

## Module ZH103: Chordates (35)

1. Chordate Classifications : (up to orders with salient features and examples, except for birds and mammals only names and examples of the orders )

2. Chordates: special topics reflecting diversity of adaptations

- 2.1 Feeding in Cephalochordates and Urochordates
- 2.2 Larval form and metamorphosis in Ascidians
- 2.3 Experimental analysis of function of a vertebrate structure: study of feeding strike of a venomous snake
- 2.4 Biting, venom delivery and feeding in snakes
- 2.5 General features of vertebrate integument and its specialization with reference to exoskeletons
- 2.6 Evolution of aortic arches in vertebrates
- 2.7 Evolutionary trend in vertebrate brains
- 2.8 Tripartite concept of kidney organization
- 2.9 Ruminant stomachs- Digestive tract specializations as fermentation chambers in herbivore mammals
- 2.10 Dentitions in vertebrates
- 2.11 Vertebrae: different types

## Module ZH104: Animal Behaviour (20)

1. Tinbergen's four questions on studying animal behaviour;
2. Definitions and examples of- habituation, instinctive behaviour, FAP, imprinting and other programmed learning, cultural transmission
3. Social animals- advantages and disadvantages of living in a group, examples of social animals and outline of their social structures
4. Definition and examples of altruism, eusociality, units of selection (just preliminary ideas)