



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

FIRST SEMESTER – NOVEMBER 2019

UPB 1301 – PLANT DIVERSITY - I

Date: 05-11-2019

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

PART A

(10 x 2 = 20 Marks)

Answer the following, each within 50 words.

1. Mention the types of sporangia in *Ectocarpus*.
2. Draw and label the gametophyte of *Funaria* with sporophyte.
3. What is actinostele?
4. Mention the different types of leaves in *Cycas*.
5. Write any two plants belonging to the family Lamiaceae with their scientific names.
6. Distinguish between legitimate and illegitimate names.
7. Mention any two oil yielding plants with their binomial.
8. Write the binomial for banana and papaya.
9. Mention the major chemical constituents of *Vinca rosea*.
10. Write the family and scientific name of thulasi/basil.

PART B

(5 x 7 = 35 Marks)

Answer the following, each within 500 words. Draw diagrams and flowcharts wherever necessary.

- 11a. Enlist the economic importance of Fungi.
Or
- 11b. Describe the internal structure of *Funaria* stem.
- 12a. Describe the L.S. of *Lycopodium* cone.
Or
- 12b. Outline the life cycle of *Cycas*.
- 13a. What is ICN? Add a note on its type.
Or
- 13b. Describe the floral characters of Rutaceae family.
- 14a. Explain the steps involved in Herbarium preparation.
Or
- 14b. Write the macroscopic and microscopic features of *Phyllanthus amarus* and *Zingiber officinale*.
- 15a. Write the common name, binomial, family, useful part and uses of any two pulses and beverages.
Or
- 15b. Write the common name, binomial, family, useful part and uses of any two narcotics and essential oils.

PART C

(3 x 15 = 45 Marks)

Answer any three of the following, each within 1200 words. Draw diagrams and flowcharts wherever necessary.

16. Give a detailed account on the classification of Algae. Enumerate the economic importance of algae.
17. Explain Bentham and Hooker's system of classification. Add a note on its merits and demerits.
18. Write detailed notes on the external and internal structure of corolloid root in *Cycas*.
19. Describe the characteristics of the family Annonaceae.
20. Write the binomial, family, useful part and uses of any two spices, medicinal plants and timber yielding plants.

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