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UNIT - 7(C)

Q. Snake ka biting and feeding mechanism ka chitra sahit varnan karey.

Ans. Bellt and ewes (1964) Studied the biting mechanism on puff adder (Bitis arietans). Recently Bellairs (1969), Bellairs and Attridge (1975) Concluded that the biting mechanism of puff adder is applicable in all poisonous snakes.

The mechanism also entails the story in case of Indian poisonous snakes,

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Specially the Cobra and Viper groups. the mechanism of biting is a complicated process and the Sequence of biting may be discussed in the three observable steps

These are:

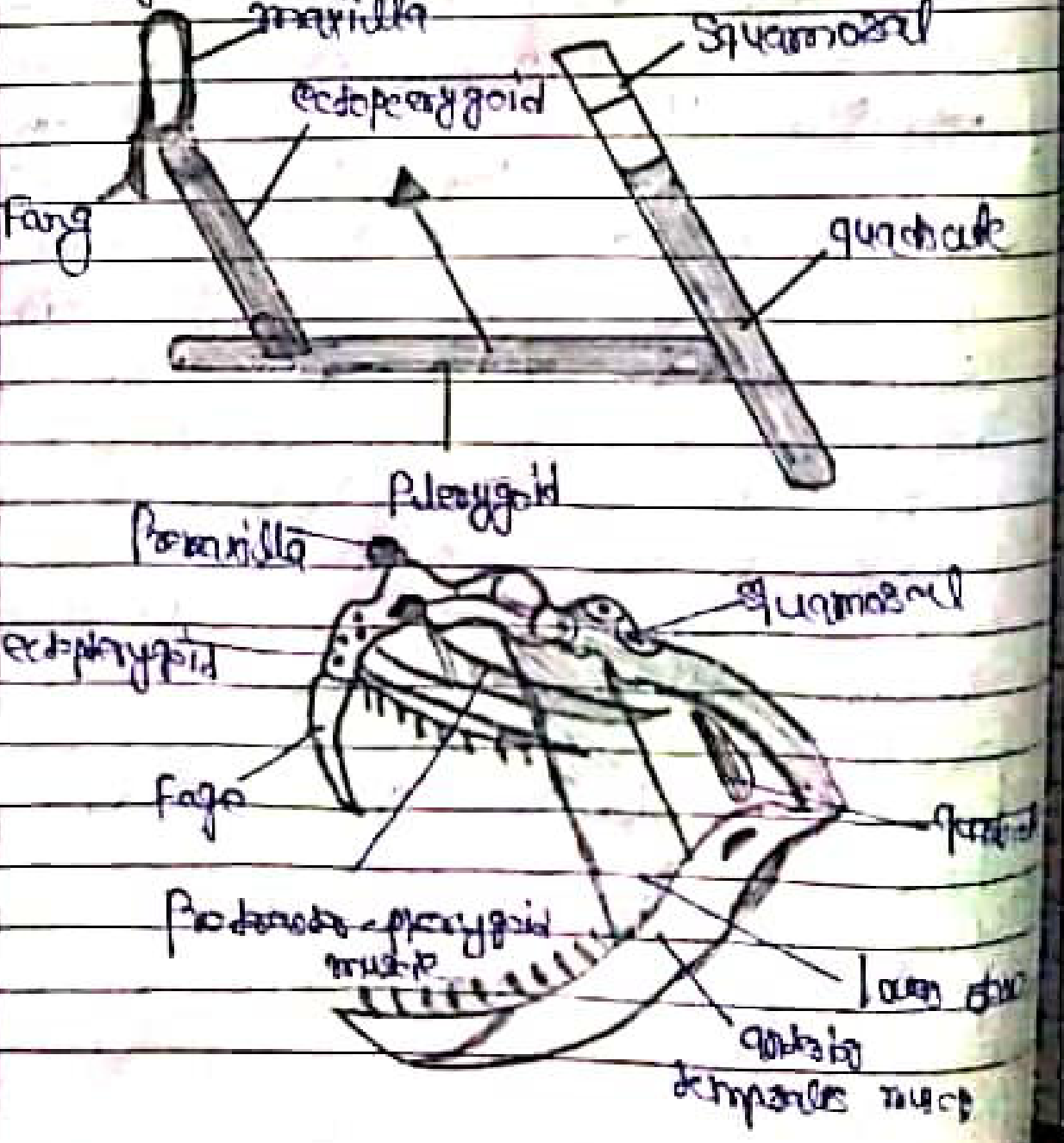
(a) opening of the mouth:
Just before biting the digastric muscle contracts. as a result the mouth opens (Fig. 8.32 B).

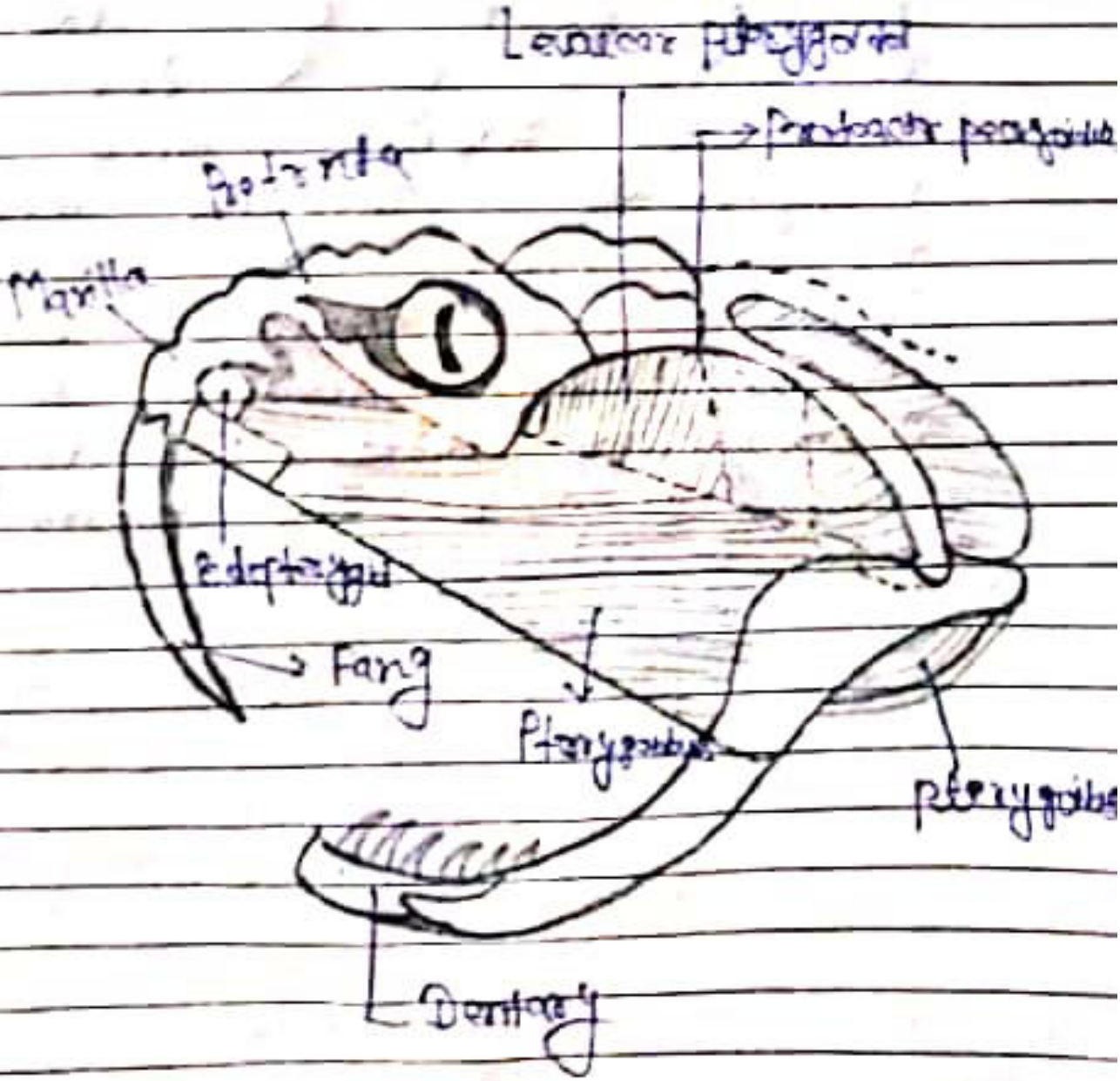
(b) Rotation of maxilla:
As the mouth opens, the lower jaw moves forward and a rotation of the squamosal quadrate and mandible in relation to each other occurs. Now the Sphenopterygoid muscles Contract

This Contraction results in the forward movement of pterygoid and up-pushing of the ectopterygoid.

The upward movement of the ectopterygoid brings about a rotation of the maxilla on its own axis round the lacrimal and as the end result the fang is raised and comes to its Standing the fang is raised and Comes to its Striking & horizontal (Fig. 8.32 B, C, D) when the mouth remains closed But during opening of the mouth to bite & the fang assumes almost Vertical position. Bolk and Ewer (1961) have suggested that the quadrate is loosely attached to the posterior part of the pterygoid

and the work force which is generated by the contraction of the lower end of quadrate. Could not help in the forward movement of pterygoid and ectopterygoid.





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(c) Closing of mouth:
This is brought about by the contraction of the temporalis muscles and sphenopterygoid muscles. while the point of the fangs is directed backward while the mouth is closed. it takes a longer time to open the mouth than to close it.

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