

D 51300

(Pages : 2)

Name.....

Reg. No.....

**THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**

(CUCBCSS—UG)

Complementary Course

**BOT 3C 03—SYSTEMATIC BOTANY, ECONOMIC BOTANY, PLANT BREEDING AND HORTICULTURE**

Maximum : 64 Marks

Time : Three Hours

**Part A**

*Answer all questions.  
Each question carries 1 mark.*

**I. Answer in one word.**

- 1 Define cohesion.
- 2 What is obdiplostemonous condition ?
- 3 Name the family having coronal hairs.
- 4 Define olericulture.
- 5 Name a botanic garden in India.
- 6 \_\_\_\_\_ is an example for artificial system of classification.
- 7 Define papilionaceous corolla.
- 8 What is scion ?
- 9 The morphology of useful part of Cotton is \_\_\_\_\_.
- 10 \_\_\_\_\_ is the binomial of Green gram.

(10 × 1 = 10 marks)

**Part B**

*Answer any seven questions.  
Each question carries 2 marks.*

**II. Answer the following.**

- 11 Define floral diagram.
- 12 What is binomial nomenclature ?
- 13 Write the general floral formula of Apocynaceae.
- 14 Explain the types of phyllotaxy you have studied.
- 15 Comment on effective publication of botanical names.

Turn over

16. Write the binomial, family and morphology of the useful part of the following plants.

(a) Rubber. (b) Coffee.

17. What is intergeneric hybridization? Cite an example.

18. Comment on the medicinal importance of *Justicia adhatoda*.

19. Differentiate between epigynous and perigynous condition.

20. Describe air layering.

(7 × 2 = 14 marks)

### Part C

*Answer any six of the following.*

*Each question carries 4 marks :*

III. 21. Discuss the role of botanic gardens and herbaria in taxonomy.

22. Differentiate between approach and tongue grafting.

23. Describe the types of placentation you have studied.

24. Give a brief account on Cytotaxonomy.

25. Give the binomial, family, morphology of the useful part and uses any of two spices.

26. Describe the procedure and applications of mutation breeding.

27. Give the diagnostic characters of Malvaceae.

28. Enumerate the demerits of Bentham and Hooker's system of classification.

(6 × 4 = 24 marks)

### Part D

*Answer any two of the following.*

*Each question carries 8 marks.*

IV. 29. Write an essay on the different types of selection methods employed in plant breeding.

30. Describe the types of inflorescence you have studied with suitable examples.

31. Describe the vegetative and floral features of Poaceae. Give an account on the economic importance of the family.

(2 × 8 = 16 marks)