

HSE2KROXI

9319-B

BIOLOGY (Botany)

(Long Answer Type Questions)

1. What is Semiconservative DNA Replication ? Describe the mechanism of the same with suitable diagrams.

Or

Define multiple allele with the help of suitable example. Explain the phenomenon of multiple allelism.

2. What are Negative Interactions ? Describe various negative interactions found among organisms.

Or

Give an account of energy flow in an ecosystem.

(Short Answer Type Questions)

3. Write short notes on :

(i) Hydrophilly (ii) Entomophilly (iii) Anemophilly.

4. Enunciate Mendel's law of segregation with the help of Monohybrid cross

5. Write explanatory note on single cell protein (SCP).

6. What is Biodiversity ? Why has it become important recently ?

(Very Short Type Questions)

7. Re-arrange the following in order of their position from outside in a carpel:

(i) Nucellus (ii) Embryo sac (iii) Ovary (iv) integuments

8. Name the water fern that is an excellent biofertilizer for rice cultivation. What helps the fern to do so ?

9 Why would biopiracy affect India most?

10. What are Threatened Species ? Name their three types in order of the danger of extinction they face,

(Objective Type Questions)

11. Pick the odd one out:

(a) Chalazogamy (b) Porogamy (c) Mesogamy (d) Allogamy

12. A hyaline bisexual and self-fertilized flower that does not open at all is chasmogamous.

(True/False)

13. Preserving seeds of plants, vegetatively propagating plants, cells, sperms, ova at -196°C (a temperature of liquid nitrogen) is called (Give one word)

14. Define the term biome.

15. The phenotype ratio obtained by Mendel in his famous monohybrid cross in F_2 generation was