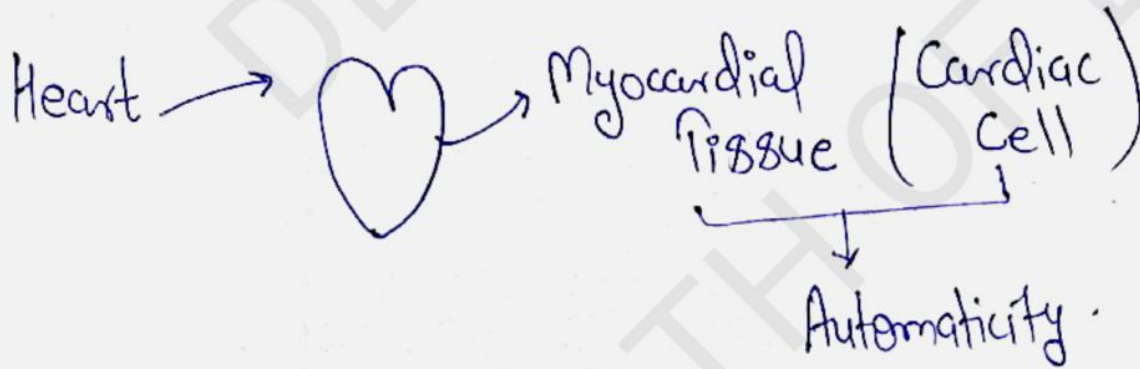


# Conduction System of Heart.

#

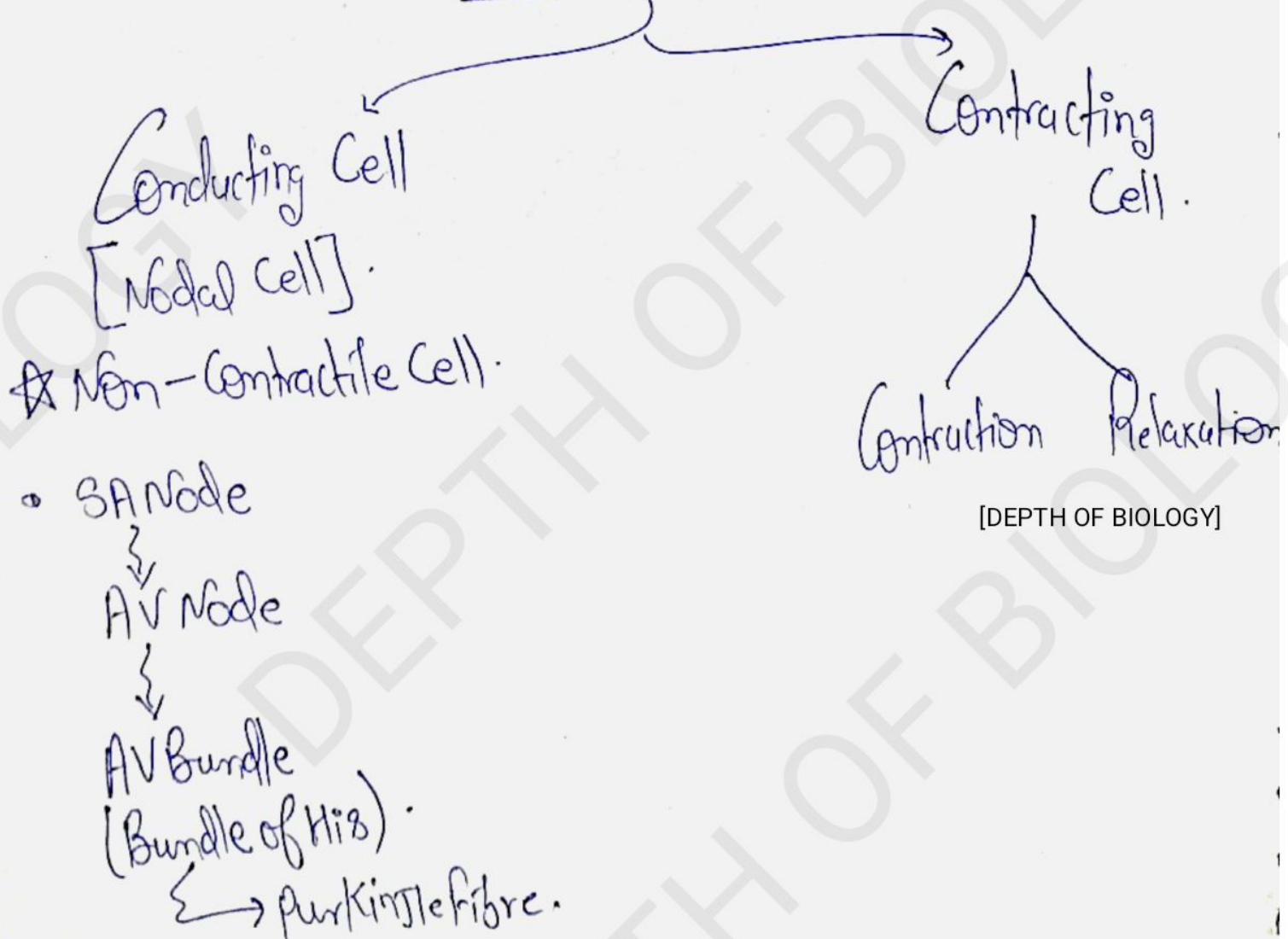
[DEPTH OF BIOLOGY]

## Electrophysiology of Heart.



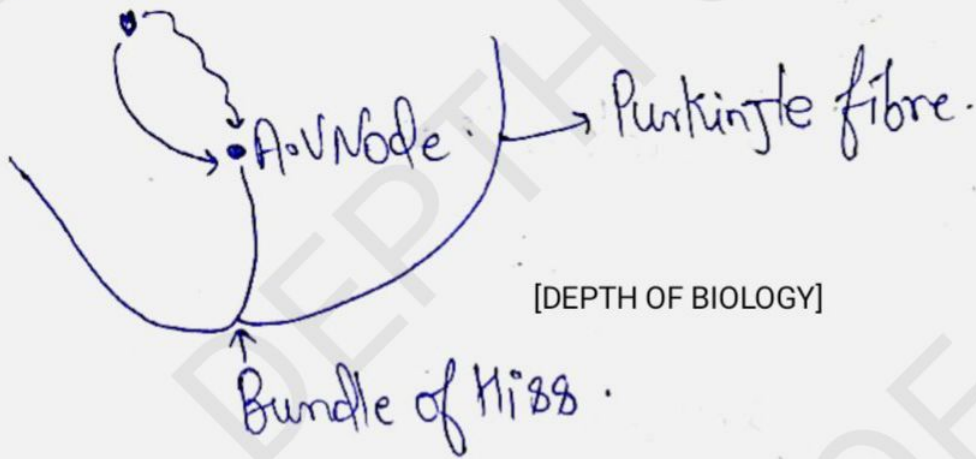
Ability of Heart to Generate Action Potential by Itself.

## Myocardium Tissue.



[DEPTH OF BIOLOGY]

SANode.



# S<sub>o</sub>A Node → Sino-Atrial Node.

↳ Pacemaker of Heart.

↳ Generate Action Potential (Electric Impulse).

↳ Located in the Wall of Right Atrium.

# A<sub>o</sub>V Node → Atrioventricular Node.

↳ 2<sup>nd</sup> Pacemaker. [DEPTH OF BIOLOGY]

# Bundle of His (A<sub>o</sub>V Bundle) →

— Located b/w the Atria & Ventricular.

— Electric Impulse travels from A<sub>o</sub>V Node to bundle branches.

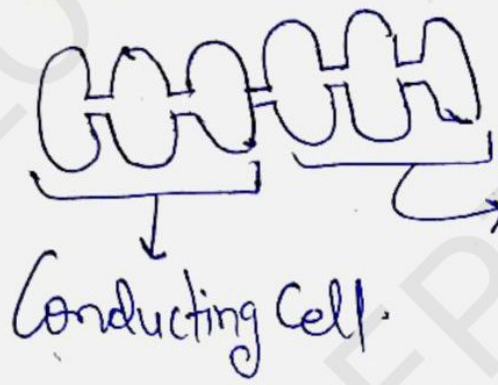
# Purkinje fibres → Located at the end of A<sub>o</sub>V Bundles.

↳ Responsible for Contraction of Ventricles.

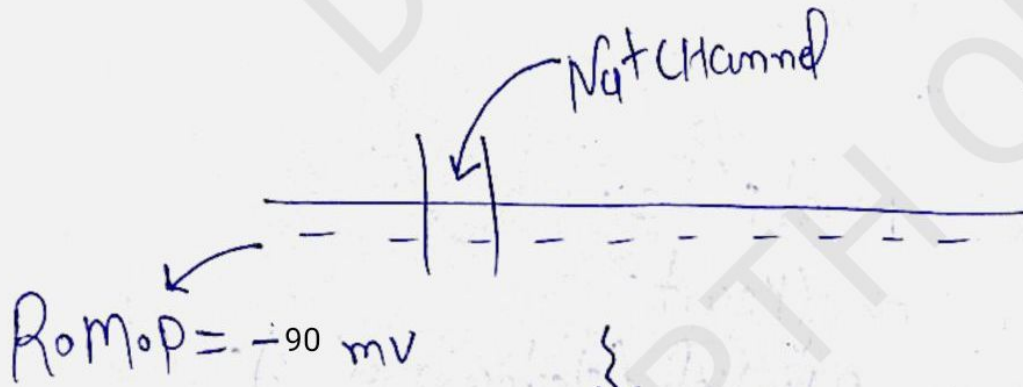
[DEPTH OF BIOLOGY]







[DEPTH OF BIOLOGY]

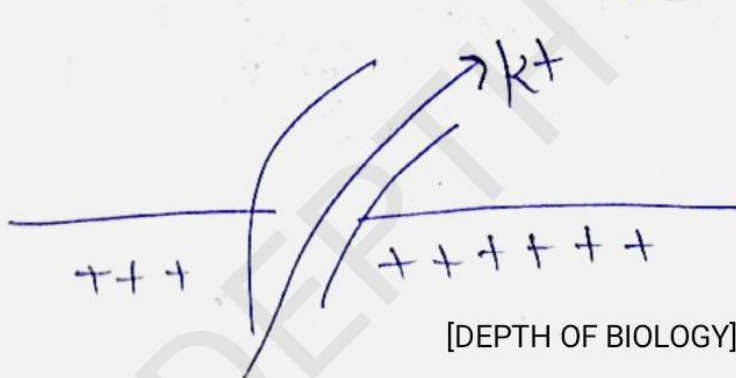


Slowly Na<sup>+</sup> Influx.

(-60 mV → -55 mV)

Na<sup>+</sup> channel opening

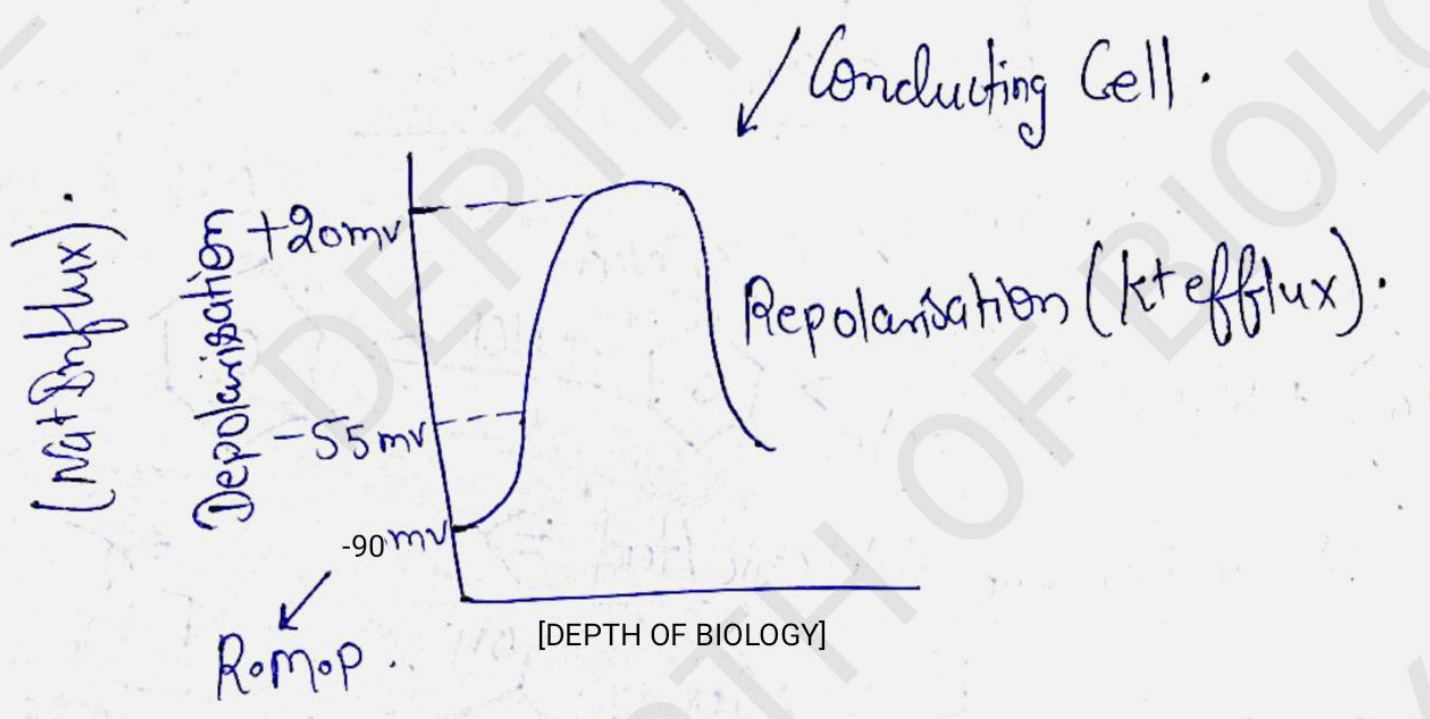
0 → +20.



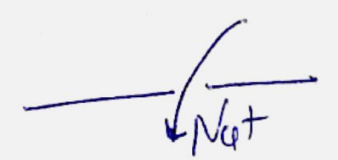
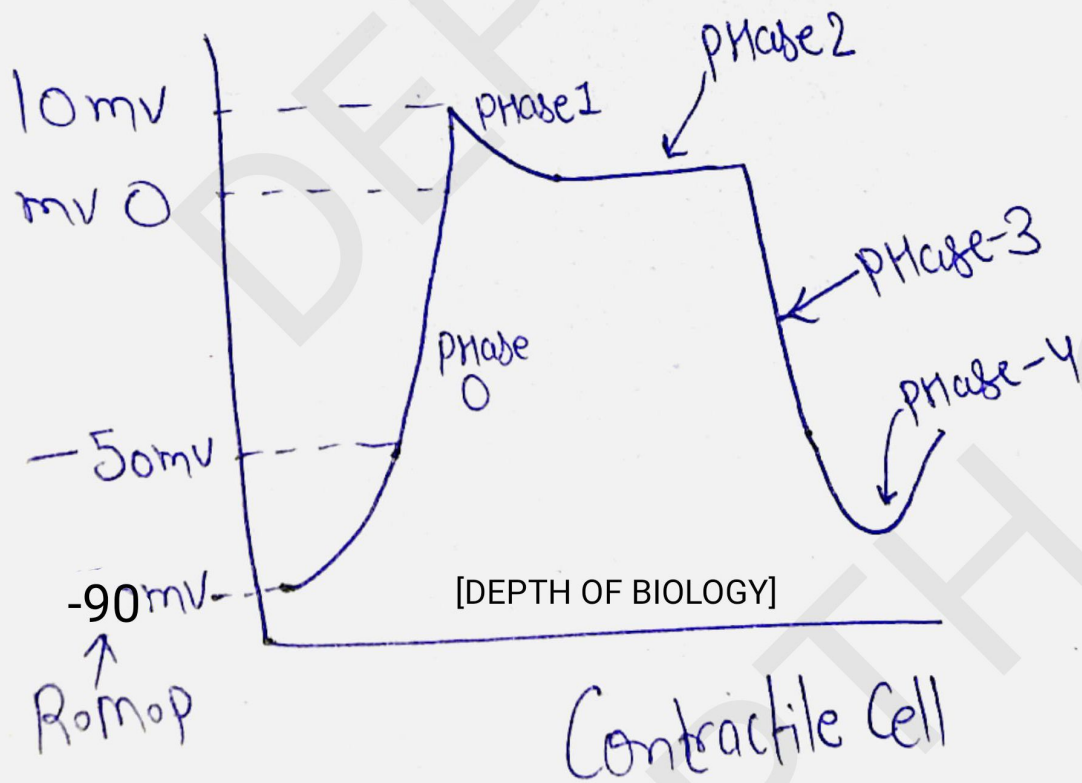
efflux of K<sup>+</sup>

(Repolarisation).

[DEPTH OF BIOLOGY]



# Contraction



① PHASE → 0  
 ↓ opening of  $\text{Na}^+$   
 Depolarisation rapid.

② PHASE -1  
 ↓  
 Repolarisation

③ PHASE -2  
 →  $\text{K}^+$       →  $\text{Ca}^{2+}$   
 (plateau phase)

④ PHASE -3  
 ↓  
 Repolarisation ( $\text{K}^+$  outflux)

⑤ Rest the same  
 PHASE -4