

13. STRUCTURAL ORGANISATION OF ANIMALS

Learning Objectives

At the end of this lesson the students will be able to:

- ❑ Understand the external morphology of the leech and rabbit.
- ❑ Recognize the structural features of different organ systems.
- ❑ Will be able to understand the physiology of various organ systems of leech and rabbit.
- ❑ Learn the parasitic adaptations of leech.
- ❑ Identify the type of dentition and its significance in rabbit.
- ❑ Perceive the differences between the structural organisation of an invertebrate (leech) and vertebrate (rabbit).

Important Points and Notes

- Leeches do not have ear, hence can sense vibrations through their skin.
- Leeches have 2 to 10 tiny eyes, which helps them to locate their food.
- Leeches can suck blood five times more than their body weight.
- It may take more than a year for the complete digestion and absorption of a full meal.
- Leeches are effective in increasing blood circulation and breaking up blood clots. It is surprising that they can be used to treat cardiovascular diseases. Biochemical substances derived from leech saliva are used for preparation of pharmaceutical drugs that can treat hypertension.
- The pygmy rabbit was listed as a threatened species in Washington in 1990, because of decline in its population size and distribution due to habitat loss. In March 2003, the Columbia Basin Pygmy Rabbit was federally listed as an endangered species.