Roll No. ....

Total No. of Questions: 14+11]

[Total No. of Printed Pages: 8

#### XIIAPBIKD22

6903-B

**BOTANY** 

(Biology)

(New/Old Course)

Time: 11/2 Hours]

[Maximum Marks: 35

NOTE:— The questions in the question paper are based on revised and prerevised syllabus marked as "New Course" and "Old Course"
respectively and candidates are advised to appear in the relevant
course meant for them. Candidates who may attempt the questions
partly from "New Course" and partly from "Old Course" will not
be awarded. Candidates are also advised to record "New Course"
or "Old Course" as the case may be, on the front page of the
answer-book.

Turn Over

XIIAPBIKD22-6903-B (New)

## (New Course)

#### Section-A

1 each

- Give an example of bird pollinated flower.
- In sweet potato, vegetative propagation takes place through ...... 1. 2.

(Fill in the blank)

- Haemophilia is a/an: 3.
  - (A) Deficiency disorder
  - (B) Y-linked disorder
  - (C) X-linked disorder
  - (D) Autosomal sex disorder
- Name the first National Park of India. 4.

### Section-B

2 each

- Write a brief note on Micropropagation. 5.
- What is Operon? Name the three types of genes which make up 6. an operon.
- What is Biogas? Discuss its production in a Gobar Gas Plant. 7.

Or

Write short note on symbiotic nitrogen fixation.

XIIAPBIKD22-6903-B (New)

F\_3\_B

#### Section-C

3 each

- 8. Write three characteristics of Genetic Code.
- 9. Write short notes on the following:
  - (A) Ex-situ conservation
  - (B) IUCN Red List
  - (C) Protected areas
- 10. What is Triple Fusion? Where and how does it take place? Name the nuclei involved in triple fusion.
- 11. A woman with blood group O married a man with AB group.
  Show the possible blood groups of progeny. List the all alleles involved in this inheritance.
- 12. What do you mean by Plant Succession? Describe the process of succession in a pond.

Or

What is Acid Rain? What are its effects on plants?

Turn Over

XIIAPBIKD22-6903-B (New)

F-3-B

# Section-D

5 each

13. Define Sewage. How is sewage subjected to various treatments in STP?

Or

Discuss the various steps in breeding a new genetic plant variety.

14. Write a detailed note on agrochemicals and their effects on environment.

Or

What kinds of threats to the biodiversity may lead to its loss?