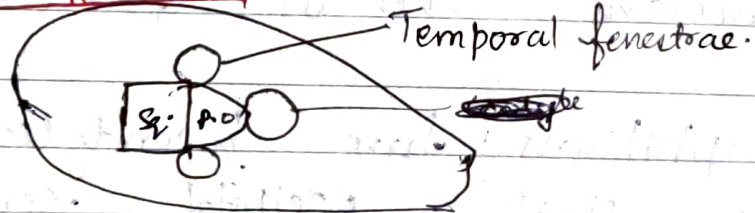
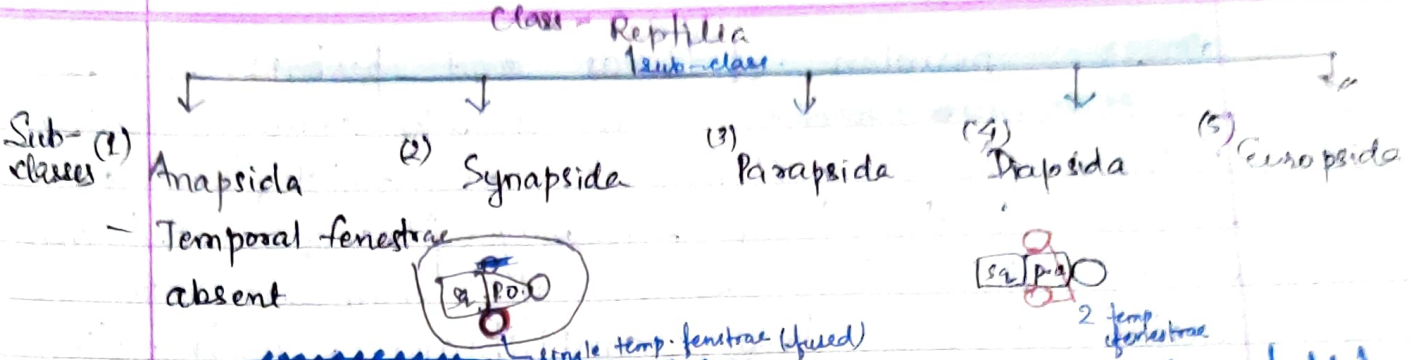


CLASSIFICATION OF REPTILES



Classification basis of reptile is pr. and ab. and location/positioning of tem.

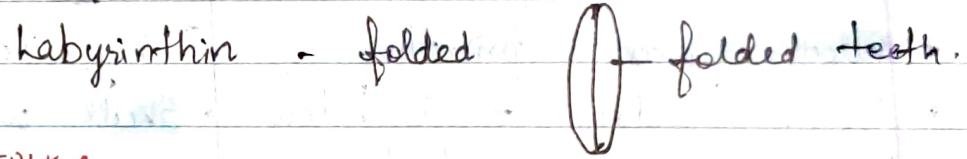


ANAPSIDA:

- First reptile came in existence in (280-310 mya).
These were provided with labyrinthine type of teeth.

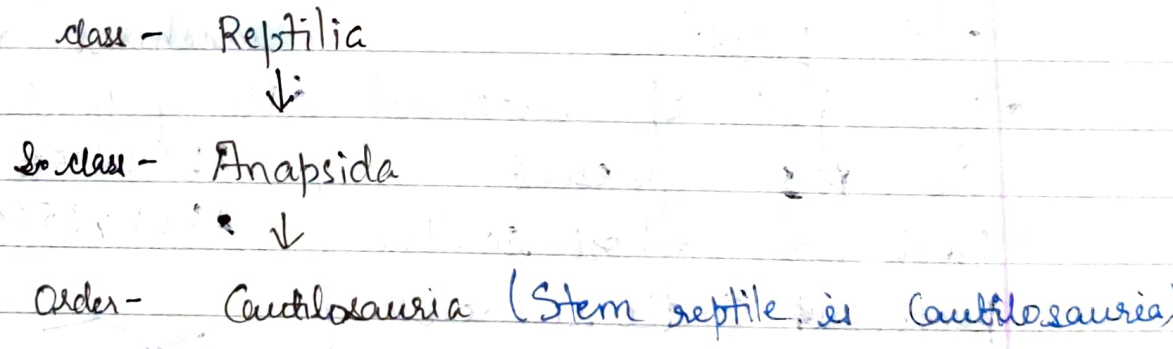
Labyrinthine type is character of cross-pterisig from which amphibians are derived.

These came in carboniferous period probably.
Emergence of reptile was so gradual that it is very difficult to decide whether the skeleton of fossil are those of advanced amphibians or primitive reptile.



REPTILIAN STALK:

- Reptiles are not of ~~non~~ monophyletic origin but polyphyletic.



Order

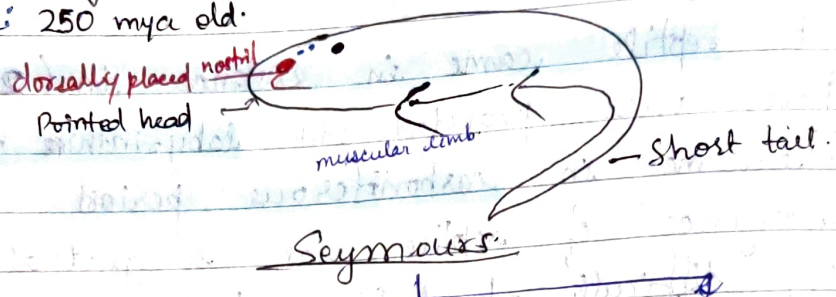
Support evidence:
Anapsaurus: labyrinthodont amphibians took on reptilian characters. They belong to sub-class anapsida and order - Anapsauria.

SoO → (1)

Seymouria - Sub-order - stalk from which reptile originated.
Seymouria = 60 cm long fossil was found

Lower Permian of Texas and perhaps it is 250 mya old. A lizard like animal having thick body, skin was very thick and a small pointed head, dorsally placed nostril and short tail. The str. of seymoures was intermediate b/w amphibians of that time and early reptiles. evidence: 250 mya old.


60 cm long body.



Amphibian characters

- Skull was flat with a reduce ossification.
- Palate was primitive.
- Posⁿ of fenestra oralis below the basal level of brain.
- Teeth were labyrinthine type and found on vomer and palatine.
- One pair of saccharal rib was present.
- Neck was short so that pectoral girdle lies close behind skull.
- Aquatic.

Reptilian characters

- Limbs were muscular and arose ~~at~~ mid-ventrally. They were ~~scapular~~ muscular.
- Skull was anapsid and monocondylic. → 
- Pelvic girdle was attached to vertebral column with saccharal vertebrae.
- No. of phalanges were 2:3:4:5:3 or 2:3:4:5:4

