

QP CODE: 25020427

Reg No	:	
Name	:	

B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

Sixth Semester

CORE COURSE - BO6CRT09 - GENETICS, PLANT BREEDING AND HORTICULTURE

Common for B.Sc Botany Model I, B.Sc Botany Model II Food Microbiology, B.Sc Botany Model II Environmental Monitoring And Management, B.Sc Botany Model II Horticulture and Nursery Management, B.Sc Botany Model II Plant Biotechnology & B.Sc Botany and Biotechnology Model III Double Main.

> 2017 Admission Onwards 8EC6C99C

Time: 3 Hours

Max. Marks : 60

Part A

Answer any **ten** questions. Each question carries **1** mark.

- 1. What is a complementary gene ratio?
- 2. What do you meant by linkage map?
- 3. What do you meant by pedigree analysis?
- 4. What is the concept of gene pool?
- 5. What is Secondary Plant Introduction?
- 6. What is Mass Selection?
- 7. What is pedigree method?
- 8. What is Embryo culture?
- 9. Name a chemical used for testing seed viability.
- 10. What is a kitchen garden?
- 11. What is the purpose of pruning?
- 12. What is the importance of wiring in Bonsai making?

 $(10 \times 1 = 10)$

Part B

Answer any **six** questions.

Each question carries 5 marks.



- 13. What is the significance of a back cross and test cross?
- 14. Explain the mechanisim of self sterility in Nicotiana.
- 15. Explain chromosome theory of sex determination with special reference to XX-XY mechanism.
- 16. What do you meant by maternal effect? Give its significance in snail.
- 17. Explain mechanisim of disease resistance in plants.
- 18. What are the limitation of Polyploidy Breeding?
- 19. Explain different classification of vegetables.
- 20. What are the advantages and disadvantages of vegetative propagation?
- 21. Describe the preparation of potting mixture.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **10** marks.

- 22. What is the reson for Mendel's success in his experiments with Pea plant?
- 23. Explain quantitative inheritance with any suitable example.
- 24. Explain the objectives of Plant Introduction.
- 25. Describe the variuos garden implements which you have studied.

(2×10=20)