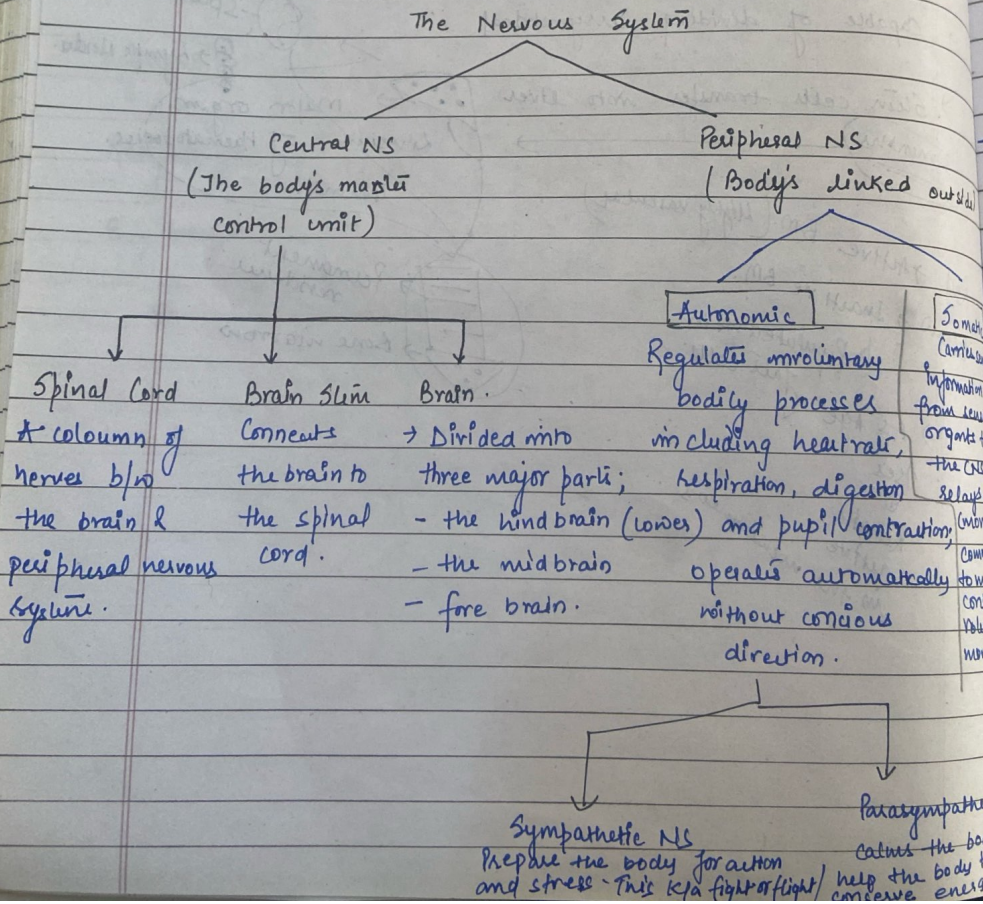
PERIPHERAL NERVOUS SYSTEM (PNS)

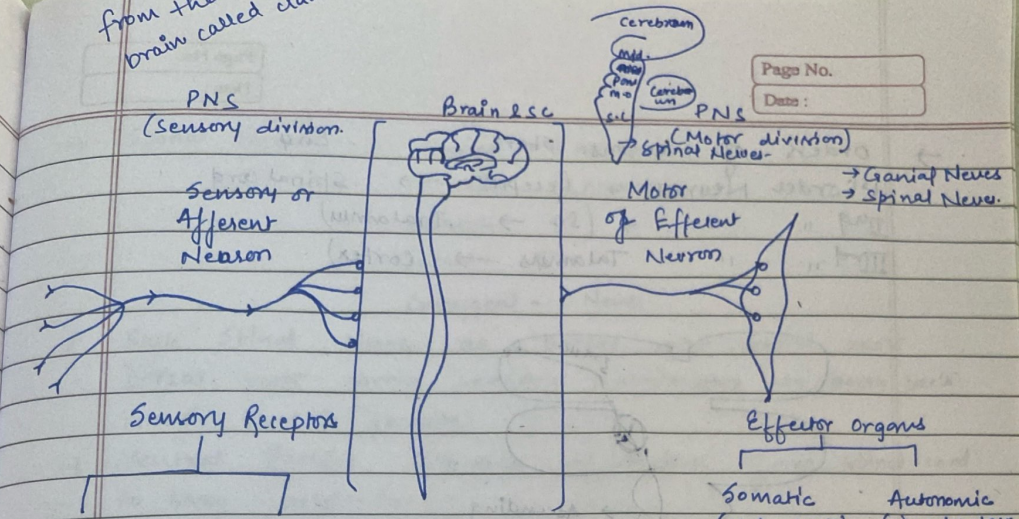
Page No.
Date :

→ Classification.
→ Control and co-ordination of body.
→ Nervous System is basically divided into two parts CNS and PNS
→ CNS consist - Brain and Spinal Cord (it is a source of many different kinds of incoming sensory information. It is also source of thoughts, emotions and memories.

→ Components of PNS are - Somatic Nervous System
Autonomic Nervous System
SNS consist of sensory neurons and motor neurons.



from the brain called as



Senses
- Sight
- hearing
- smell
→ taste
→ touch.

Internal Environment (autonomic) eg.
chemoreceptors (chemical)
baroreceptors (blood regulation)
osmoreceptors. (sodium & water balance)

→ Autonomic Nervous System – Supplies smooth muscles
All glandular structure
Myocardium.

→ Neurons
(I) Sensory (take the information from the body to brain) Afferent (ascending tract) (Act as input)
(II) Motor (take the information from brain to body) Efferents (Descending tract) (Act as output).

→ Senses
- General Sensation
  → Touch, pain, temp, pressure).
  Receptors are present on skin.
- Special Sensation. (Taste, Olfaction, Vision, Hearing, Balance)

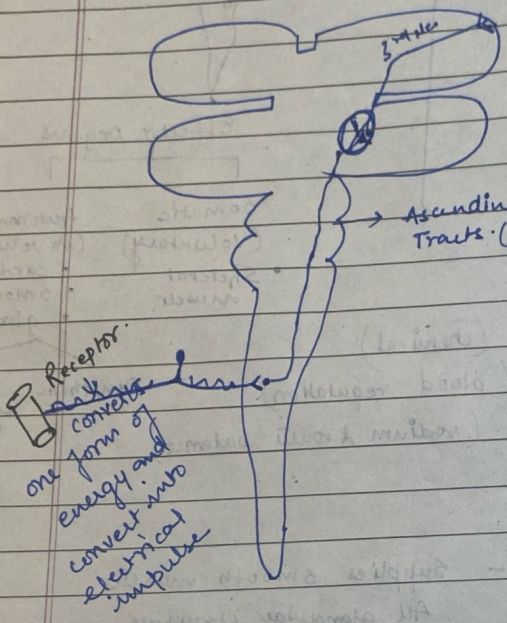
Receptor → are localized on special organs.

→ Orders of Neurons. Start Eng

1st order Neurons → Receptor → Spinal cord

IInd " " → (SC → Thalamus)

IIIrd " " Talamus → Cortex)



→ Receptors

(I) Thermoreceptors (Nociceptors - PAIN)

(II) TACTILE RECEPTOR (TOUCH)

(III) Proprioceptors → (Positional sensce of joints)

(IV) Teleceptors - Responds to distant stimuli

Eg. Rods & cons.

→ Nervous - 31 pairs of Spinal Nerve

12 pair of Cranial Nerve

ANS.

Page No.
Date :

→ Spinal Nerves – Cervical – 8 nerves.
Thoracic – 12 nerves
Lumbar – 5
Sacral – 5
Coccygeal – 1 Nerves

→ Each Spinal Nerve as Dorsal and Ventral roots
Dorsal roots carries sensory information to body parts through dorsal ganglia.

→ Ventral Roots → Carries information from spinal cord to body parts

There are five large plexuses – Cervical
Brancial / Thoracic
Lumbar
Sacral
Coccyx.

2. ANS :→ Involuntary part
Control autonomic function of the body.

1. Sympthatic :→ It has adrenergic nerve fibre, that secreats nor-epinedrinene or adrenaline, Responsible for fight & flight reponses.

→ Sympathetic are mediated by nor-epinephrine.

→ Parasympthatic → Colinergic Nerve fibers that secreate Ach.

→ Cranial 12 Nerves.

	Cranial Nerve	Fibers	function.
(1)	Olfactory	S	Sense of Smell
(2)	Optic	S	Vision.
(3)	Oculomotor	M, Parasymthatic	Movement of Pupil Constriction of Movement of
(4)	Trochlear (Smallest)	M	
(5)	Trigeminal (largest)	S, M.	General Sensation Opening & closing
(6)	Abducens	M	(Mov. of mouth.
(7)	facial	S, M	Taste, Salivation, Tear Secreation.
(8)	Auditory	Sensory	Hearing.
(9)	Glosso pharyngeal	Pharynx, Tongue, Salivary Gland.	Taste Salivation
(10)	Vagus	S, M.	Gastric & Pancreatic Secreation, GI Movement Cardiac reflex, Visceral reflex Respiratory Reflex.
(11)	Spinal Assessory	Motor.	Muscle movement & Visual reflex
(12)	Hypoglossal	Motor.	Tongue movement