

QP CODE: 22100940



Reg No :

Name :

B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, APRIL 2022

Sixth Semester

CORE - 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

3D3E6BF8

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. What are complementary Genes?
2. Define chiasmata.
3. What is chromosome theory of sex determination?
4. What is the concept of gene pool.
5. What is the full form of RRII?
6. What is emasculation?
7. What is Inbreeding Dipression?
8. What is pollen culture?
9. What is pomology?
10. What is T budding?
11. What is the purpose of wiring in Bonsai?
12. What is an orchidarium?

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*





13. Explain Mendel's principles of Independent Assortment and dihybrid cross?
14. Explain inheritance of comb pattern in fowls?
15. Explain the inheritance of ear size in maize.
16. Explain how chloroplast variegation occurs in 4-O' clock plants.
17. Explain the merits and Demerits of Plant Introduction?
18. Explain the procedure for Mass selection.
19. What are the steps involved in seed bed preparation and seed transplantation.
20. Explain the importance of a medicinal garden.
21. Explain different factors to be considered while designing a garden.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **10** marks.

22. What is the reason for Mendel's success in his experiments with Pea plant?
23. Explain sex linked genes and its inheritance pattern with an example in drosophila and in man.
24. Explain the method and significance of mutation and Polyploidy Breeding.
25. Describe the various garden implements which you have studied.

(2×10=20)

