



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

SECOND SEMESTER – NOVEMBER 2016

PB 2102 / PB 2100 - ESSENTIALS OF PLANT BIOLOGY

Date: 15-11-2016
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

PART – A

(10 x 2 = 20 Marks)

Answer the following, each within 50 words.

1. What is heterocyst?
2. Draw and label the structure of *Aspergillus*.
3. Cite the contribution of *Carolus Linnaeus*.
4. Give the floral diagram and formula of *Leucas aspera*.
5. What is xylem?
6. What is stomata?
7. List out the types of endosperm with example.
8. What is double fertilization?
9. Give the binomial for rice and wheat.
10. What are condiments? Give an example.

PART – B

(5 x 7 = 35 Marks)

Answer the following, each within 500 words; draw diagrams and flow charts wherever necessary.

11. a) Draw and describe the sporophyte of *Funaria*.
Or
b) Describe the life cycle of *Ectocarpus*.
12. a) List out the salient features of Amaranthaceae with *A. aspera* as example.
Or
b) Give a brief account on the rules of ICBN.
13. a) Draw and describe the anatomy of dicot leaf.
Or
b) Write a note on the different types of simple tissues.
14. a) Describe the different types of ovules.
Or
b) Give a brief account on microsporogenesis.
15. a) Tabulate the binomial, family, useful part and uses of any two spices.
Or
b) Cite the binomial, family, useful part and uses of any two essential oils yielding plants.

PART – C

(3 x 15 = 45 Marks)

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

16. Give an account on the lifecycle of *Cycas*.
17. Write in detail on the Natural system of classification of plants.
18. Draw and describe the internal structure of monocot stem and root.
19. Explain the process of embryo development in dicots with an example.
20. List out the binomial, family, useful part and uses of any two narcotic plants and vegetables.
