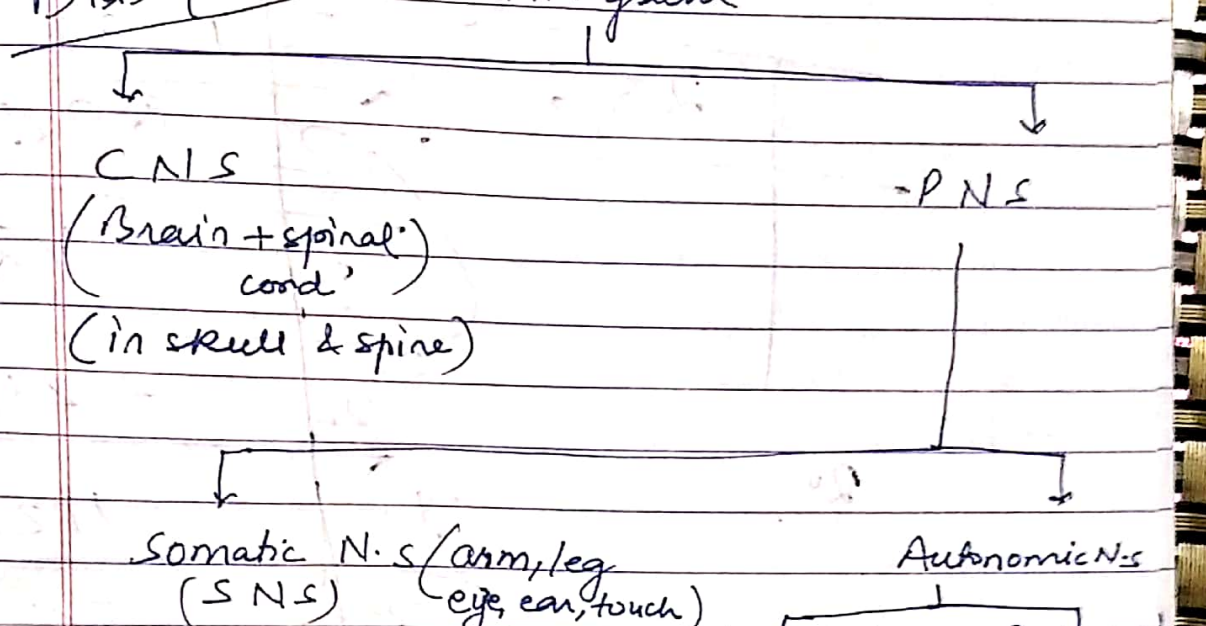
⇒ Connection of N.S to muscles & endocrine glands

In Biological Basis of behaviour



PNS - Consists of nerve fibres or axons which -

1) Carry Nerve impulses from sensory receptors of the body inward to CNS
2 Carry nerve impulses for the movement of muscles & the excitation of certain glands outwards from the CNS

SNS - motor fibres activate the striped muscles of the body - to move arm & leg while sensory fibres of this system come from the major receptor organs of the body - eye, ear, touch receptors et so on. - as ~~Salivary, gastric~~,

ANS - motor fibre activate the smooth muscles of such body organs as stomach cause secretion of salivary glands & regulate activity of some special type of muscle found in heart. It is thus - Smooth muscle, glandular & heart muscle Syst.

In human
The musculoskeletal system are controlled through N.S. = except cardiac muscle = which are completely autonomous.

3 different types of muscles.

1) Smooth M(non striated) in internal organs — controlled by ANS — & are involuntary. (~~or willingly controlled~~
2. Heart or cardiac muscles & influenced by A.N.S (Autonomic N.S)
3. skeletal muscles & involuntary movement)
Voluntary

The N.S is ~~not only~~ linked to the glandular system of the body between hypothalamus (brain) & pituitary gland (endocrine gland (ductless)

There are endocrine system — endocrine glands (ductless glands)

1) pituitary gland (masterglend)
2) thyroid " & Parathyroid.
3) pancreas "
4) adrenal. "
5) ovaries (in females & testes (in male)

functions: 1) growth & development } body & 3) emotional behaviour
2) metabolism 4) } reproduction, 5)

The N.S allows various organs to communicate with each other by virtue of electric signals generated by neurotransmitter flowing across synapses & endocrine system permits communication

by means of chemical substances called hormones secreted by endocrine glands & carried through the body by the bloodstream to various organs of the body.

Communication via the N.S is relatively quick which com.... via the Endocrine S. is relatively slow.

Pituitary hormones → play role in facilitating learning & memory & critically involved in the body's response to stressful situations.

exocrine glands — 1) salivary glands
have (duct) 2) sweat "
3) gastric "
4) lacrimal "