

## CLASS X

### HEREDITY AND EVOLUTION

1. Name some tools for tracing evolutionary relationships.
2. “ It is not as if one species is eliminated to give rise to a new one “ justify the statement.
3. What do we understand by the term ‘ artificial selection ‘
4. Match the following:

Sterile flowers	Kohlrabi
Arrested flower development	Cauliflower
Swollen parts	Broccoli
Larger leaves	Kale
5. During evolution,a change that is useful for one property to start with can become useful later for quite a different function. Explain with the help of an example.
6. How can we find out age of fossils.
7. What is the relationship of classification & evolution?
8. Explain genetic drift.
9. Why do we find very little variations among sugarcane plants.
10. Why did Mendel choose pea plant for his experiments.
11. What is the difference between dominant & recessive gene.
12. With the help of an example show that genes control traits.
13. Give some contrasting characters seen in pea plant.
14. Name an animal which can change its sex.
15. Name the homologous organs of three animals.
16. What name is given to the sequence of gradual changes over millions of years in which new species are formed.
17. With the help of a diagram show how sex is determined in human beings.
18. A mendelian experiment consisted of breeding tall pea plants bearing violet flowers with short pea plants bearing white flowers. The progeny all bear violet flowers but almost half of them were shown. Suggest the genetic make up of the tall parent.
19. What would be the genotypic ratio in  $F_2$  generation of monohybrid cross.
20. If a plant is heterozygous for tallness,the  $F_2$  generation has both tall and dwarf plants. Which principle does it prove?