

WHITE MATTER of Cerebrum

1) Association fibres



Conn. 2 diff areas of same Cerebral Hemisp.

2) Commissural fib.



Conn. same areas of both C.H.

eg: Corpus callosum, A.P., Ha, Hippo Comm.

3) Projection fibres



all Corticopetal & Corticofugal fibres

(Asc. & Desc. Tracts)

eg: I.C., Fornix & Fimbriae

AF

Short AF

(aka. Arcuate fasciculus)

Long AF



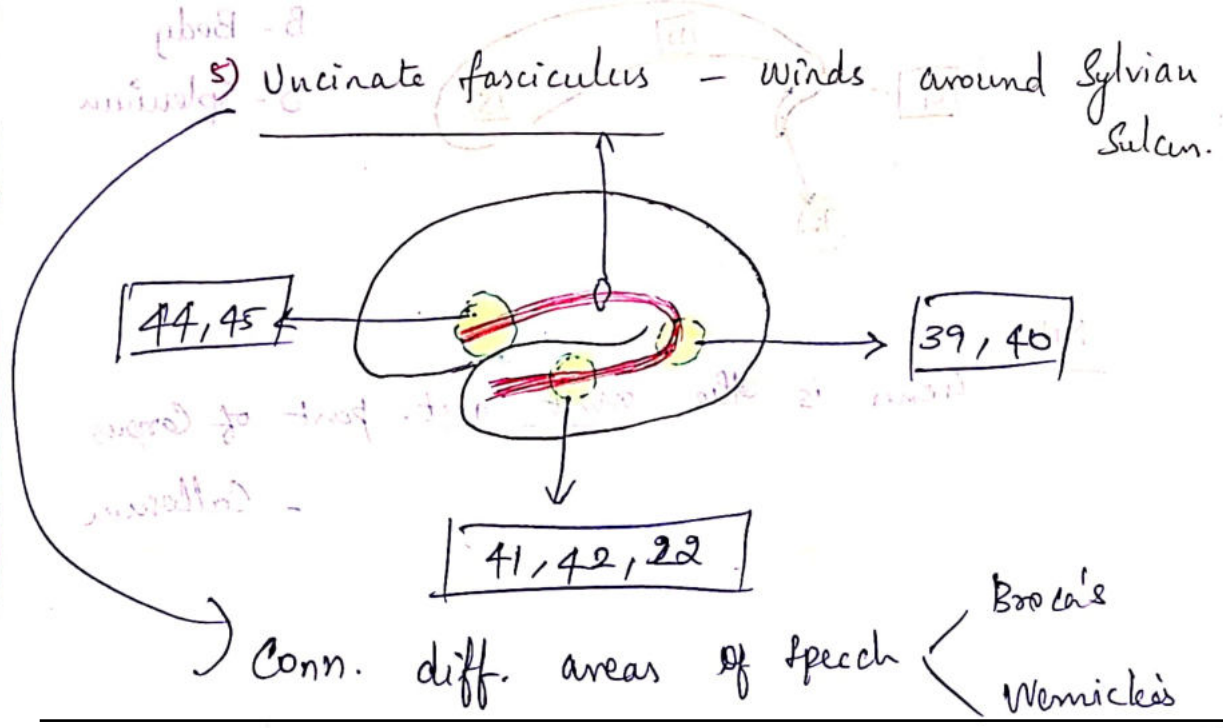
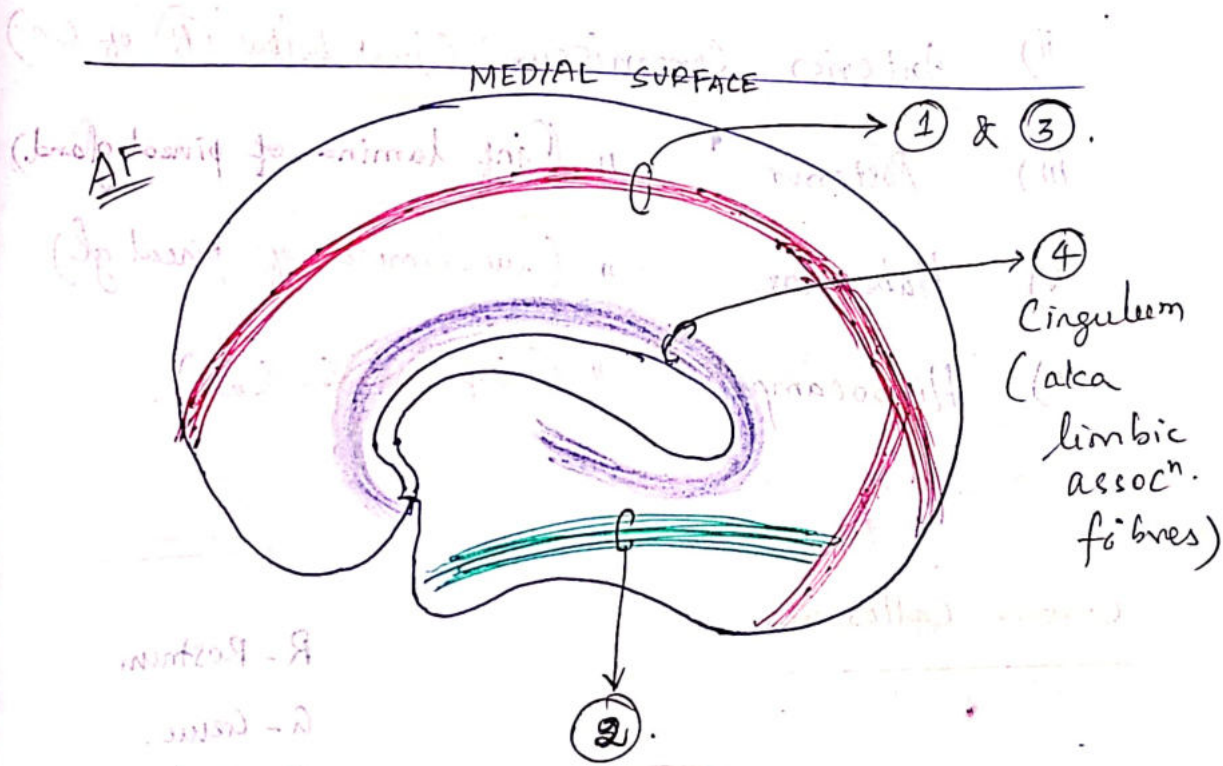
1) Sup. longitudinal fasciculus

2) Inf

3) Fronto occipital

4) Cingulum

5) Uncinate fasciculus



from frontal lobe & Splenium (S)
Gen front of occipital lobe
but it has forcsps min any
So they can't conn. all areas of
the ② C.H.

- ii) Anterior Commissure (just below R of C.C.)
- iii) Posterior " (inf lamina of pineal gland)
- iv) Habenulae " (sup. lamina of pineal gl.)
- v) Hippocampal " (inf l-l-l-l)

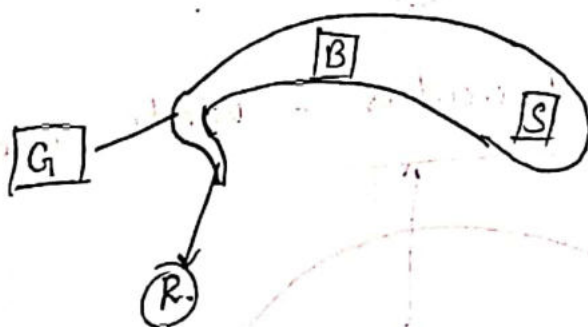
Corpus Callosum:

R - Rostrum

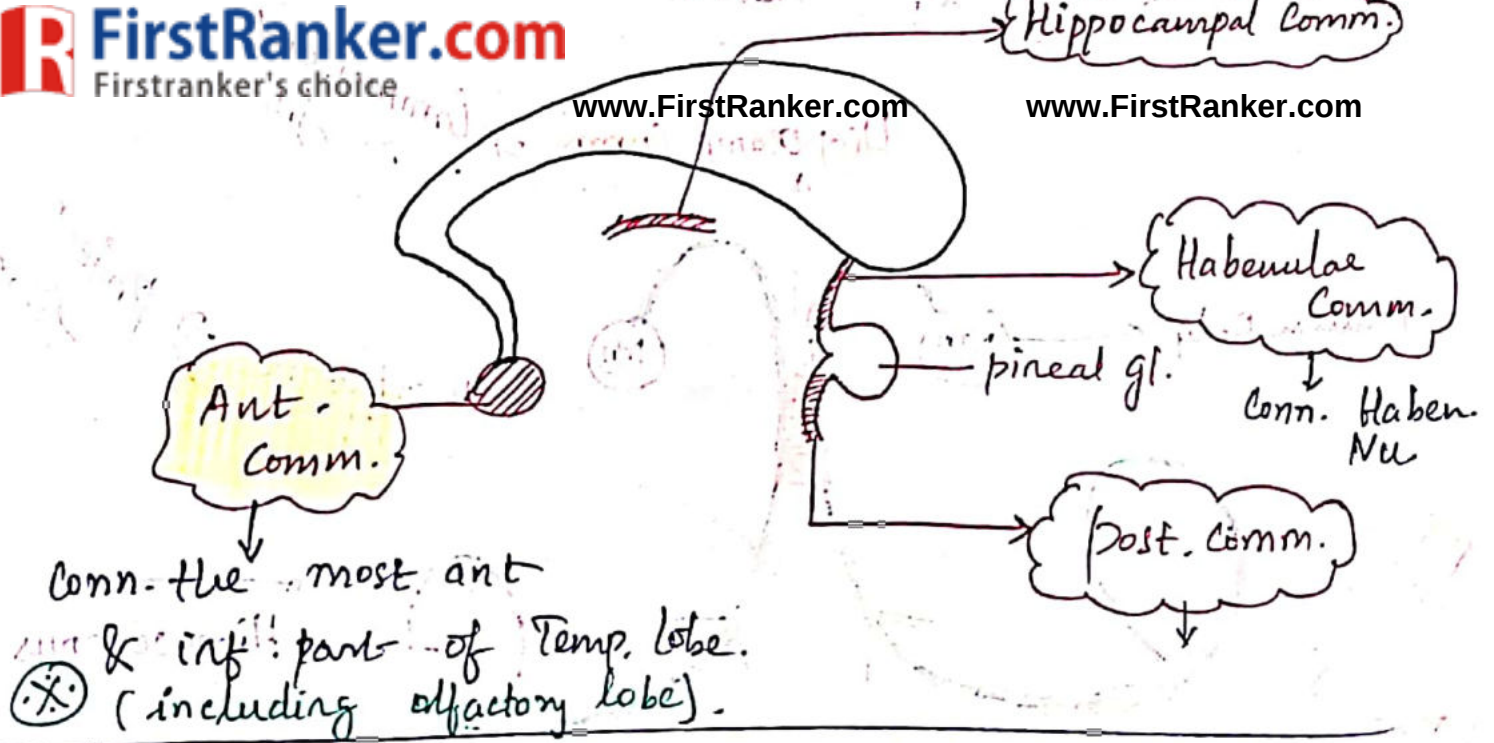
G - Genu.

B - Body

S - Splenium



Note: Genu is the most ant. part of Corpus Callosum

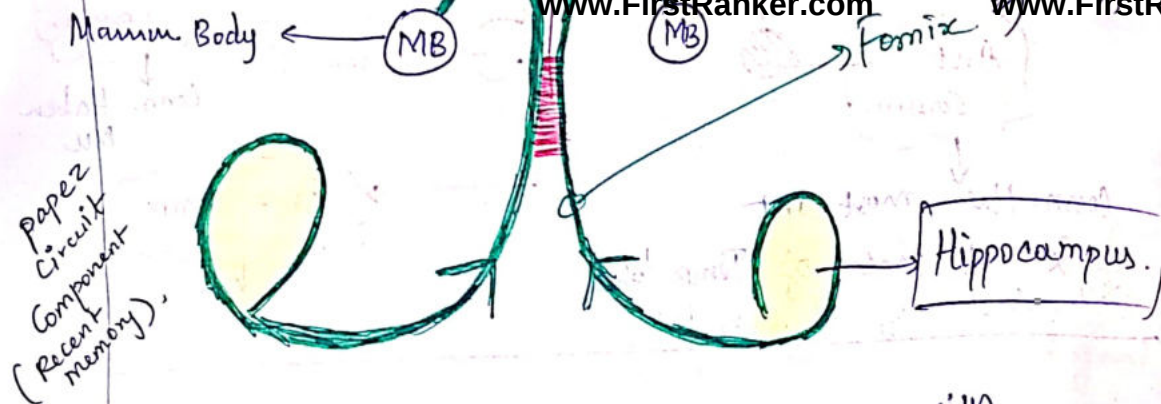


Hippocampal commissure

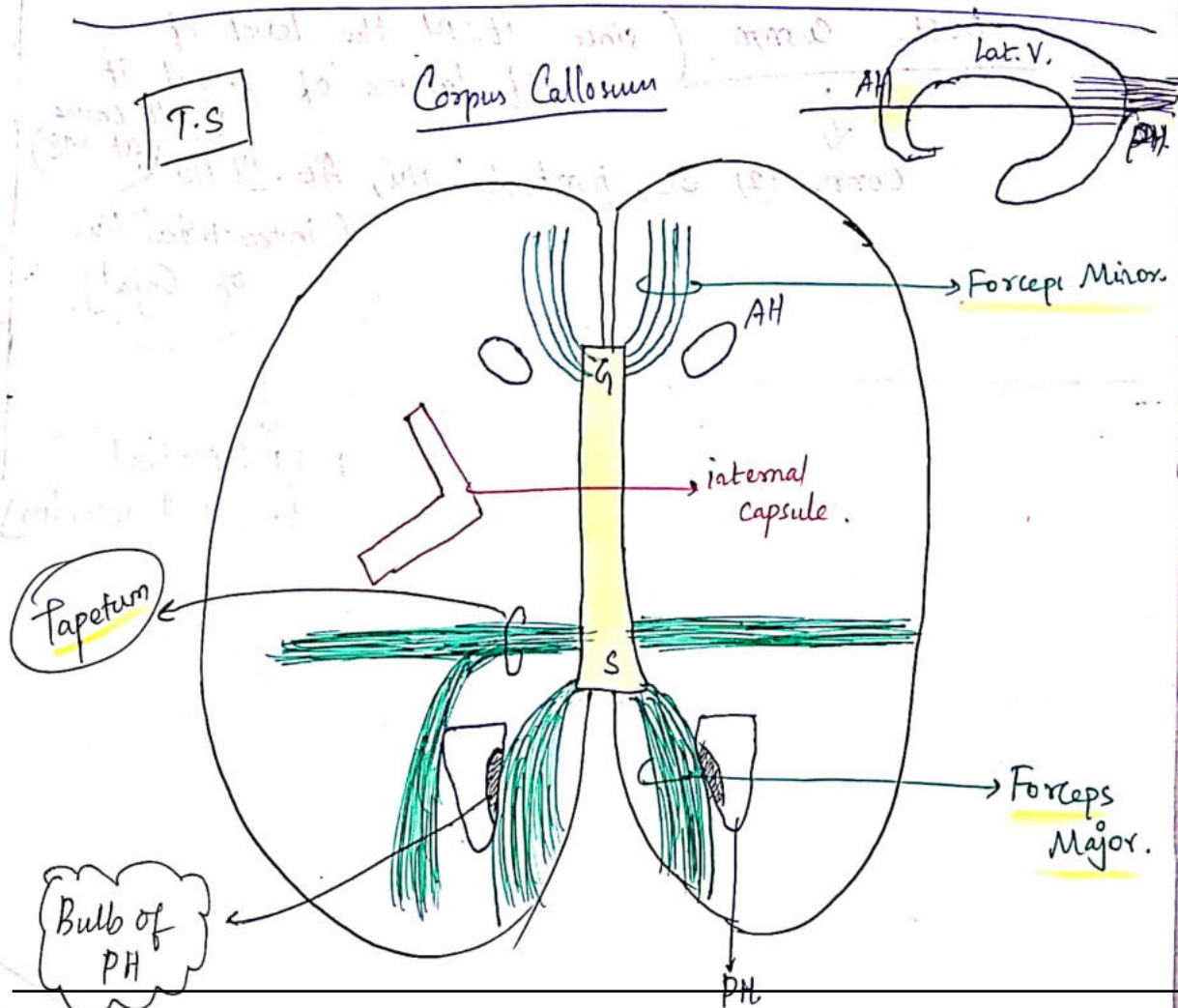
↓
Conn. ② fornix. (not ② Hippocampus).

post. comm (since its at the level of inf. lamina of pineal it will come at MB)
↓
conn. ② SC, pretectal Nu, Acc. III Nu (interstitial Nu. of Cajal).

↓
MLF (Medial Longit. Fasciculus)



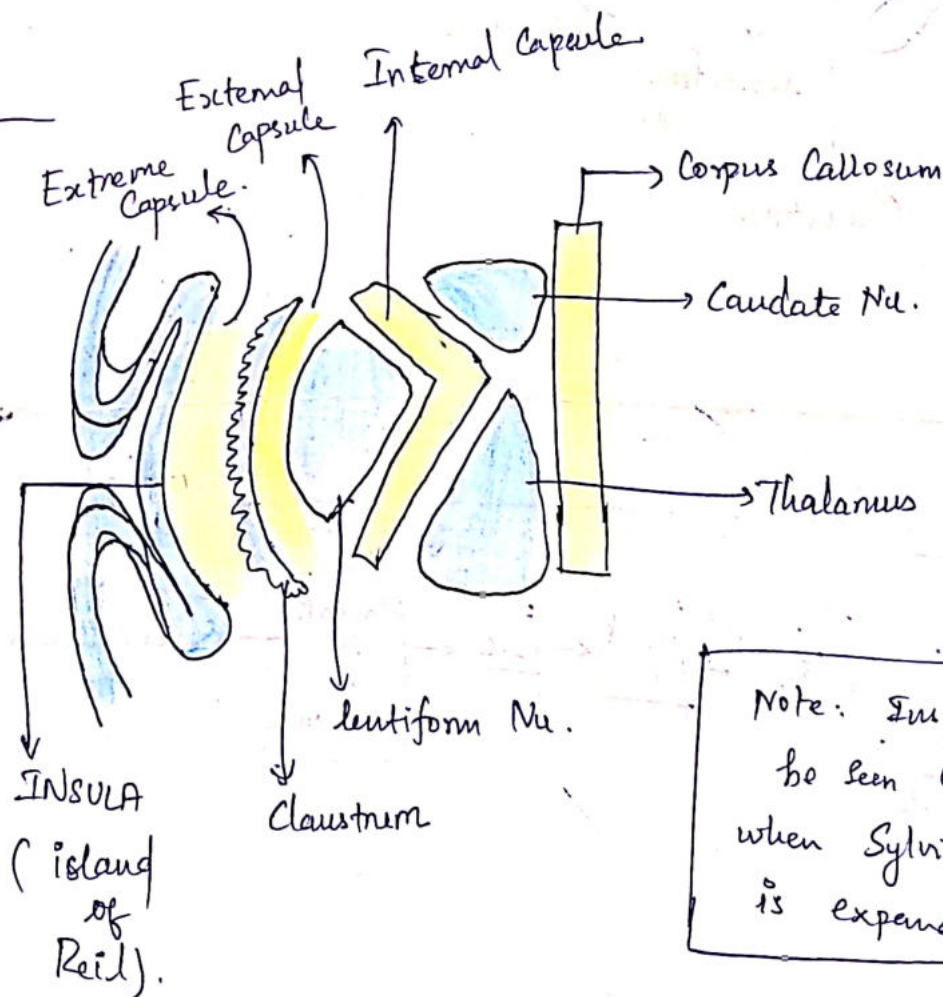
Fornix → originates from Hippocampus and ends in Mamm. Body.



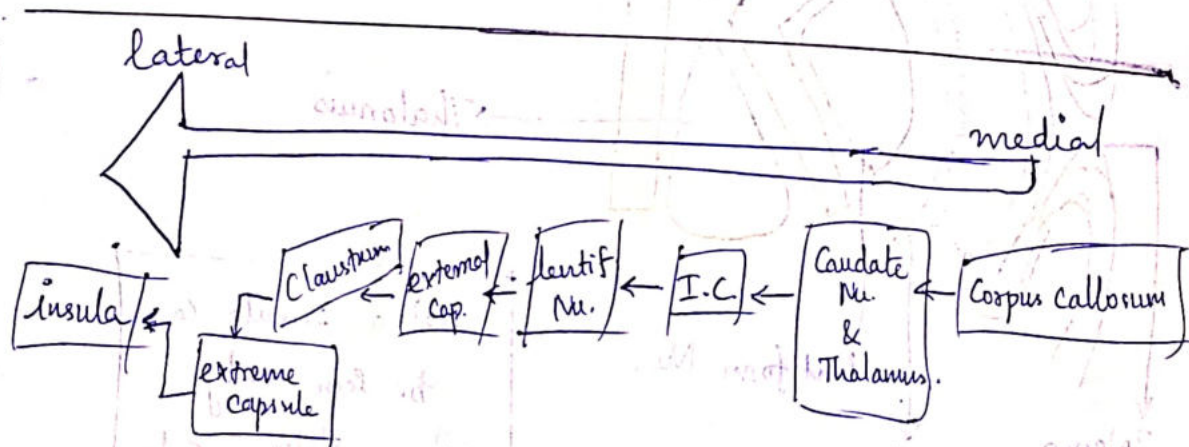
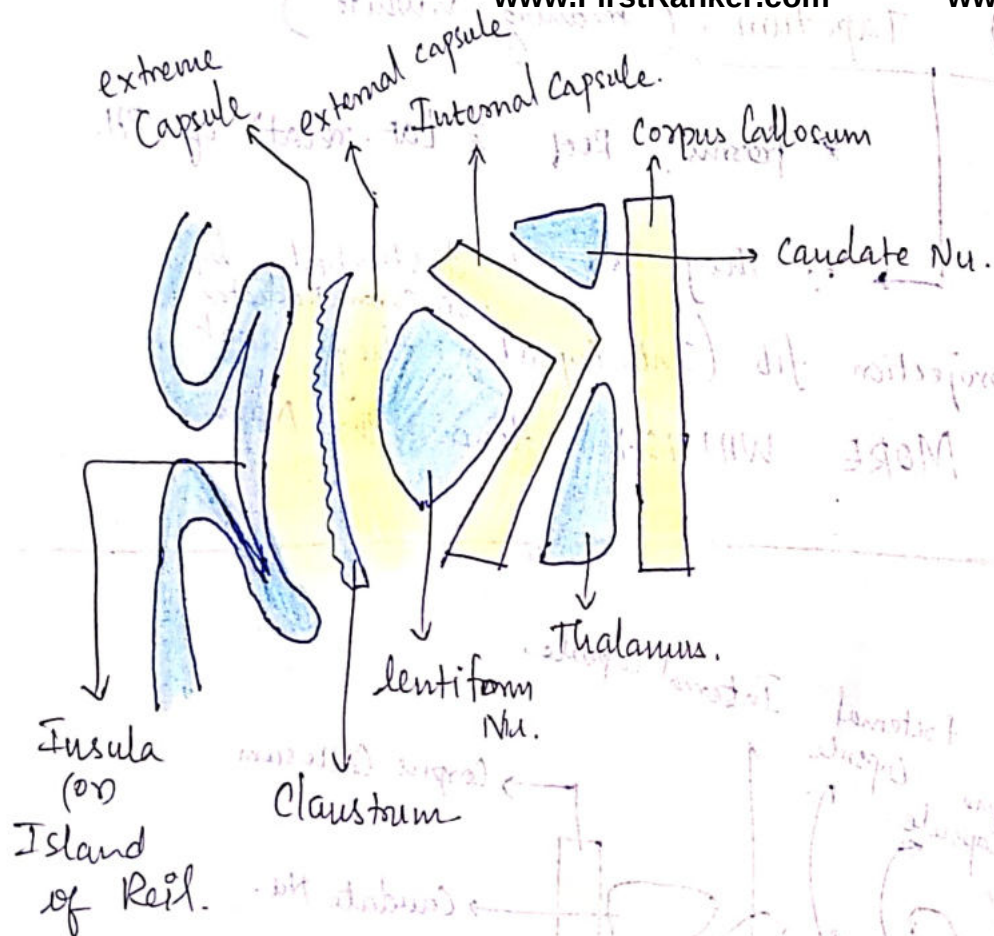
2) Tapetum : (meaning "v. white").

* forms Roof & Lat. relatⁿ of PH.

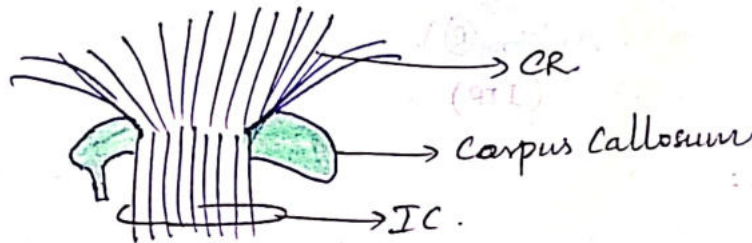
∴ They are undisturbed by
(or) Corona Radiata
projection fib. (Int. capsule), they look
MORE WHITISH. Hence the Name.



Note: Insula can
be seen only
when Sylvian sulcus
is expanded.

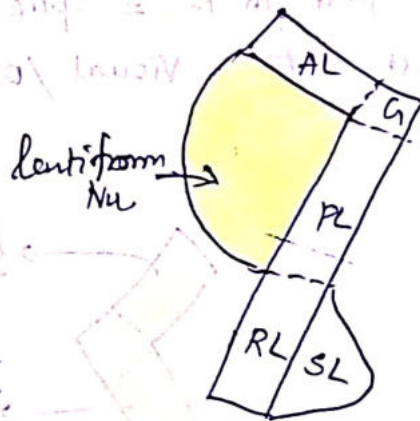


Internal Capsule.
~~Corona radiata~~ is a condensed white matter bundle which spreads out to form Corona radiata. AT THE LEVEL OF Corpus Callosum

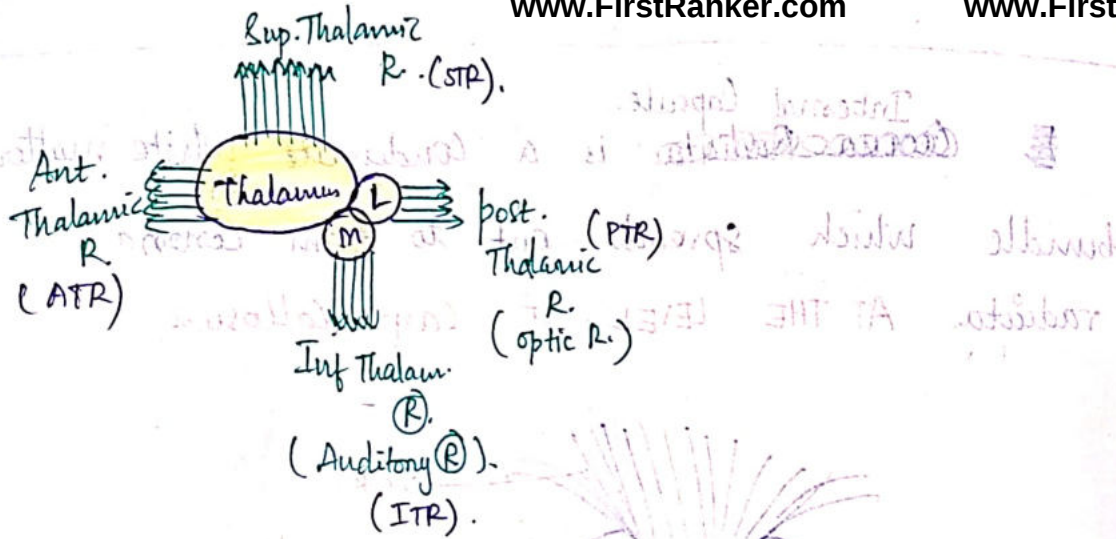


Parts of IC

- * Ant limb
- * Genu
- * Post limb
- * Retro lentiform part
- * Sub lentiform "



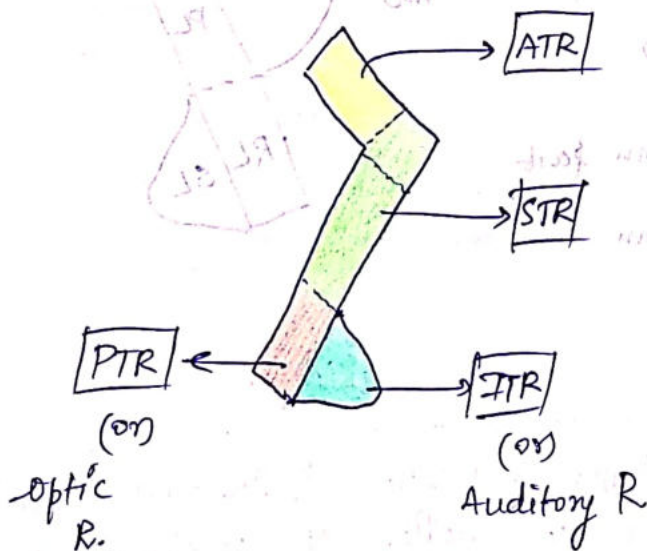
Difference b/n Corpus callosum & Internal Capsule?
 Both are white matter of cerebrum. but
 Corpus callosum is a ~~condensed~~ commissural fibres
 whereas I.C is a projection fibre



Note:

* inf. Th. R. $\equiv$ Auditory R. becoz it goes down to Auditory / Temp. Cortex.

* post. Th. R $\equiv$ Optic R. becoz it goes post. to Visual / Occip. Cortex.



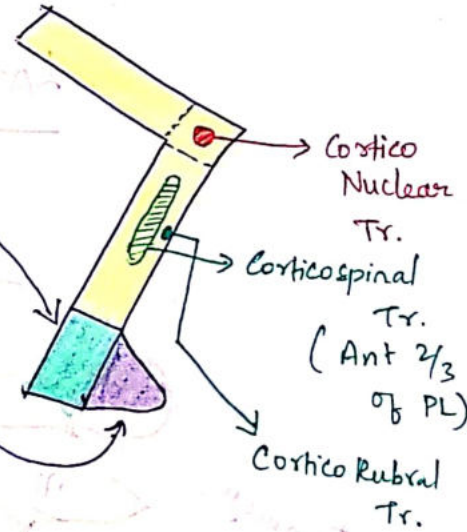
1) Frontopontine Fib. (most extensive).

2) Parietopontine Fib.

3) Occipitopontine Fib.

4) Temporopontine Fib.

goes into pons & decussate & then enter cerebellum. They are aka Corticopontocerebellar Tr.



⊗ Note:

Cortico Nuclear Tr. $\xrightarrow{\#}$ Entire H & N paralysis becoz this Tr. supplies UMN for all C.N.

Corticospinal Tr. ⊗ $\Rightarrow$ Ant $\frac{2}{3}$ rd of PL of IC.

||lar to Sp. Cord, In IC also Cortico Rubral Tr. is found v. adjacent to Corticospinal Tr. (Refer Desc. Tr. in Sp. Cord).

Homunculus Representatⁿ of in'

Corticosp. Tr.
(Ant $\frac{2}{3}$ rd of PL)

