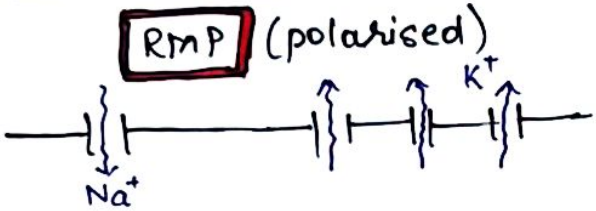
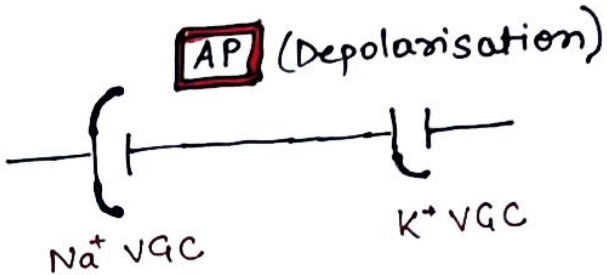
ACTION POTENTIAL

CHANNELS :-

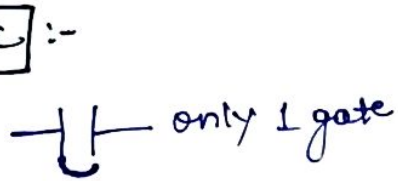


Leaky channels
↳ Always open



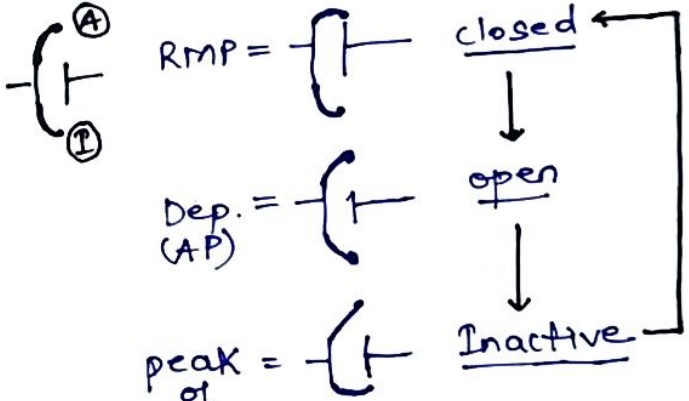
VGC
↳ open when MP changes

K^+ VGC :-

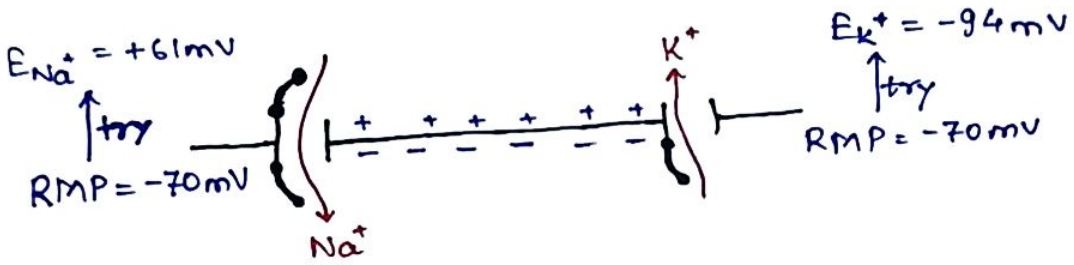
close :-  only 1 gate

open :- 

Na^+ VGC



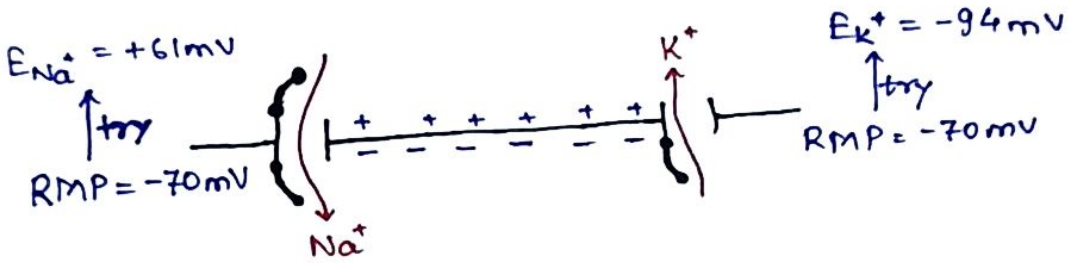
Tendency of VGC :- They try to make memb. potential close to their equilibrium potential



ACTION POTENTIAL :-

→ The electrical response of the membrane to a threshold or greater than threshold stimulus.

Tendency of VGC :- They try to make memb. potential close to their equilibrium potential



ACTION POTENTIAL :-

→ The electrical response of the membrane to a threshold or greater than threshold stimulus.

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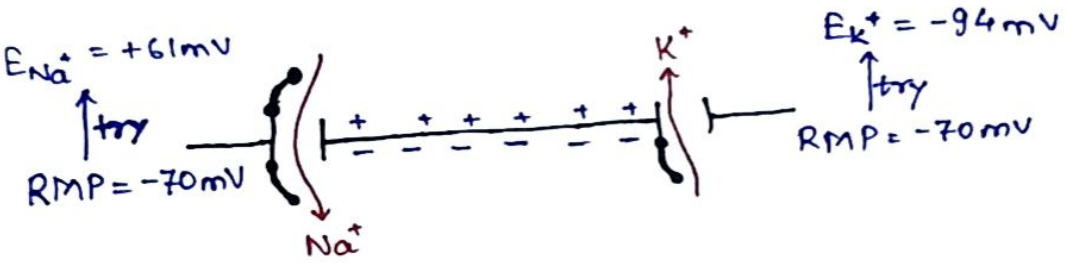
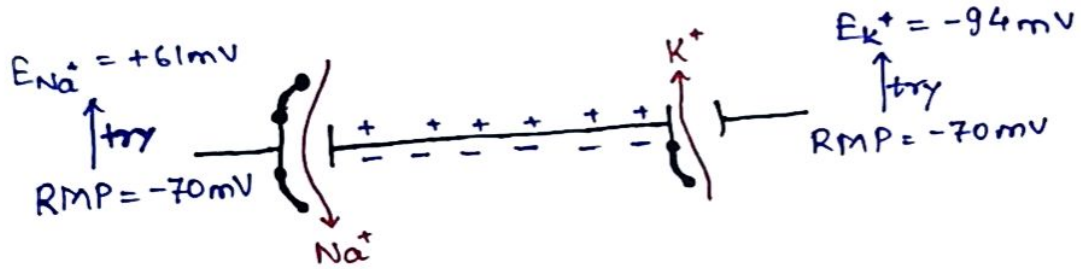


ACTION POTENTIAL :-

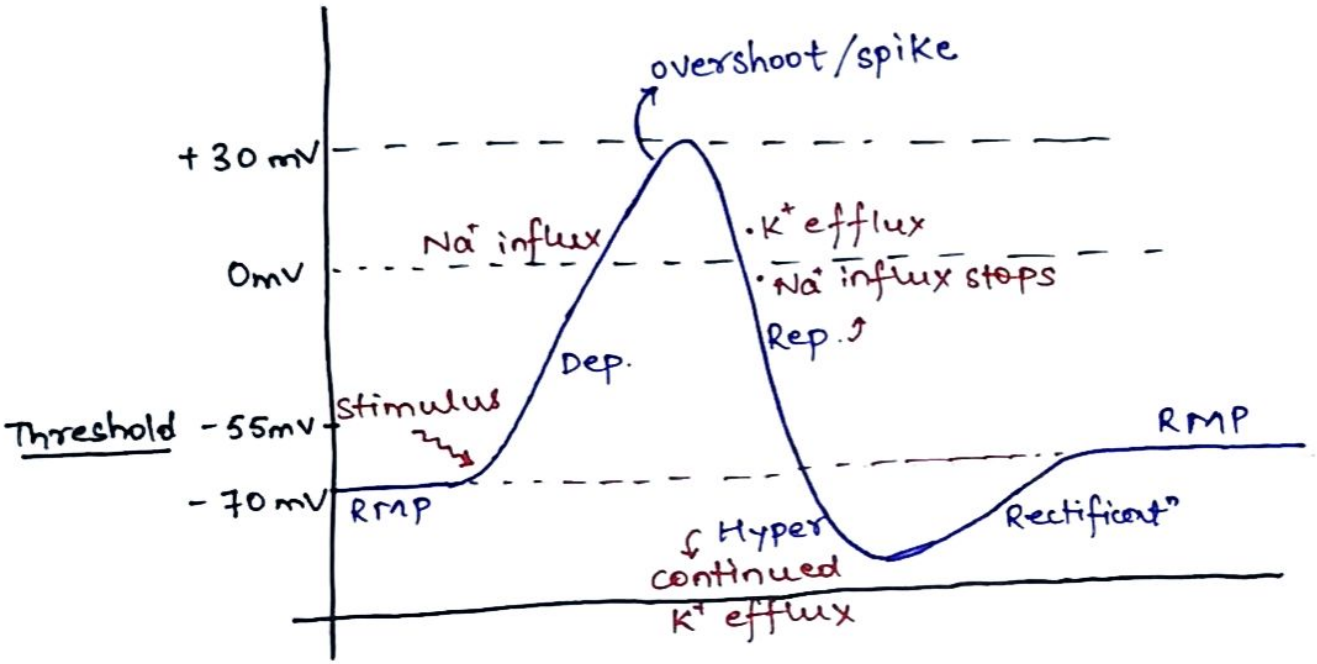
→ The electrical response of the membrane to a threshold or greater than threshold stimulus.

Tendency of VGC :- They try to make memb. potential close to their equilibrium potential

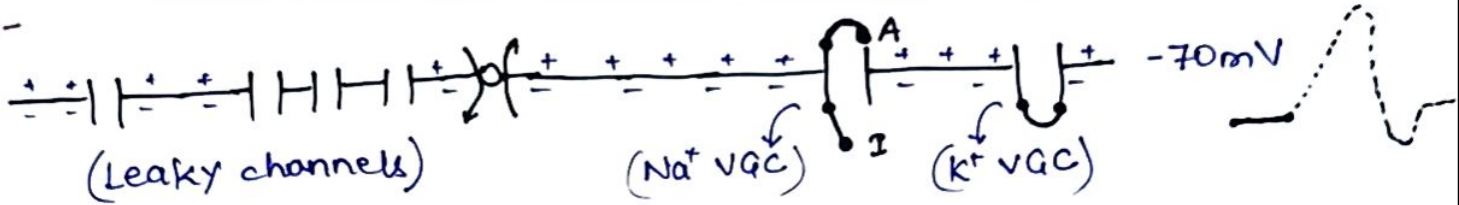


ACTION POTENTIAL :-

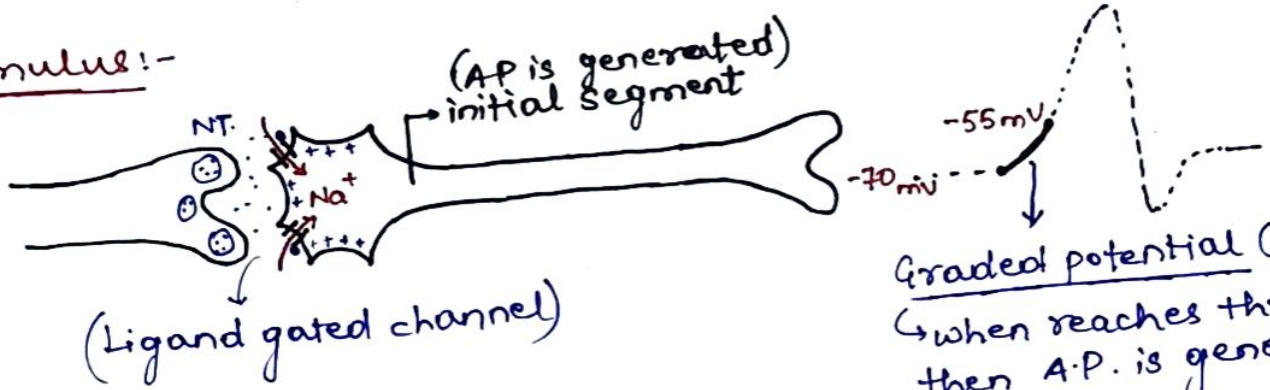
→ The electrical response of the membrane to a threshold or greater than threshold stimulus.


overshoot/spike
+30 mV
0mV
Na⁺ influx
K⁺ efflux
Na⁺ influx stops
Rep.
Dep.
Threshold
-55mv
Stimulus
RMP
-70 mV
RMP
Hyper
continued
K⁺ efflux
Rectificat"

RMP :-



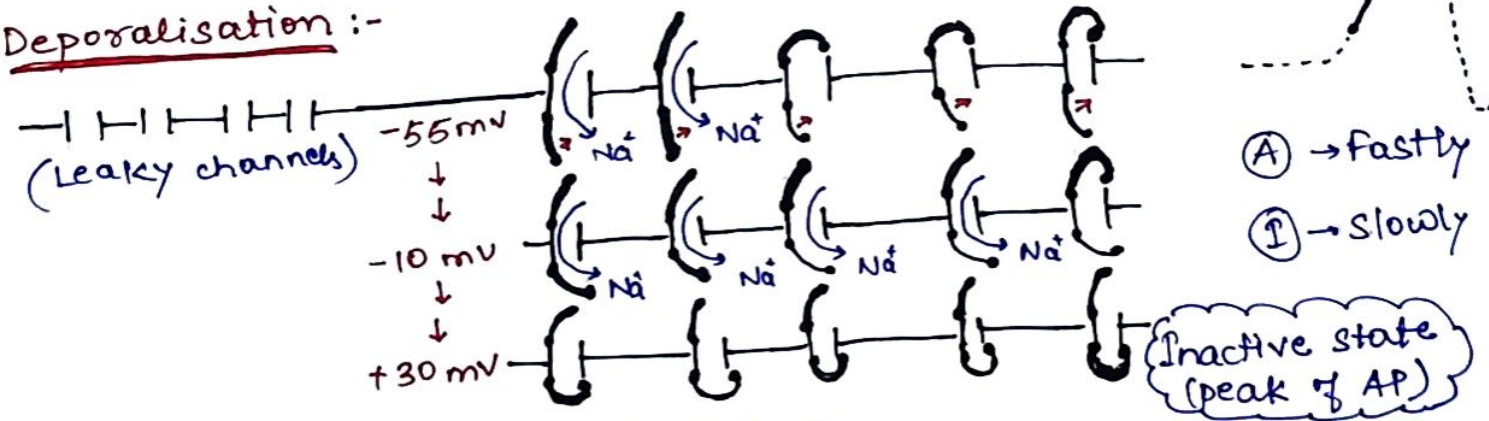
Stimulus :-



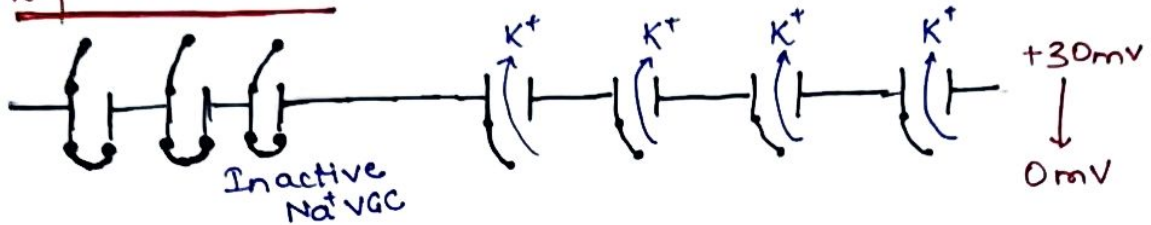
Graded potential (Local potential)
↳ when reaches threshold then A.P. is generated.

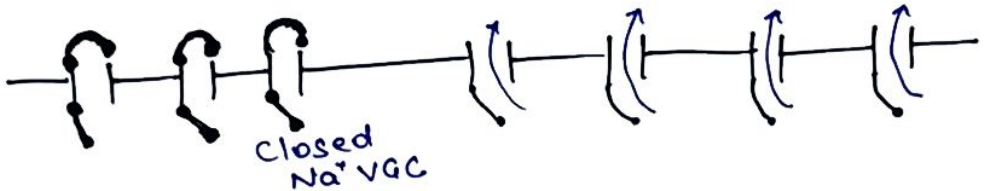
∴ A.P. follows "All or None Law"

Deporalisation :-



Repolarisation :-





Hyperpolarisation :-