

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2025
(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 ICRISAT.
2. What is clonal selection? Mention its merits and demerits.
3. Name two improved varieties of Pepper.
4. Mention the significance of haploids in crop improvement.
5. Briefly explain the difficulties in breeding for drought resistance.
6. Write a note on vertical and horizontal resistance.
7. Expand JNTBGRI and CTCRI.
8. Explain intergeneric hybridization with a suitable example.
9. What is plant introduction? Mention its merits and demerits.
10. Give two examples for achievements in insect resistance breeding.
11. Comment on biofertilizers used for crop improvement.
12. Give an account on the origin of Cashew and Pepper.

SECTION B: Answer the following questions. Each carries *five* marks.
(Ceiling 30 marks)

13. Write an account on the mutation breeding and make a note on its achievements.
14. Explain the mechanism of disease resistance in plants.
15. Give a detailed account on two agencies involved in plant genetic resources activities in India.
16. Write an account on the sources and methods of disease resistance breeding.
17. What is the significance of heteroploidy in crop improvement? Give examples.
18. Write an account on the classification of Plant genetic resources.
19. Discuss the breeding for mineral stress resistance.

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

20. Give an account on the origin, genetics, breeding techniques and achievements in Rice and Coconut.
21. Write an essay on breeding for resistance to abiotic stresses.

(1 × 10 = 10 Marks)