

G-52

Roll No.

Total No. of Questions : 15]

(Total No. of Printed Pages 2

HS2PKJ13

69019-P

BOTANY

(Biology)

Time : 1½ Hours + 15 Minutes extra to read the question paper]

[Maximum Marks : 35

(Long Answer Type Questions)

1. What is a Monohybrid Cross ? State and explain Mendel's law of segregation. Why this law is universally accepted ?

Or

What is DNA replication ? Describe semiconservative replication of DNA (with diagram).

5

2. What is Conservation ? Why is there a need for conservation of biodiversity ?

Or

What are the sources of Water pollution ? Suggest some steps to be taken to control water-pollution.

5

(Short Answer Type Questions)

3. Define Pollination. What are outbreeding devices which promote cross pollination ?
4. How does a test cross differ from a back cross ? Make Punnet Square.
5. What are the applications of Plant Breeding ?
6. Explain the flow of energy in an Ecosystem.

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(Very Short Answer Type Questions)

7. What is Vegetative Propagation ? Write its two merits.
8. Write short note on Biofortification.
9. Differentiate between Natality and Mortality.
10. What are effects of Deforestation ?

(Objective Type Questions)

11. Name the part of pistil which receive pollen grains.
12. In angiosperms embryosac represents :

- (a) Female gametophyte
- (b) Sporophyte
- (c) Male gametophyte
- (d) All of these

13. What is initiation codon ?

14. Biogas is produced by Methanogens.

15. Expand BOD, COD.

(True/False)