**B.Sc. Botany Degree (C.B.C.S.S.) EXAMINATION, OCTOBER 2015**

**Fifth Semester**

**Model Questions**

**Core course: GENETICS, PLANT BREEDING AND HORTICULTURE**

(Common for B.Sc. Botany Model I, Model II Programmes)

Time: Three Hours Maximum marks: 60

**Part A**

Answer **all** questions.

Each question carries **1** mark

1. What is anthesis?

2. Differentiate between genotype and phenotype

3. What is a test cross?

4. What is Y linked inheritance?

5. Define epistasis

6. What is plant introduction?

7. List out the merits of drip irrigation

8. Write a brief note on pruning (8×1=8 marks)

**Part B**

Answer any **six** questions.

Each question carries **2** marks

9. State Mendel’s law’s of inheritance

10. Explain incomplete dominance with an example.

11. Citing an example describe cytoplasmic inheritance

12. Write a note on plant nutrition

13. What are the advantages of drip irrigation?

14. What are complementary genes? Explain with example

15. Explain genic balance theory of sex determination

16. What are weeds? How will you manage the weed problem in a garden?

17. List out the advantages of vegetative propagation

18. Write a note on garden implements (6×2=12 marks)

**Part C**

Answer any **four** questions.

Each question carries **4** marks

19. Give an account of different types of layering

20. Enumerate the steps involved in plant hybridization. Add a note on the importance of hybridization in crop improvement

21. Explain multiple allelism with an example .

22. During a visit to a foreign country you became interested in a plant. What are the steps for bringing the plant to your country and establishing it in the new environment?

23. Why is that males are badly affected by haemophilia than females?

24. Explain the various types of budding (4×4=16 marks)

**Part D**

Answer any **two** questions.

Each question carries **12** marks

25. citing a suitable example describe recessive epistasis

26. What is a pureline? Explain the method of pureline selection

27. Write an account on mutation breeding

28. Give a detailed account of various garden components

 (2×12=24 marks)