

Reg. No. : .....

Name : .....

**Third Semester B.Sc. Degree Examination, October 2019**

**First Degree Programme under CBCSS**

**Complementary Course**

**BO 1331- SYSTEMATIC BOTANY, ECONOMIC BOTANY, ETHNOBOTANY**

**PLANT BREEDING**

**(2014 Admission Onwards)**

Time : 3 Hours

Max. Marks : 80

- I. Write short notes on the following (All questions are compulsory)
1. Define Heterosis.
  2. What is Placentation?
  3. What is Floral Diagram?
  4. Explain Acclimatization.
  5. What is meant by binomial nomenclature?
  6. Write the binominal of Ragi.
  7. What is Emasculation?
  8. Comment on Monadelphous stamen.

9. What is Intergeneric Hybridization?
10. Define Polyploidy.

(10 × 1 = 10 Marks)

II. Answer **any eight** of the following

11. Write the binominal, family and morphology of useful part of cotton.
12. What is the importance of Hebarium?
13. Write a note on basic rules of binominal nomenclature.
14. Describe the artificial system of classification.
15. Mention the salient features of corolla in Papilionaceae.
16. Write a note on the floral characters of Poaceae.
17. Describe spike with an example.
18. Write a note on floral characters of the family Verbenaceae.
19. Explain the characters of Solanaceae.
20. Write the economic importance of the family Malvaceae.
21. Write an account on polyploidy breeding.
22. Mention objectives of plant breeding.

(8 × 2 = 16 Marks)

III. Answer **any six** of the following

23. Write an account on racemose type of inflorescence.
24. Describe the ethanobotanical significance of *Trichopus zeylanicus*.
25. Give an account on plant introduction
26. Explain the procedure for hybridization.

27. Give the binominal, family and morphology of useful parts of the following:

(a) Black gram

(b) Asafoetida.

28. Give the binominal, family and morphology of useful parts of any two spices.

29. Distinguish between mass selection and pureline selection.

30. Explain phylogenetic system of classification.

31. What is aestivation? Explain the different types with examples.

**(6 × 4 = 24 Marks)**

IV. Write essay on **any two** of the following

32. What are the different types of inflorescence? Classify them.

33. Write an account on natural system of classification proposed by Bentham and Hooker. Mention the systematic position of Apocynaceae under this system.

34. Explain the methodology, application, merits and demerits of mutation breeding.

35. Write an account of ethnobotany and its importance in modern medicine.

**(2 × 15 = 30 Marks)**