

Unit 2

STRUCTURAL ORGANISATION IN PLANTS AND ANIMALS

Chapter 5

Morphology of Flowering Plants

Chapter 6

Anatomy of Flowering Plants

Chapter 7

Structural Organisation in Animals

The description of the diverse forms of life on earth was made only by observation – through naked eyes or later through magnifying lenses and microscopes. This description is mainly of gross structural features, both external and internal. In addition, observable and perceivable living phenomena were also recorded as part of this description. Before experimental biology or more specifically, physiology, was established as a part of biology, naturalists described only biology. Hence, biology remained as a natural history for a long time. The description, by itself, was amazing in terms of detail. While the initial reaction of a student could be boredom, one should keep in mind that the detailed description, was utilised in the later day reductionist biology where living processes drew more attention from scientists than the description of life forms and their structure. Hence, this description became meaningful and helpful in framing research questions in physiology or evolutionary biology. In the following chapters of this unit, the structural organisation of plants and animals, including the structural basis of physiologial or behavioural phenomena, is described. For convenience, this description of morphological and anatomical features is presented separately for plants and animals.