



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

SECOND SEMESTER – APRIL 2016

PB 2102 - ESSENTIALS OF PLANT BIOLOGY

Date: 26-04-2016
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

PART – A

Answer the following, each within 50 words only

(10 x 2 = 20)

1. Draw and label the plant body of *Funaria*.
2. What is isogamy?
3. Cite the contribution of *Carolus Linnaeus*.
4. Draw the floral diagram of *Achyranthes aspera*.
5. Define the Tunica Corpus theory.
6. Differentiate endarch and exarch xylem.
7. What is megasporogenesis?
8. Draw and label T.S. of anther.
9. Write the binomial for jute and coconut.
10. List the binomial of any two narcotic plants.

PART – B

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

(5 x 7 = 35)

11. (a) Give a brief account on the life cycle of *Cycas*.
Or
(b) Draw and describe the T.S. of *Marsilea* petiole.
12. (a) Write the classification of plants by Bentham and Hooker.
Or
(b) Write short notes on ICBN.
13. (a) Describe the internal structure of the dicot leaf.
Or
(b) Explain briefly the process of secondary growth in dicot stem.
14. (a) Outline the development of the dicot embryo.
Or
(b) Write a short note on the types of endosperm.
15. (a) What are pulses? Give the binomial, family and useful part of any three pulses.
Or
(b) Define condiments. List the binomial, family and useful part of any three condiments.

PART – C

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

(3 x 15 = 45)

16. Explain the life cycle of *Ectocarpus*.
17. List out the characteristic features of *Liliaceae* and *Caesalpineaceae* with suitable examples.
18. Give an account on the types of simple permanent tissues.
19. Elaborate on the process of double fertilization.
20. List out the binomial, family, useful part and uses of any 2 members of cereals, edible oils and non-alcoholic beverages.
