

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI 600 086

B.SC. DEGREE: BRANCH V. A. PLAT BIOLOGY ANDD PLANT BIOTECHNOLOGY

CODE: 11BT/MC/TE 34 TAXONOMY OF ANGIOSPERMS AND ECONOMIC BOTANY

DURATION: 3 HOURS

TOTAL MARKS: 100

Section A - Answer all the Questions (18 x 1 = 18 Marks)

I. Fill up the following:

1. Bentham and Hooker's system of classification does not bring out the _____ relations of the various groups of plants.
2. The term "Natural Order" is equivalent to _____
3. The standard size of the plant press is _____
4. Fabaceae is placed in the order _____

II. Match the following:

- | | |
|------------------------|---------------------------|
| 5. Saffron | (a) Linnaeus |
| 6. Species Plantarum | (b) Takhtajan |
| 7. <i>Malus malus</i> | (c) <i>Crocus sativus</i> |
| 8. Phylogenetic system | (d) Tautonym |

III. Say True or False:

9. The commercial fibre is obtained from the species of *Corchorus*
10. Asafoetida is a stem resin.
11. Usually the members of Poaceae are herbs.
12. The name of the scientist who first described the species follows the binomial.
13. After mounting on herbarium sheets, the plant specimens are subjected to drying.

IV. Choose the right answer:

14. The father of Botany is
(a) Plato (b) Theophrastus (c) Aristotle (d) Linnaeus

15. The basic unit of classification is

- (a) Species (b) Genus (c) Family (d) Order

16. Linnaeus used sexual characters to classify the plants and the number of classes recognized is

- (a) 21 (b) 22 (c) 23 (d) 24

17. The useful part of zinger is

- (a) root (b) bark (c) rhizome (d) bulb

18. The fruit is a schizocarp which splits into two mericarps in the family

- (a) Apiaceae (b) Acanthaceae (c) Amaranthaceae (d) Arecaceae

Answer any 6 out of 9 questions.

(6 x 3 = 18 Marks)

Write short notes on the following:

19. Artificial system of classification

20. Polynomial

21. Importance of herbaria

22. Economic importance of Rubiaceae

23. Fruit type of Cucurbitaceae

24. ICBN

25. Isotype

26. Tannins

27. Coir

Section B – Answer any 4 out of 6 questions to be answered in 200 words each.

(4 x 6 = 24 Marks)

28. What are dichotomous keys? Explain.

29. What is Typification? Explain.

30. Give an account on the Botanical Gardens of India.

31. Explain the distinguishing characters of the family Rutaceae.

32. Discuss the floral characters of the family Apiaceae.
33. Give the botanical aspects of any 3 Spices and Condiments.

Section C - Answer any 2 out of 4 questions to be answered in 1000 words each.

(2 x 20 = 40 Marks)

34. How are Phanerogams classified by Bentham and Hooker? Discuss its merits and demerits.
35. Discuss in detail any 5 rules which are connected with the naming of plants.
36. Explain the techniques and uses of herbarium preparation.
37. Give the salient features with floral diagram and floral formula of the family Solanaceae.
Discuss the economic importance of the family.