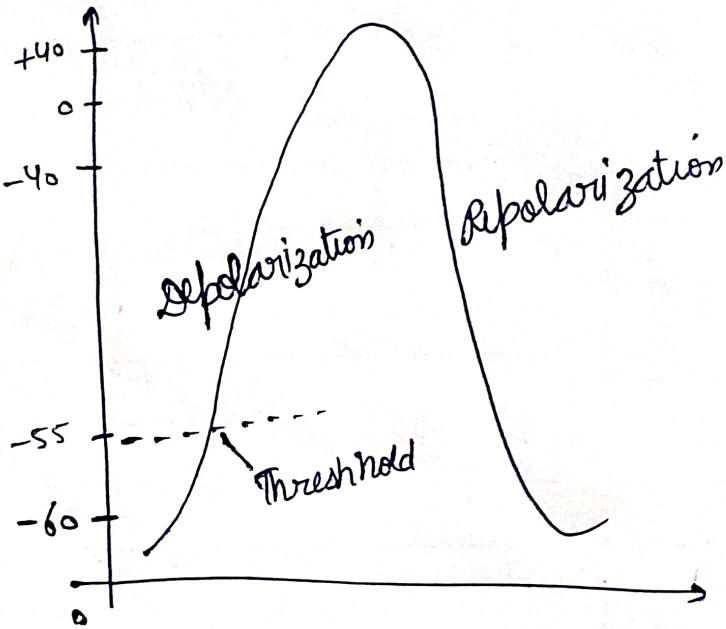
Repolarization.

↓

0 mv

↓

Normally 70-90mv Potential generated (Polarization)



Or