



QP CODE: 24000669



Reg No :

Name :

B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, MARCH 2024

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

ED101472

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. What is a gene?
2. What is the difference between single cross over and double cross over?
3. What do you mean by maternal effect?
4. What is the concept of gene pool?
5. What is Genetic Erosion?
6. What is Selection?
7. What is Distant Hybridization?
8. What is Hybrid vigour?
9. What are perennials?
10. Mention any two advantages of micropropagation.
11. What is an aquatic garden?
12. What is trophy?

(10×1=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. With suitable example explain incomplete dominance.
15. Explain sex linked inheritance with an example of eye colour in *Drosophila*.
16. Explain the inheritance of ear size in maize.
17. Explain the application of Mutation breeding.
18. Explain the role of embryo culture in plant breeding.
19. What is the advantage and disadvantage of mist chamber?
20. What are the steps involved in seed bed preparation and seed transplantation?
21. Describe the preparation of potting mixture.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **10** marks.

22. What is non-epistasis geneic Interaction ratio? Explain the inheritance of comb pattern in fowl using a punnett square?
23. Explain chromosome theory of sex determination with suitable examples.
24. Explain the procedure involved in plant Introduction in India.
25. Explain the steps involved in creating a bonsai.

(2×10=20)

