



MAR IVANIOS COLLEGE (AUTONOMOUS)
THIRUVANANTHAPURAM

Reg. No.:.....

Name:.....

Third Semester B.Sc. Degree Examination, November 2016

First Degree Programme under CBCSS

Complementary Course: Botany – III (for Zoology)

**AUBO331.2e: Systematic Botany, Economic Botany, Ethno Botany,
Plant Breeding**

Time: 3 Hours

Max. Marks: 80

SECTION – A

Write short notes on ALL the following.

1. Monoadelphous condition
2. Superficial placentation
3. Mutation breeding
4. Fruit of Asteraceae
5. Name the type of inflorescence in *Achyranthes aspera*
6. Standard size of the Herbarium sheet
7. Stamens of Annonaceae
8. Source of Asafoetida
9. NBPGR
10. Jeevani

(10 × 1 = 10 Marks)

SECTION – B

Answer any EIGHT questions, not exceeding one paragraph.

11. Differentiate between ray floret and Disc floret.
12. Describe imbricate aestivation.
13. Which are the oil yielding parts of Sesame and coconut ?
14. Write binomial and family of Sugar cane and Cardamom.
15. State any two demerits of Bentham and Hooker's classification.

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16. Mention any three distinguishing features of Rubiaceae.
17. Differentiate between Cereals and millets.
18. Give the binomial, family and morphology of the useful parts of Cotton.
19. Briefly explain significance of Ethnobotany.
20. Write notes on any Two of the following:
a) Plant introduction b) Inter generic hybridization c) Clonal selection.
21. Enumerate the main objectives of hybridization in plant breeding programme.
22. With the help of sketch explain the structure of Heterogamous Capitulum.

(8 × 2 = 16 Marks)

SECTION – C

Short essay type : Answer any SIX questions.

23. Describe the characteristic feature of the family Rutaceae.
24. Discuss the economic importance of Poaceae
25. What is meant by floral diagram ? Construct the floral diagram and write the Floral formula of a plant belonging to the family Malvaceae.
26. Give the Binomial and the family, mentioning the part from which the following are yielded – a) Ragi b) Cumin c) Black gram.
27. Define crop improvement. List out the objectives of plant breeding programme.
28. Write critical notes on inflorescence of Graminae
29. Explain the limitations of mutation Breeding.
30. How does Mass selection differ from Pureline selection ?
31. Write any four advanced characters of Asteraceae.

(6 × 4 = 24 Marks)

SECTION – D

Long essay type : Answer any Two questions.

32. With suitable diagram describe the floral features of Rubiaceae and Asteraceae. Mention the botanical name of any one of economic importance and name the products obtained from them.
33. With suitable examples, give an account of the different types of inflorescences found in angiosperms.
34. Explain the methods of plant breeding.
35. Mention the binomial, family, morphology of the useful parts and uses of any three medicinal plants studied by you.

(2 × 15 = 30 Marks)

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