# 13. List out the evidences in support of evolution. Fossil study, comparative morphological studies, biochemistry and physiology, molecular biology. Evidences of evolution

### Fossils

#### 14. What are fossils?

Fossils are remnants of primitive organisms. They are evidences that explain the history of life on earth.

#### 15. What evidences do fossils give?

Complex organisms originated from primitive single celled organisms with simple structure. The older fossils had simpler structure. The fossils that were formed later had complex structure.

**Comparative** morphological studies 16. What are homologous organs?

Organs that are similar in structure and perform different functions are called homologous organs. Eg: The forelimbs of lizard, bat and whale.

# 17. What evidences do comparative morphology give?

Though homologous organs have different external features, they have the same internal features. It gives the inference that all the present organisms have evolved from a common ancestor.

## **Biochemistry and Physiology**

18. What evidences do biochemistry and physiology give us?

Organisms show differences in their external features. But their biochemistry and physiology are almost the same.

- Enzymes control chemical reactions.
- Energy is stored in ATP molecules.
- Genes determine hereditary traits.
- Carbohydrates, proteins and fats are the basic substances.

From the above facts it becomes clear that the organisms that we see today are formed from a common ancestor.