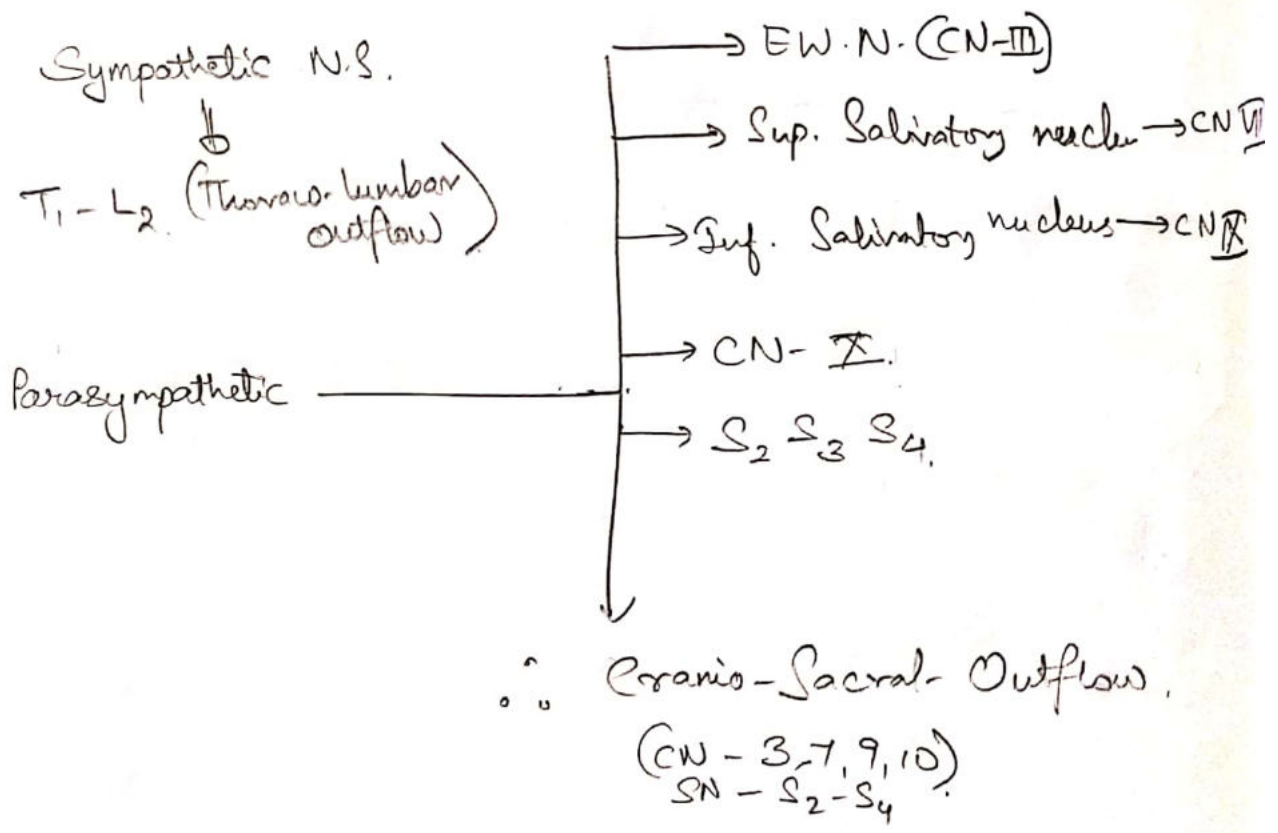
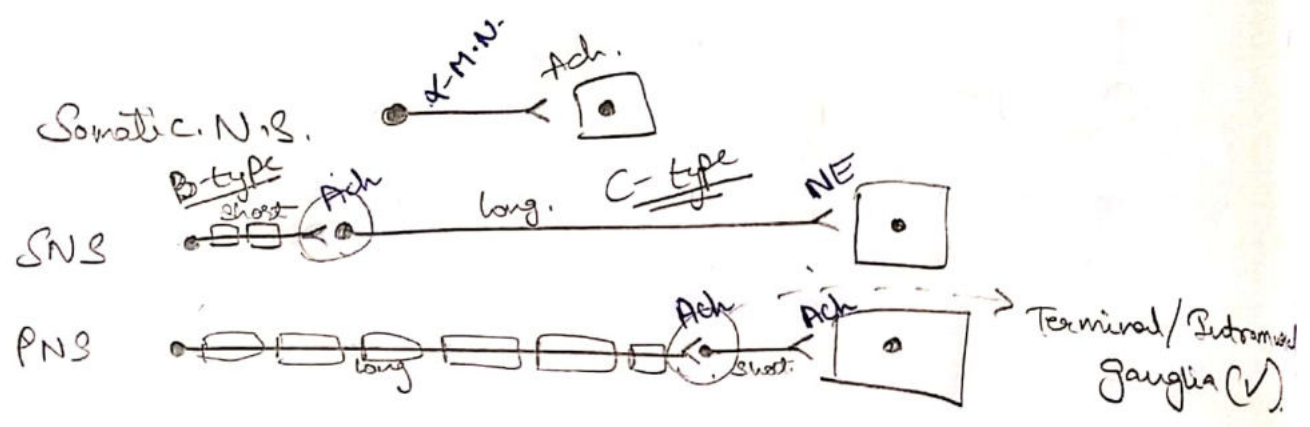
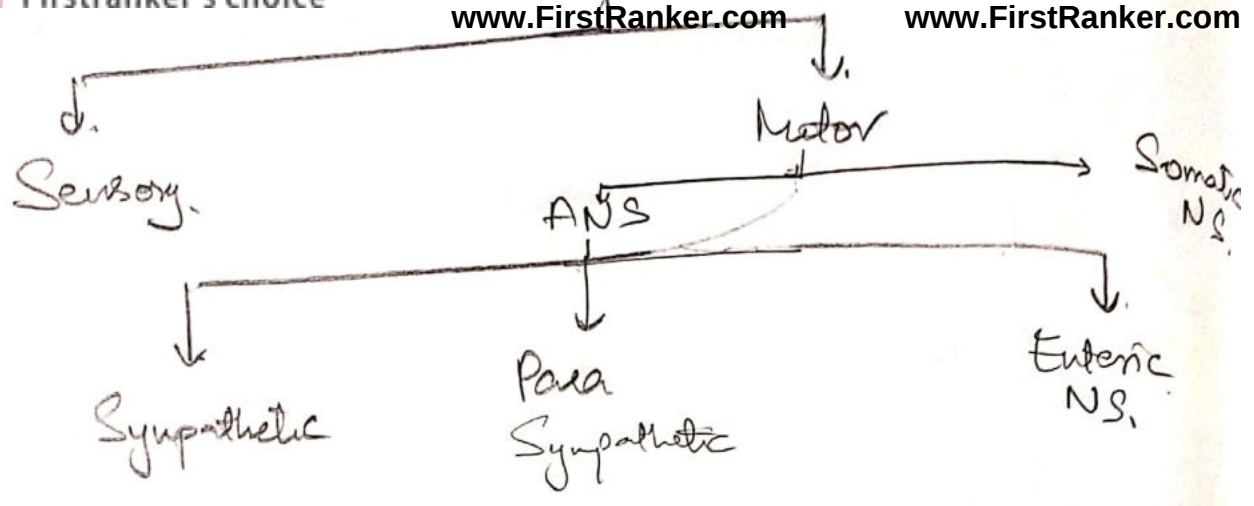




at T₁-T₂ lateral horn

↓
Ventral root
↓
Central trunk
↓
Ventral Ramus

↓
White Rami - Communicans

↓
Paravertebral / Chain Ganglion

↓
Synapses with Post-ganglionic Sy. Neuron

↓
Grey ~~Rami~~ Rami Communicans

↓
Pilo-motor fibres
↓
Arrector Pili

↓
Vaso motor fibres
↓
Blood vessels

↓
Sudo motor fibres
↓
Sweet glands
↓
Post gash neuron release Ach (exception)

"Splanic Nerve" → Abd visc

↑
Synapses here & emerges

↑
Pre-vertebral
Pre-aortic ganglion
Collateral
Sub-diaphragm

↑
Via Alternate pathway

↑
goes up/downwards
&

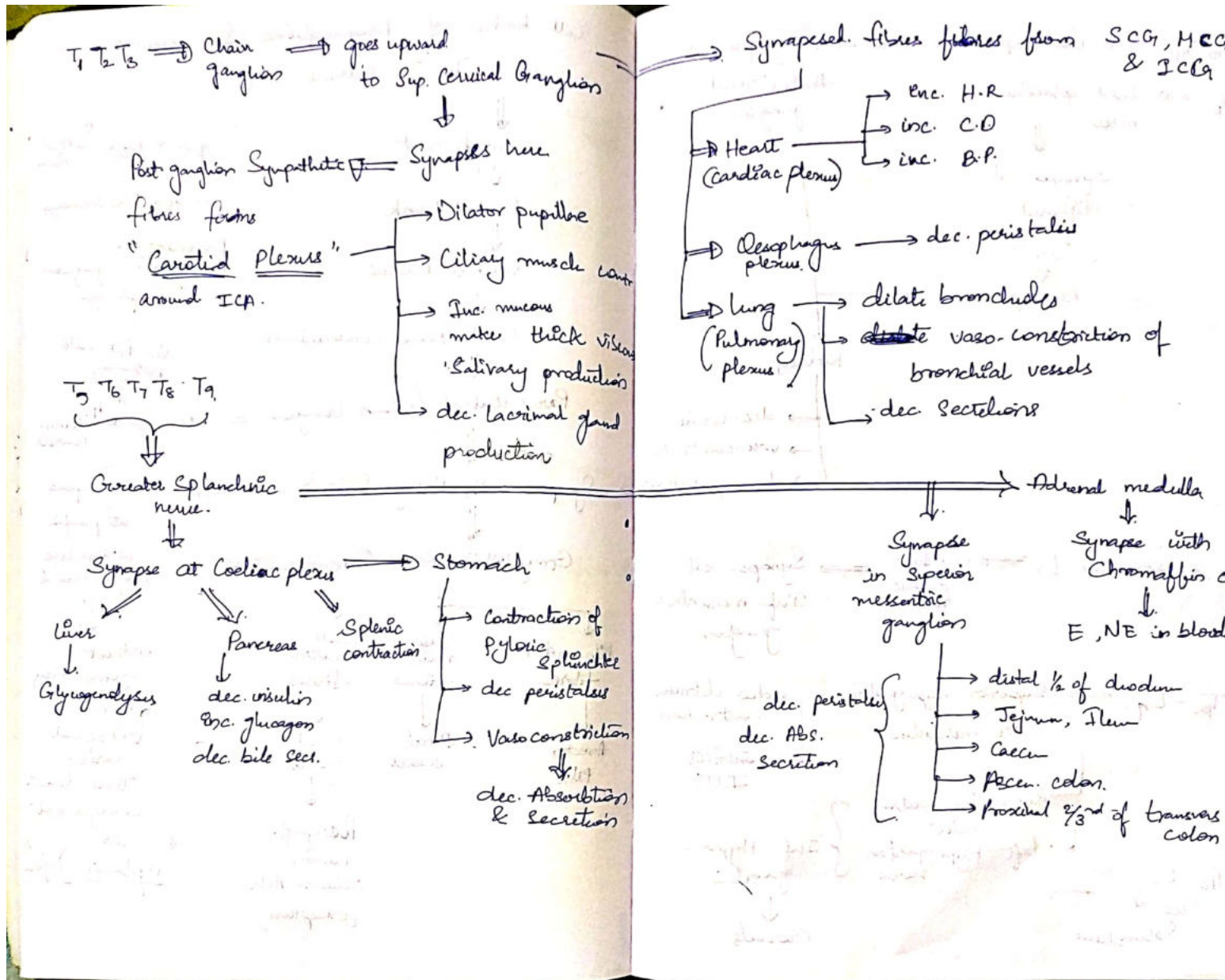
Synapses at ganglia

which lies above/below it

↓
without going through Grey Rami C. or Spinal nerve.

These directly emerges out

as "Splanic Nerve"



T₁₂ ⇒ Least Splanchnic nerve.

↓
Synapse at
diffused
ganglions

↓
Renal plexus.

Aortic-renal
ganglion.

Kidney

- dec. urine
- vaso-constriction
- dec. peristalsis

L₁, L₂ Sometime L₃

⇒ Lumbar
Splanic
nerve

⇒ Synapse at
Inf. mesenteric
ganglion

T₁₂ - L₄

Superior hypogastric.
Inter mesenteric

- dec detrusor
contraction
- contracts
IUS

→ Right Hypogastric
nerve

→ Left Hypogastric
nerve

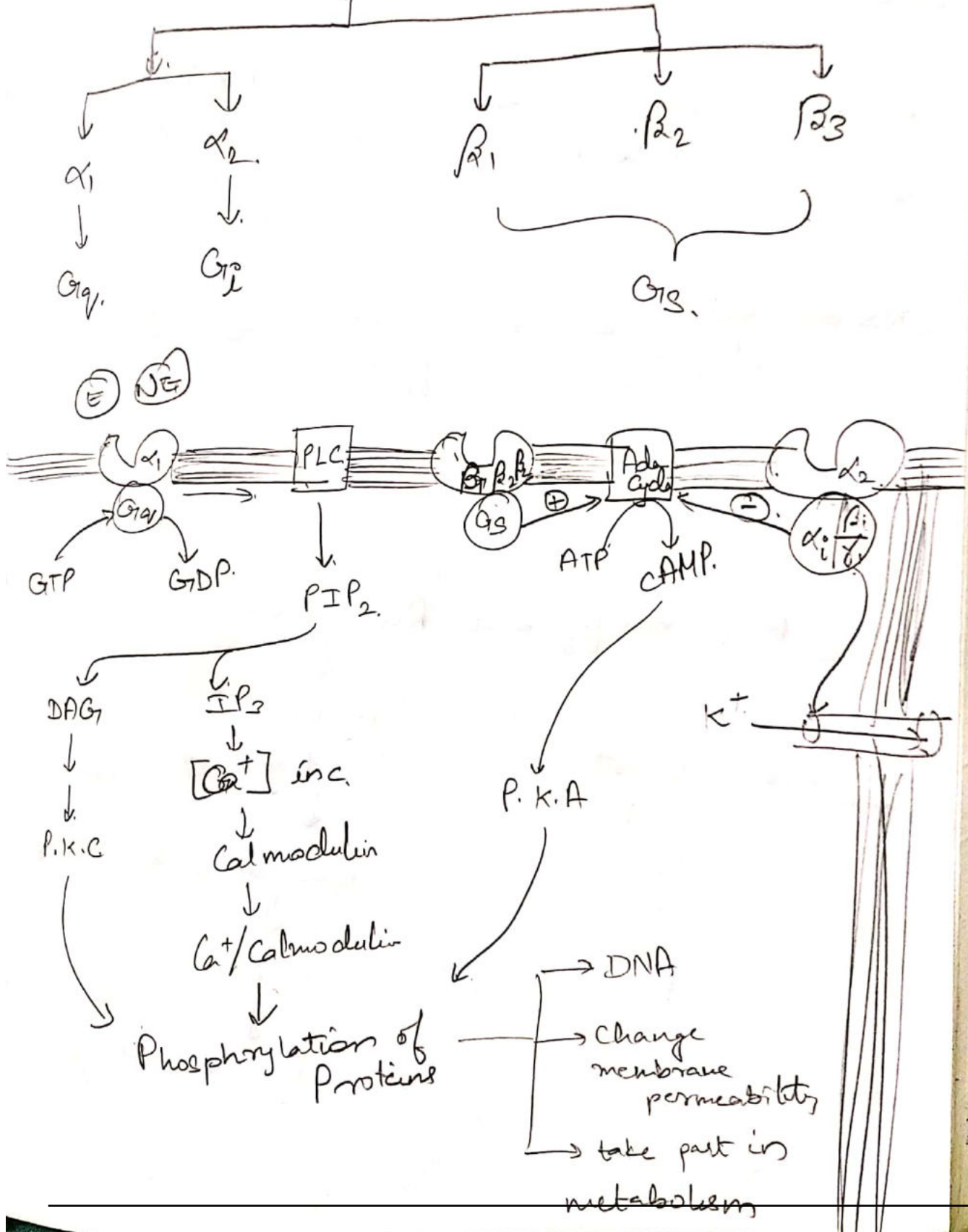
} Inf. Hypo-
gastric

↓
Genitals

T₁₀ - L₂
Sacral
Splanchnic

Cerebral cortex
Hypothalamus
limbic cortex

Adrenergic Receptor



Blood flow

Skin } α_1 -A.R. $\Rightarrow$ Vaso-constriction

Kidneys } α_1 -A.R. $\Rightarrow$ Vaso-constriction

G.I.T. } α_1 -A.R. $\Rightarrow$ Vaso-constriction

Skeletal Muscle $\Rightarrow \beta_2$ -A.R. $\Rightarrow$ Vaso-dilation

Heart $\Rightarrow$ Both α_1 & β_2 $\Rightarrow$ doesn't have significant effect $\Rightarrow$ Autoregulation (metabolic control)

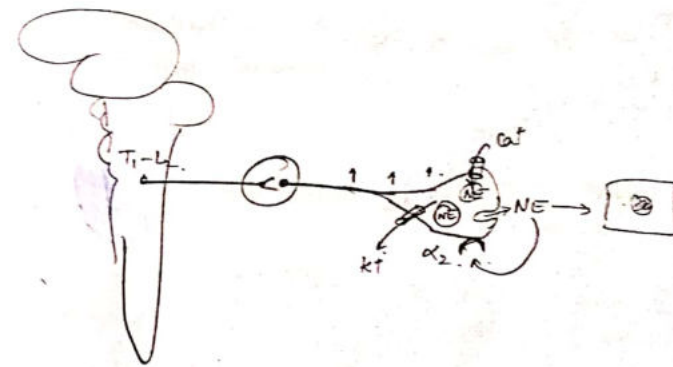
CNS $\Rightarrow$ Both α_1 & β_2 $\Rightarrow$ No significant effect $\Rightarrow$ Autoregulation $\Downarrow$ Myogenic Mechanism

Ciliary Muscle $\Rightarrow \beta_2$ $\Rightarrow$ Relaxation $\Downarrow$ tightens lens ligament. $\Downarrow$ lens becomes flat $\Downarrow$ f inc. $\Downarrow$ Far Vision

Dilator Pupillae $\Rightarrow \alpha_1$ $\Rightarrow$ contraction $\Downarrow$ dilate pupil $\Downarrow$ Far vision

Salivary Gland $\Rightarrow \beta_2$ $\Rightarrow$ less H_2O & electrolyte & make it viscous

Salivary Gland blood vessel $\Rightarrow \alpha_1$ $\Rightarrow$ Vaso constriction $\Rightarrow$ less blood flow $\Rightarrow$ thick viscous saliva



Heart Muscle.
 SAN
 AVN
 Bundle of His } β_1 -A.R.

JG cells $\rightarrow$ Renin.

Ghrelin

Muscle Spindle $\Rightarrow \beta_2$ A.R $\Rightarrow$ Tremor

$\downarrow$
Stimulates Na^+/K^+ pump.

Muscularis Externa of GIT $\Rightarrow \beta_2 \Rightarrow$ dec. GI motility

Pyloric & I.A.S. $\Rightarrow \alpha_1 \Rightarrow$ inc. contraction constrict GIT.

Ureter. Urinary bladder $\Rightarrow \beta_2 \Rightarrow$ Relax.

I.V.S. $\Rightarrow \alpha_1 \Rightarrow$ constriction

Adipose tissue $\Rightarrow \beta_2 \Rightarrow$ lipolysis

I

inc. Glucagon

α -cells $\Rightarrow \alpha_2$ -A.R. $\Rightarrow$ inc. Glucagon
 β -cells $\Rightarrow \alpha_2$ -A.R. $\Rightarrow$ dec. Insulin

liver $\Rightarrow \beta_2$ -A.R. $\Rightarrow$ Glycogenolysis
Gluconeogenesis

lungs $\Rightarrow$ Bronchiole $\Rightarrow \beta_2$ -A.R.

Mast cell $\Rightarrow \beta_2$ -A.R.

$\downarrow$
dec. Histamine
 $\downarrow$
dec B.F.

Epididymis

Vas-deferens

Seminal vesicles

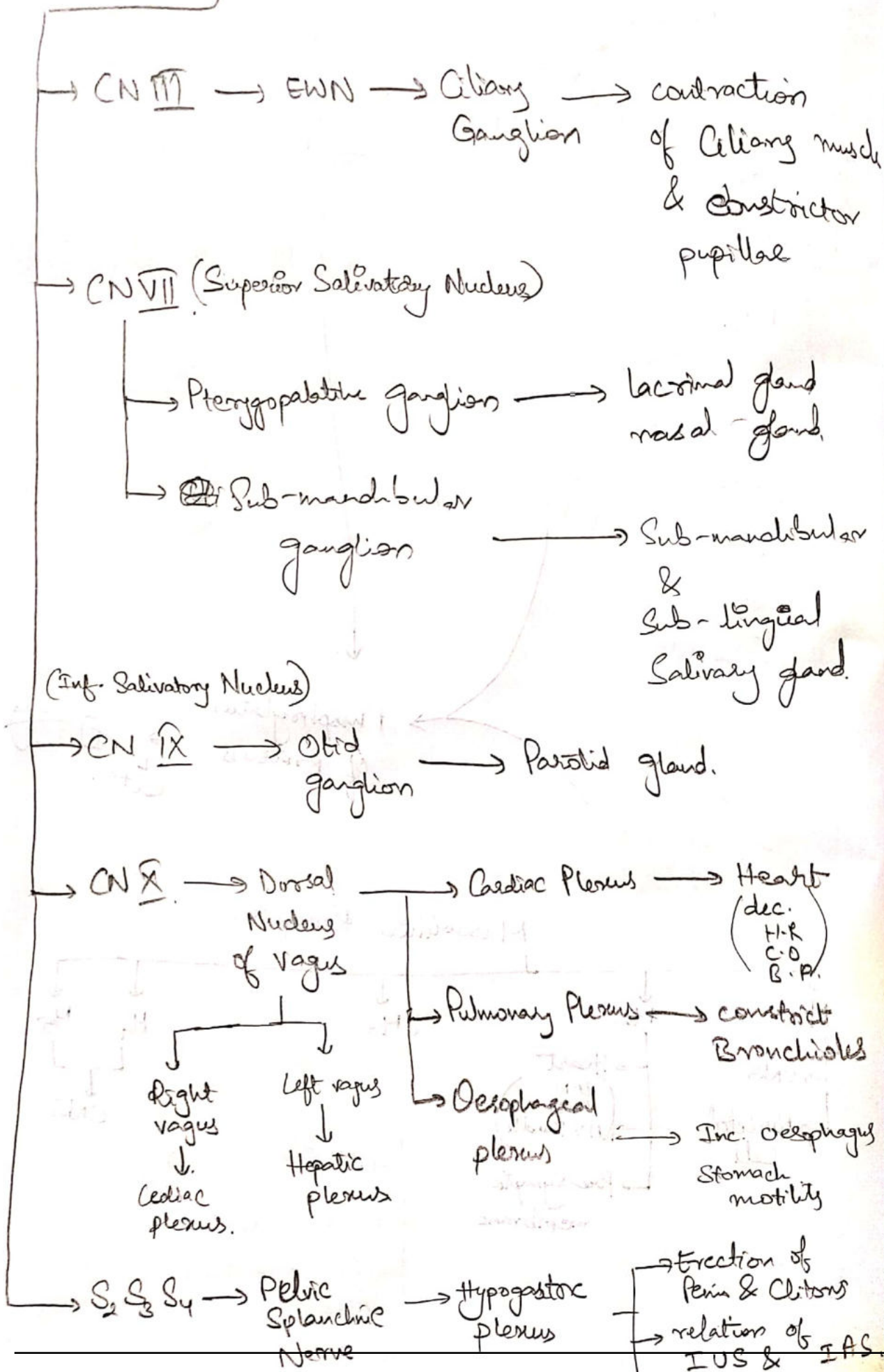
Prostate glands

α_1 -A.R. $\Rightarrow$ Emission
ejaculation

Myometrium $\Rightarrow \alpha_1$ & β_2 A.R. $\rightarrow$ To prevent pre-mature labor
tocolytic agents

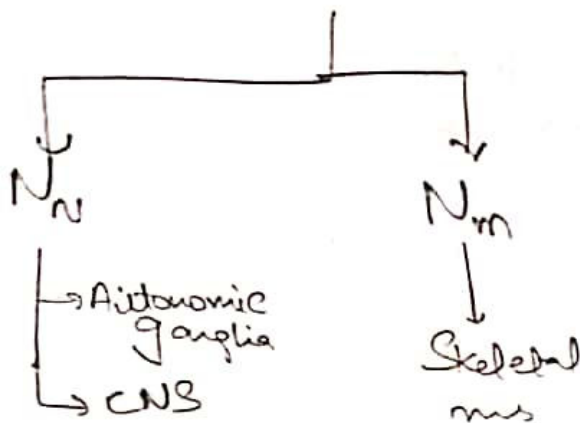
$\text{NE} \oplus \text{E} \Rightarrow \text{Platelet } \alpha_2\text{-A.R.} \Rightarrow \text{Thromboxane A}_2$
ADP
Serotonin
 $\Downarrow$
Platelet aggregation

www.FirstRanker.com



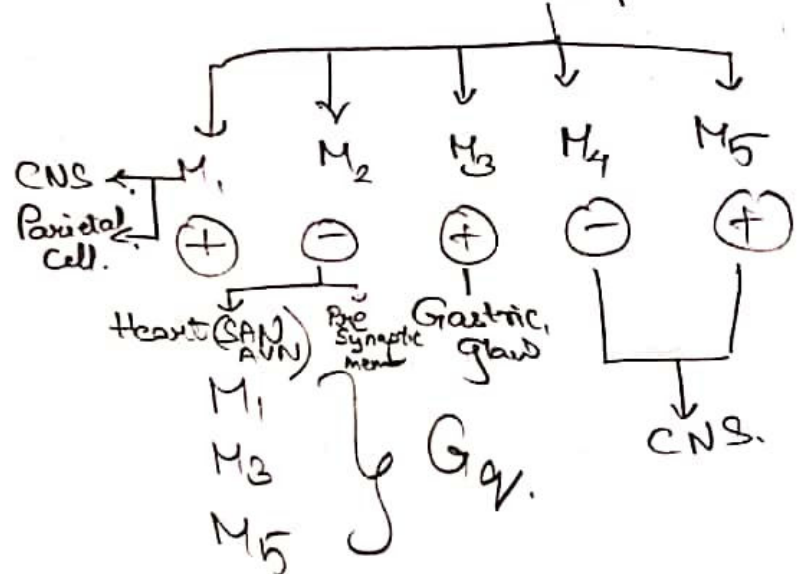
Cholinergic Receptors

Ligand Gated
ion-channels
(or)
Nicotinic Receptors

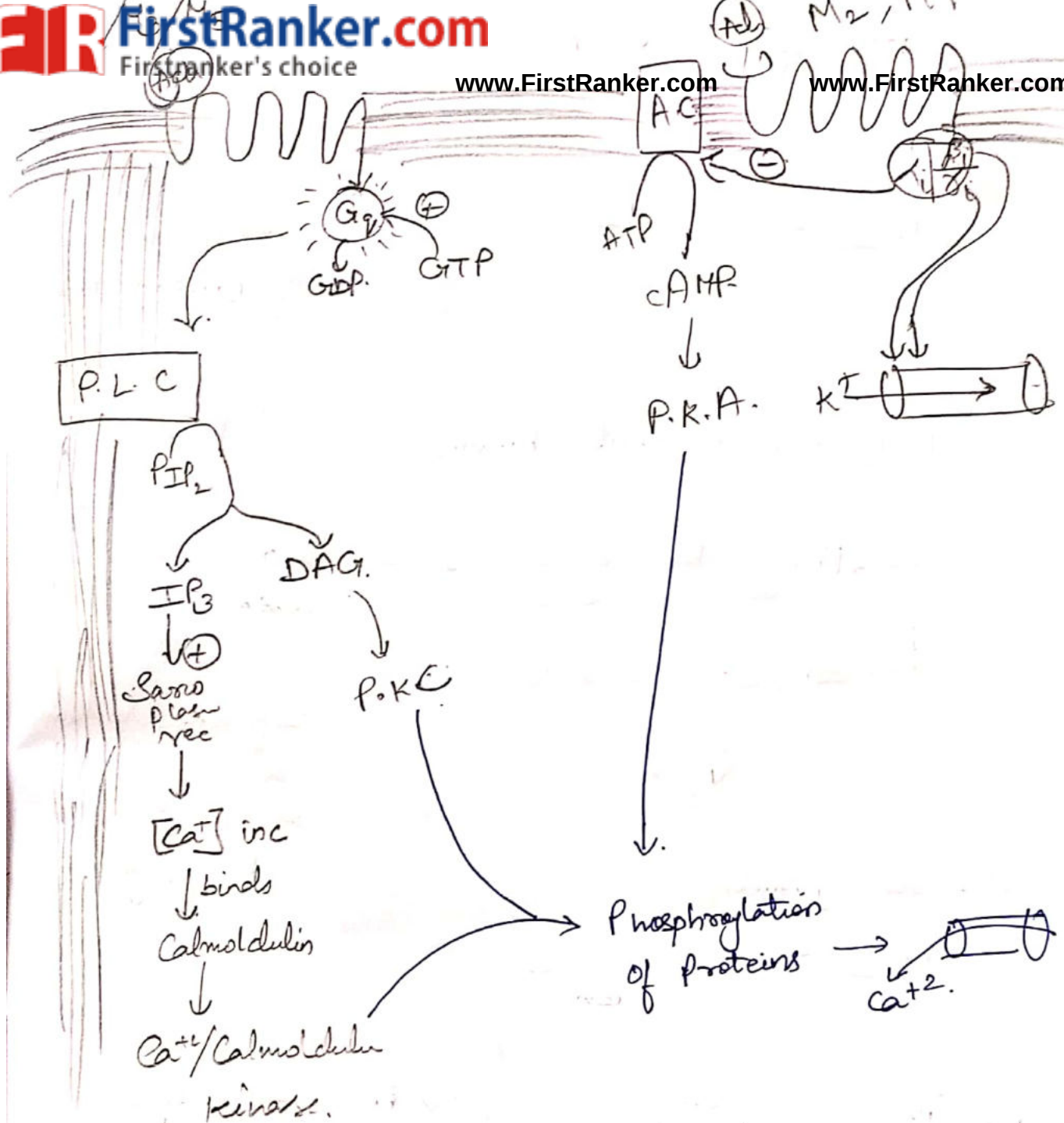


Nn α Memory
Arousal
Analgesia

G-protein
coupled Receptors
(or) Metabotropic
receptors
Muscarinic
Receptors



M2 } Gi
M4 }



Muscarinic Receptor

