

Heredit y and Evolution

ONE MARKS QUESTION

1. Mention the ways by which variant genotypes are produced in an organism?
2. How are fossils helpful in developing evolutionary relationships?
3. The number of chromosomes in human ovum is
4. The hereditary units are ?
5. The science dealing with biotechnology is called ?
6. Name the scientific name of plant selected by Mendel .
7. What is genotype ?
8. How many pair of sex chromosome are present in human being.
9. What is DNA ?
10. What is a gene ?

TWO MARKS QUESTION

11. How do Mendel's experiments show that traits may be dominant or recessive?
12. Does genetic combination of father play a significant role in determining the sex of the child? Show with the help of a flow chart.
13. Why did Mendel select pea plant for his experiment .
14. Name for varieties of cabbage developed from wild cabbage through artificial selection?
15. Design a mono hybrid cross.
16. Explain law of dominance.
17. How is the equal genetic contribution of male and female parents ensured in progeny?
18. Organism showing asexual reproduction show little variation from each other?
19. State two methods for determining the age of fossils.

THREE MARKS QUESTION

20. If a trait exists in 10% of a population of an asexually reproducing species and a trait B in 60% of the same population which trait is likely to have arisen earlier? Explain how advantageous variations like long neck help an organism like Giraffe to survive better?
21. Why are human beings, who look different from each other size and colour belongs to the same species?
22. All the human races like Africans, Asians, European and others might have from common ancestors provide few evidence in support of the view.
23. What is chromosome? Explain how in sexually reproducing organism the number of chromosome in the progeny is maintained. ?
24. What is DNA copying ? state its importance .

FIVE MARKS QUESTION

25. How has the method of 'artificial selection' by humans helped in the evolution of different vegetables?
26. How do Mendel's experiments show that traits are inherited independently?
27. Human are not pinnacle of evolution . justify this statement with suitable example.
28. Define Mendels law of independent assortment by designing a dihybrid cross.