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D6BBT2105

Reg.No.....

Name:

**SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2024
(Regular/Improvement/Supplementary)**

BOTANY

GBOT6E02T: ADVANCES IN CROP IMPROVEMENT

Time: 2 Hours

Maximum Marks: 60

SECTION A: Answer the following questions. Each carries *two* marks.

(Ceiling 20 Marks)

1. Comment on any two breeding techniques of Arecanut.
2. Briefly mention any breeding achievements of Rubber.
3. Write a short note on gene for gene relationship.
4. Write a brief account on research activities of CTCRI.
5. Briefly discuss about Heterobeltiosis.
6. What is meant by ion exclusion?
7. Write a short note on any morphological feature with respect to insect resistance.
8. Briefly discuss about the pathogenicity with respect to vertical resistance.
9. Write a brief account on achievements of IISc.
10. Comment on cytoplasmic resistance with respect to diseases.
11. Explain the genetic variability of Cashew.
12. Comment on saline soils and their characteristics.

SECTION B: Answer the following questions. Each carries *five* marks.

(Ceiling 30 Marks)

13. Discuss the breeding techniques and achievements in Pepper.
14. Briefly discuss about pureline selection as a crop improvement method.
15. Explain the significance of haploids and polyploids.
16. Write the procedure of mutation breeding.
17. Discuss the breeding techniques and achievements in Coconut.
18. Explain the effect of biotic and abiotic stresses on the performance of crops.
19. Discuss some points with respect to the breeding for resistance to parasitic weeds.

SECTION C: Answer any *one* question. Each carries *ten* marks.

20. Write an essay on different activities and classification of Plant Genetic Resources.
21. Explain drought stress, resistance, breeding approaches and difficulties in breeding for drought resistance.

(1 x 10 = 10 Marks)