1. Why are living organisms classified?
Solution: Living organisms are classified because of the following reasons:
(i) Easy identification.
(ii) Study of organisms of other places.
(iii) Study of fossils
(iv) Grouping helps in study of all types of organisms while it is impossible to study individually all of them.
(v) Itbringsoutsimilaritiesanddissimilarities. They help in knowing relationships among different groups.
(vi) Evolution of various taxa can be known.

2. Why are the classification systems changing every now and then?
Solution: From very early days till now biologists use several characters for classification system. These are morphology, anatomy, cytology, physiology, ontogeny, phylogeny, reproduction, biochemistry, etc. But day by day biologists are learning something new about organisms from their fossil records and using" advanced study techniques such as molecular phylogeny, etc. So their point of view about classification keeps changing. Thus the system of classification is modified every now and then.

3. What different criteria would you choose to classify people that you meet often?
Solution: The various criteria that may be chosen to classify people whom we meet often include behaviour, geographical location, morphology, family members, relatives, friends etc.

4. What do we learn from identification of individuals and populations?
Solution: The knowledge of characteristic of an individual or its whole population helps in identification of similarities and dissimilarities among the individuals of same kind or between different types of organisms. It helps us to classify the organisms in various categories depending upon these similarities and dissimilarities.

5. Given below is the scientific name of mango. Identify the correctly written name.
Mangifera Indica or Mangifera indica
Solution: The correctly written scientific name of mango is Mangifera indica.

6. Define a taxon. Give some example of taxa at different hierarchical levels.
Solution: A taxonomic unit in the biological system of classification of organism is called taxon (plural taxa). For example a phylum, order, family, genus or species represents taxon. It represents a rank. For example, all the insects form a taxon. Taxon of class category for birds is Aves and taxon of Phylum category for birds is Chordata. The degree of relationship and degree of similarity varies with the rank of the taxon. Individuals of a higher rank, say Order or Family, are less closely related than those of a lower rank, such as Genus or Species.

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