



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

SECOND SEMESTER – **APRIL 2015**

PB 2102 - ESSENTIALS OF PLANT BIOLOGY

Date : 20/04/2015

Dept. No.

Max. : 100 Marks

Time : 01:00-04:00

PART – A

Answer the following, each in about 50 words

(10 x 2 = 20)

1. What are akinetes?
2. Write notes on *amphiphloic siphonostele*.
3. What is the contribution of Carolus Linnaeus?
4. Write the floral formula of *Asparagus racemosus*.
5. Define chlorenchyma.
6. What is fascicular cambium?
7. Draw and label the parts of an ovule.
8. Write notes on tapetum.
9. Mention the binomial of Maize and Tobacco.
10. What are condiments? Give the binomial of two condiments.

PART – B

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

(5 X 7 = 35)

11. (a) Describe the lifecycle of *Albugo*.
Or
(b) Write briefly on the lifecycle of *Cycas*.
12. (a) Discuss the basic rules of plant nomenclature.
Or
(b) Enumerate the characteristic features of *Amaranthaceae* with an example.
13. (a) Draw and describe the structure of a monocot stem.
Or
(b) Describe the anomalous secondary growth in *Dracaena*.
14. (a) Explain the process of double fertilization.
Or
(b) Draw and describe the T.S. of anther.
15. (a) What are beverages? Give the binomial, family, useful part and uses of 2 members in alcoholic and non-alcoholic beverages.
Or
(b) List any 2 members of edible and aromatic essential oils with respect to their binomial, family, useful part and any 2 uses.

PART – C

Answer any three of the following, each within 1200 words. Draw diagrams and flowcharts wherever necessary **(3 x 15 = 45)**

16. Write in detail on the lifecycle of *Ectocarpus*.
17. Give an account of the Natural system of classification with its merits and demerits.
18. Discuss in detail on the classification of simple permanent tissues.
19. Describe in detail the development of the dicot embryo.
20. List the binomial, family, useful part and uses of any 1 member of fruits, pulses, spices, fibre-yielding and medicinal plants.
