

QP CODE: S0100450



Reg No :

Name :

BSc DEGREE (CBCS) EXAMINATION, MARCH 2020

Sixth Semester

Core course - BO6CRT09 - GENETICS, PLANT BREEDING AND HORTICULTURE

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 Food Microbiology, B.Sc Botany Model II Plant Biotechnology, B.Sc Botany and Biotechnology Model III Double Main, B.Sc Botany Model II Horticulture and Nursery Management

2017 Admission Onwards

27A927A2

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. What is a phenotype?
2. What do you mean by recombination frequency?
3. What do you mean by pedigree analysis?
4. What are polygenes? Write an example of polygenic inheritance.
5. What is Genetic Erosion?
6. What are centers of Origin?
7. What is Hybrid vigour?
8. What are Gamma Gardens?
9. Differentiate between binnials and Perennials?
10. Name a garden tool used in lawn maintainance.
11. What is an aquatic garden?
12. What is a pergola?

(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. Explain inheritance of comb pattern in fowls?
15. How do sex determination occur in plants with special reference to *Melandrium album*?
16. Which is the fundamental law of population genetics and write down its salient features.
17. What is the merits and demerits of Mass Selection?
18. Explain the procedure for hybridization by Pedigree Method?
19. What are the steps involved in seed testing and seed certification?
20. What is layering? Explain different types of layering?
21. Explain the significance of wiring and training in bonsai making?

(6×5=30)

Part C

Answer any two questions.

Each question carries 10 marks.

22. What is epistasis? With suitable examples explain dominant and recessive epistasis?
23. Describe extra chromosomal inheritance with suitable examples.
24. Explain the role of plant tissue culture in plant breeding.
25. Explain plant growing structures and its significance.

(2×10=20)

