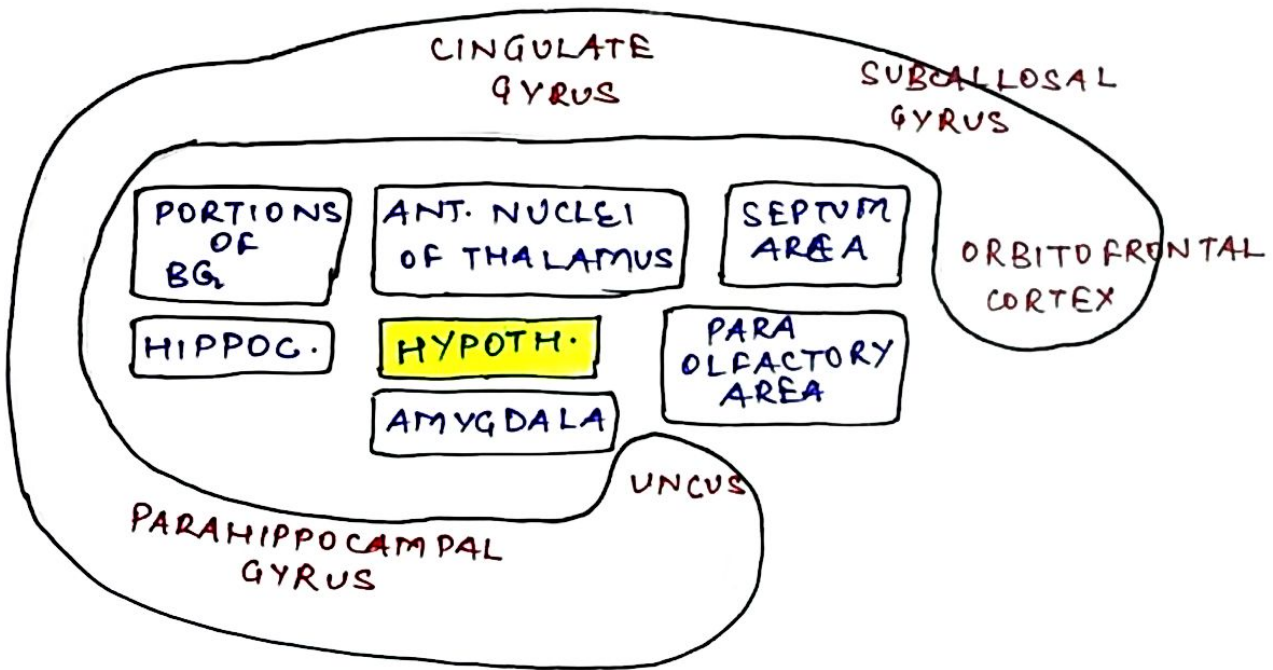
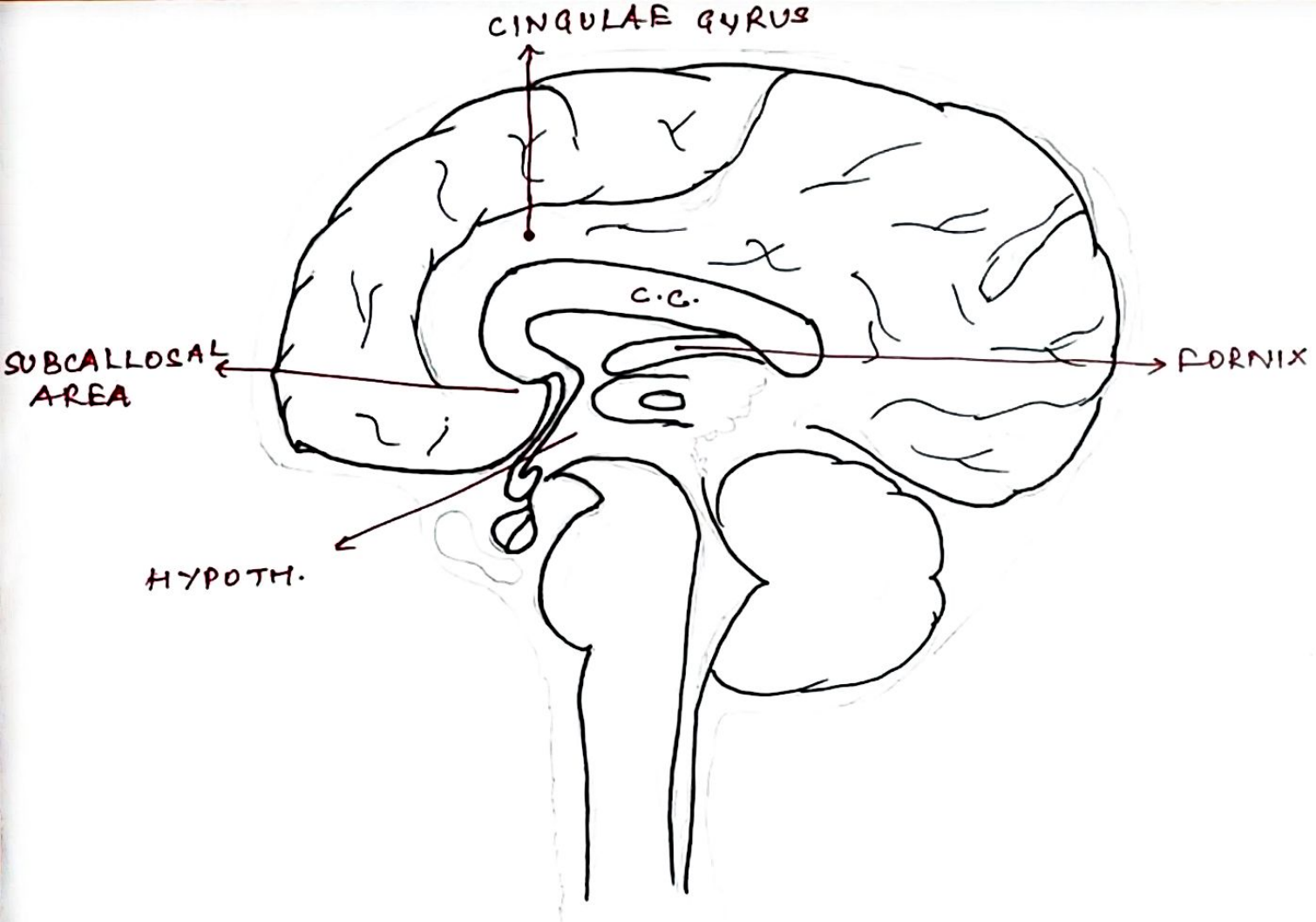
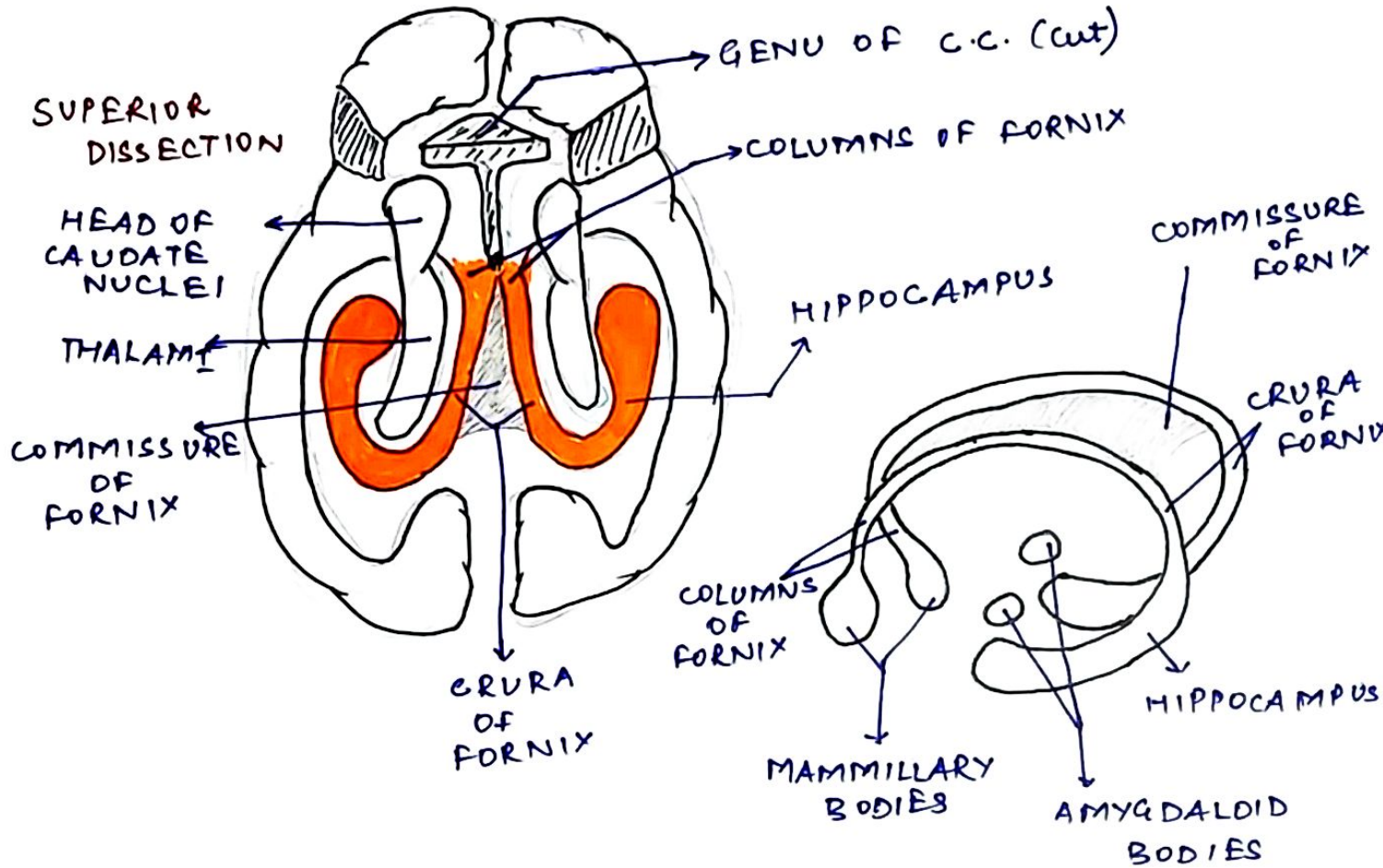


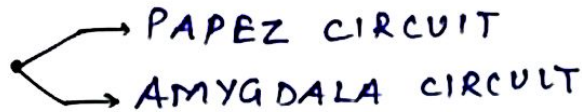
- "LIMBIC" :- BORDER
 :- ENTIRE NEURONAL CIRCUITRY RELATED WITH EMOTIONAL BEHAVIOR AND MOTIVATION
- FUNCTIONAL ANATOMY OF LIMBIC SYSTEM



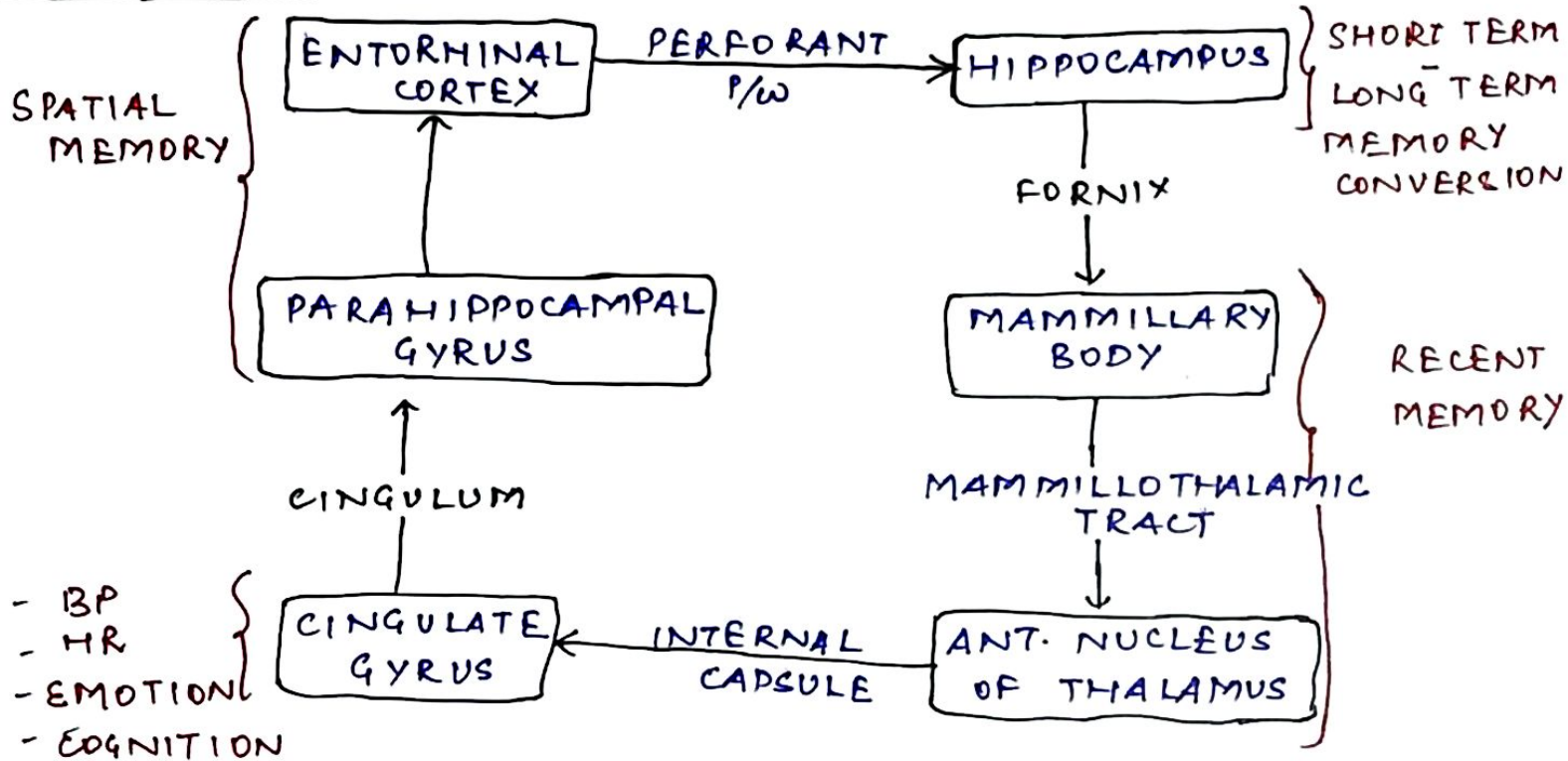




CIRCUITS IN LIMBIC SYSTEM



PAPEZ CIRCUIT :-



• AMYGDALA CIRCUIT

CIRCUITRY OF PREFRONTAL CORTEX WITH
"AMYGDALA" & "HIPPOCAMPUS"

THETA WAVES

PRODUCED
DURING RETRIEVAL
OF EMOTIONAL
MEMORY.

⇓
EMOTION

⇓
MEMORY

→ BILATERAL ABLATION OF AMYGDALA



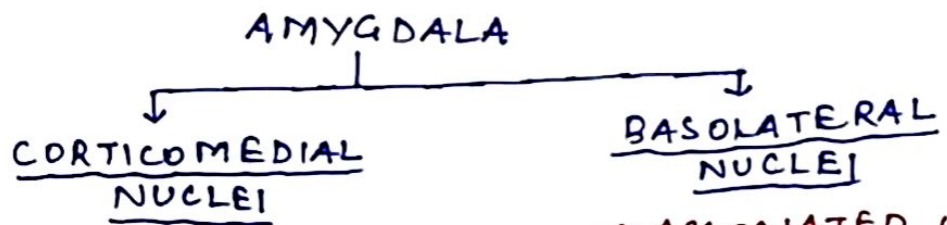
KLÜVER-BUCY SYNDROME

- VISUAL AGNOSIA
- PLACIDITY
- HYPERORALITY
- HYPERSEXUALITY
- NOT AFRAID OF ANYTHING
- EXTREMELY CURIOUS
- FORGETS RAPIDLY



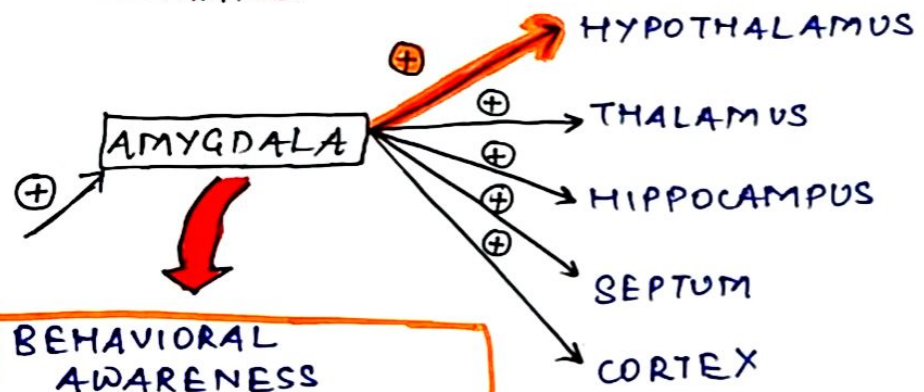
CANNOT RECOGNISE BY
ONLY SEEING. HE/SHE
NEEDS TO TOUCH TO
RECOGNISE

THE AMYGDALA



- ASSOCIATED WITH OLFACTORY STIMULUS
- MUCH DEVELOPED IN LOWER ANIMALS
- LESS DEVELOPED IN HUMANS.

- ASSOCIATED WITH BEHAVIORAL ACTIVITIES.
- MUCH DEVELOPED IN HUMANS.
- LESS DEVELOPED IN LOWER ANIMALS



- ARTERIAL PRESS. REG.
- HEART RATE REG.
- GI MOTILITY & SECRETION
- ANT. PITUITARY HORMONES

BEHAVIORAL AWARENESS AT SEMICONSCIOUS LEVEL

DEPRESSION AND MANIC-DEPRESSIVE PSYCHOSES

DEPRESSION :- SYMPTOMS THAT APPEAR :-

- ✓ GRIEF
- ✓ UNHAPPINESS
- ✓ DESPAIR
- ✓ MISERY
- ✓ LOSS OF APPETITE & SEX DRIVE
- ✓ SEVERE INSOMNIA.

→ BY DIMINISHED FORMATION IN BRAIN OF NOREPINEPHRINE OR SEROTONIN OR BOTH.

→ DRUGS BLOCKING SECRETION OF NOREPINEPHRINE OR SEROTONIN

RESERPINE



DEPRESSION

INCREASES EXCITATORY EFFECTS OF NE & 5-HT

→ DRUGS FOR TREATMENT OF DEPRESSION :-

MONOAMINE OXIDASE INHIBITORS ⇒ BLOCK DESTRUCTION OF NE & 5-HT

TRICYCLIC ANTIDEPRESSANTS

- IMIPRAMINE
- AMITRIPTYLINE

⇒ BLOCKS REUPTAKE OF NE & 5-HT