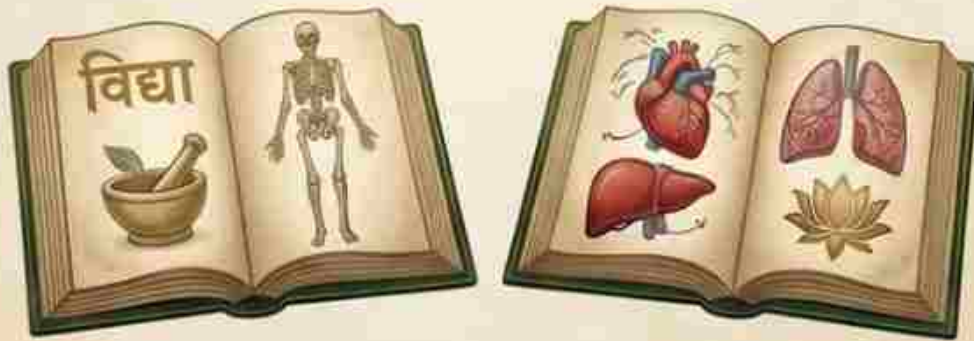
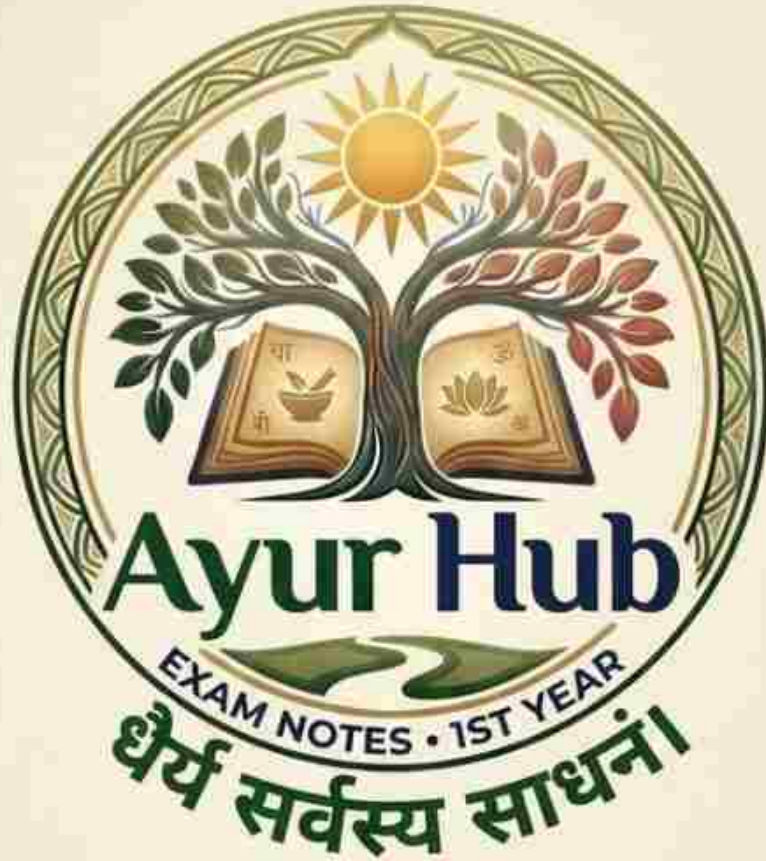
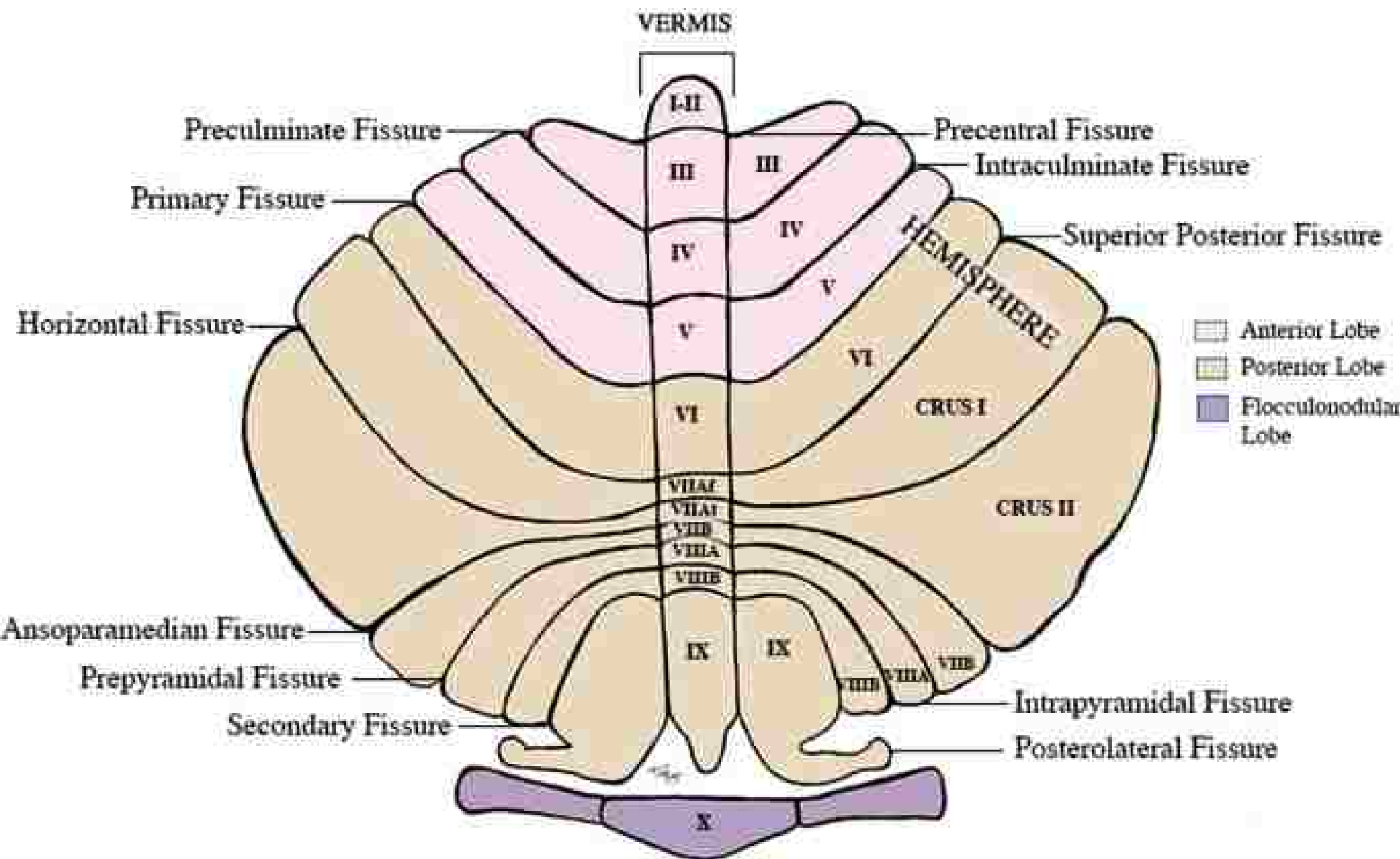


# ANATOMY

AYURVEDIC RATCHANA SHARIR (रचना शरीर)





## \* Cerebellum

- Intro

- weight

- External feature → 3 Part  
→ 2 Surface  
→ 2 Notch  
→ 3 Fissure

- Sub division of cerebellum → Anatomical subdivision - 3 lobe

→ Morphological subdivision - 3 evolution part

- Internal feature → 4 Intercerebellar nuclei  
→ 3 layer  
→ 3 Purkinje

→ Artery → Basilar artery - Superior cerebellar  
- ant. Inf. cerebellar  
- Post. Inf. cerebellar

→ Vein → sup. and inf. petrosal sinuses.

→ clinical anatomy  
1) Ataxia :- Lack of voluntary coordination of muscle movements.

2) Dysmetria :- Inability of judgement (overshooting target)



HEAD AND NECK ANATOMY

CEREBELLUM ANATOMY

मधुमस्तिष्क / एन्सोमेलन

- CEREBELLUM IS LARGEST PART OF HIND BRAIN
- LOCATED IN POSTERIOR CRANIAL FOSSA BEHIND PONS AND MEDULLA
- EACH HEMISPHERE OF CEREBELLUM CONNECTED TO BRAINSTEM BY 3 PAIR OF 19 LARGE FIBRE TRACT CALLED CEREBELLAR PEDUNCLES

(Nerve fibres)

\* FUNCTION:-

- MAINTANACE OF EQUILIBRIUM
- REGULATION OF MUSCLE TONE
- COORDINATION OF SOMATIC MATAR ACTIVITIES

150 gm weight

\* EXTERNAL FEATURES

- PARTS - 3X PART - 2X LATERAL HEMISPHERICAL LOBES
- 2X CEREBELLAR HEMISPHERE
- NARROW MEDIAN WARM LIKE PARTION - VERMIS

- SURFACE - SURPERIOR SURFACE
- INFERIOR

\* NOTCHES :-

- ANTERIOR ASPECT OF CEREBELLUM MARKED BY WIDE SHALLOW ANTERIOR CEREBELLAR NOTCH
- POSTERIOR CEREBELLAR NOTCH IS, DEEP AND NARROW

\* FISSURE

- HORIZONTAL FISSURE → ALONG LATERAL AND POSTERAR MARGIN OF CEREBELLAM
- MARKS JUNCTION B/W - SUPERIOR AND INFERIOR SURFACE OF CEREBELLUM.
- POSTEROLATERAL SURFACE → INFERIOR SURFACE OF CEREBELLUM
- SEPARATE - FLOCCULONODULAR LOBE FROM REST OF CEREBELLUM
- V-SHAPED FISSURE PRIMA - DIVIDE CEREBELLUM INTO ANTERIOR AND POSTERIOR LOBES

\* SUB-DIVISION OF CEREBELLUM:

- ANATOMICAL SUB-DIVISIONS:- INTO 3X LOBES - ANTERIOR
- POSTERAR
- FLOCCULONODULAR

- 1) ANTERIOR LOBE- LIE ON SUPERIOR SURFACE ANTERIOR TO FISSURE PRIMA
- 2) POSTERIOR/MIDDLE LOBE:- BETWEEN FISSURA PRIMA AND POSTEROLATERAL
- 3) FLOCCULONODULAR LOBE : - SMALLEST OF ALL
- LIES ON INFERIOR SUFACE

\* MORPHOLOGICAL SUB-DIVISIONS :-

\*BASED ON PHYLOGENETIC AND FUNCTIONAL CRITERIA

1) ARCHICEREBELLUM (VESTIBULAR CEREBELLUM)

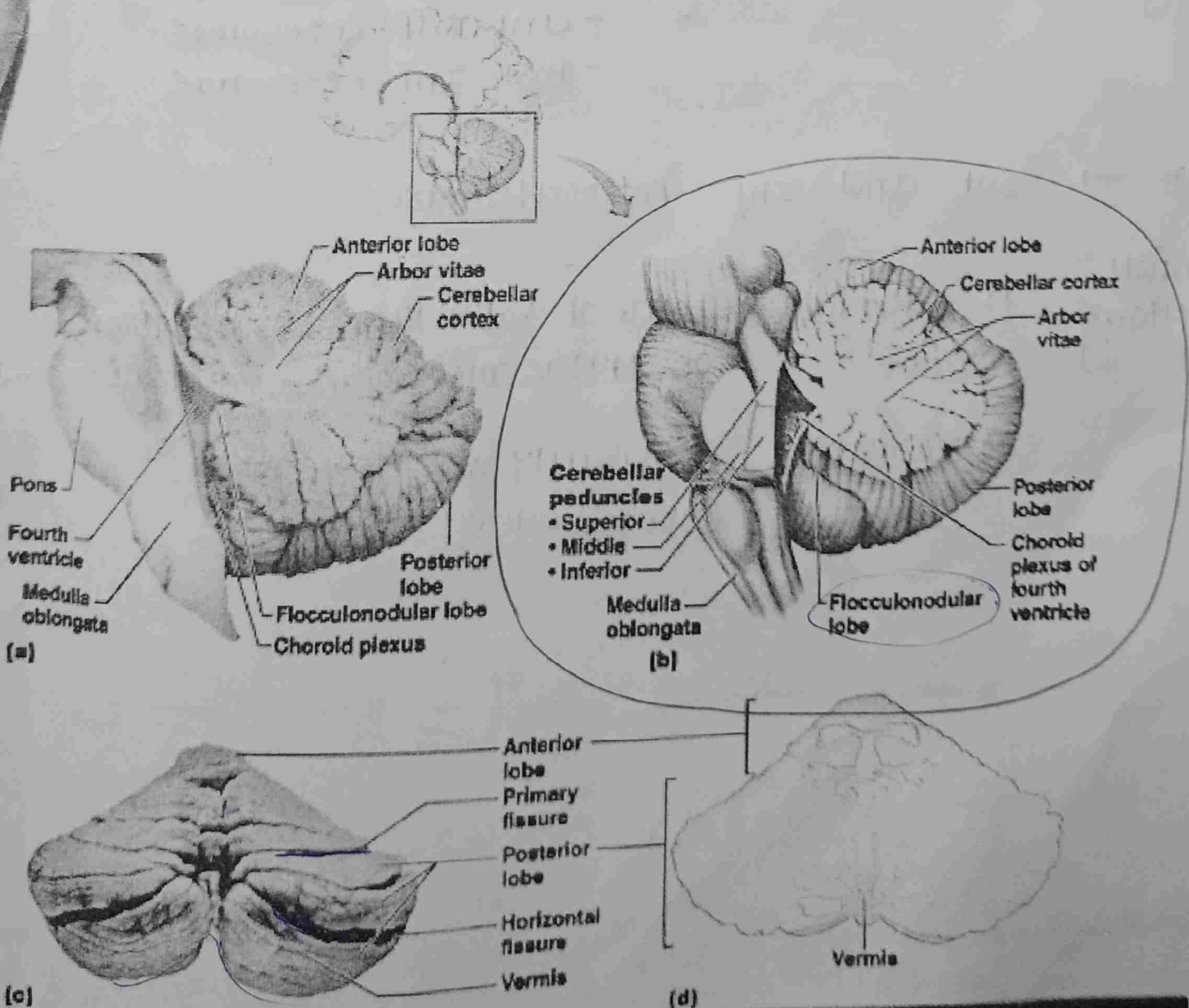
- OLDEST PART OF CEREBELLUM (1st evolution part)
- CONSIST OF FLOCCULO NODULAR AND LINGULA
- FUNCTION- MAINTANANCE OF EQUILIBRIUM, TONE  
*balance of body*

2) PALEO CEREBELLUM (SPINAL CERE BELLUM)

- PHYLOGENETICALLY, IT IS NEXT PART OF CEREBELLUM TO APPEAR
- CONSIST OF ANTERIOR LOBE (EXCEPT LINGULA) AND PYRAMID AND UVALA OF INFERIOR VERMIS
- FUNCTION- CONCERNED WITH TONE, POSTURE AND simple CRUDE MOVEMENT OF LIMB

3) NEOCEREBELLUM (CEREBRAL CEREBALLUM)

- PHYLOGENETICALLY- MOST RECENT PART OF CEREBELLUM TO DEVELOP
- MADE UP OF- MIDDLE LOBE, LARGE PART OF CEREBELLUM
- CHIEFLY CORTICO PONTOCEREBELLAR IN CONNECTION
- CONCERNED WITH SMOOTH PERFORMANCE OF SILKED VOLUNTARY MOVEMENT

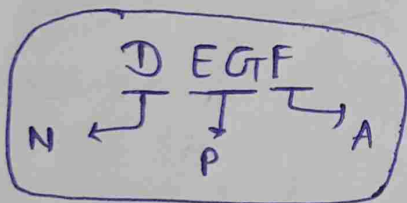
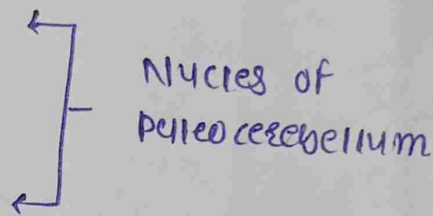


• Internal structure of cerebellum

- outer → gray matter (cerebellar cortex)
- inner → white matter
- Internal cerebellar Nuclei → gray matter into some part of white matter (central core)

→ 4 Nuclei is present into the white matter  
 [gray matter] & (Internal cerebellar Nuclei)

- i) Dentate Nucleus → Prominent of Internal cerebellar  
 → Nucleus of neocerebellum.
- ii) emboliform Nucleus → oval in shape
- iii) globose Nucleus → Rounded in shape  
 → Also emboliform N. & fastigial N.
- iv) Fastigial N. → lie near the mid line of vermis  
 → close to roof of 4th ventricle  
 → Nucleus of Archicerebellum.

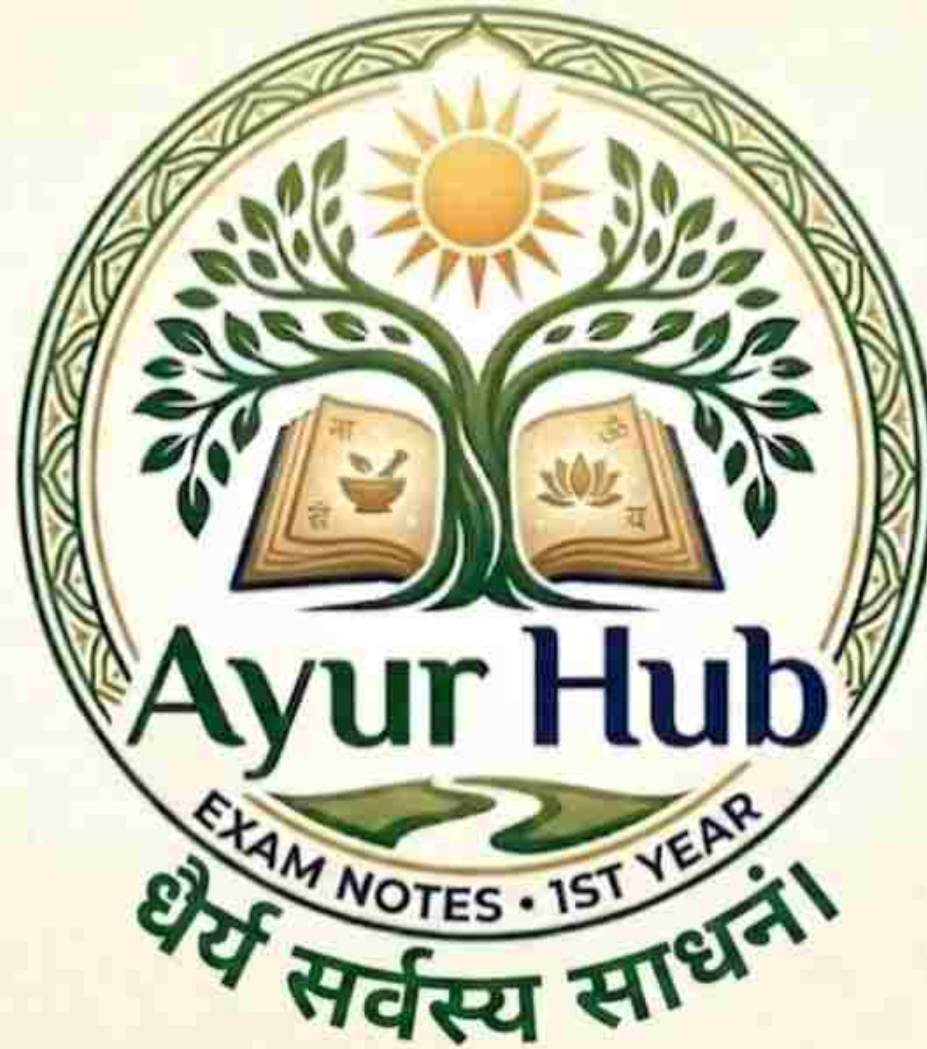


→ 3 layers of cerebellar cortex (structure)

- 1) Molecular layer → mainly Purkinje cells dendrite & Basket cell or stellate cell
- 2) Intermediate Purkinje cell layer → Purkinje cell
- 3) granular layer → few large Golgi cell

→ 3 Peduncle

- 1) Superior → connect to Midbrain → send signals
- 2) Middle → connect to Pons → receives signals
- 3) Inferior → connect to Medulla + Spinal cord → Both send + receiving the signals



Het lakkad ✦