



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**B.Sc. DEGREE EXAMINATION – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY**

**THIRD SEMESTER – APRIL 2016**

**PB 3506/PB 3502 – ANGIOSPERM, TAXONOMY, ECO.BOTANY & EMBRYOLOGY**

Date: 28-04-2016

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

**PART –A**

ANSWER THE FOLLOWING, EACH WITHIN 50 WORDS ONLY:

**(10x2=20 marks)**

1. What are Botanical keys?
2. Define Numerical taxonomy.
3. What is resupination?
4. Comment on gynandrophore.
5. Give the binomial of any two spices.
6. Give the binomial of any two fibre yielding plants.
7. Explain the structure of microspore.
8. What is heterostyly?
9. Define Apomixis.
10. What is triple fusion?

**PART –B**

ANSWER THE FOLLOWING, EACH ANSWER WITHIN 500 WORDS.

DRAW DIAGRAMS WHEREVER NECESSARY.

**(5x7=35 marks)**

11. a) Explain the artificial system of classification in angiosperms.  
(OR)  
b) Enumerate the Principles of ICBN and write the importance of binomials.
12. a) Describe the characteristic features of Solanaceae and name 5 important genera with their respective uses.  
(OR)  
b) Explain the characteristic features of Euphorbiaceae, name any 5 important genera with their economic importance.
13. a) Define narcotics. Describe any two narcotic plants with their importance studied by you.  
(OR)  
b) Describe the importance of essential oils and explain any 2 of them studied by you.
14. a) Describe the structure of a mature anther.  
(OR)  
b) Describe the development of female gametophyte in Peperomia.
15. a) Define endosperm. Name the types and explain the development of any one studied by you.  
(OR)  
b) Explain the development of monocot embryo.

**PART – C**

ANSWER ANY **THREE** OF THE FOLLOWING. EACH ANSWER WITHIN 1200 WORDS:  
DRAW DIAGRAMS WHEREVER NECESSARY. **(3 x 15=45 marks)**

16. Explain Bentham and Hooker's system of classification. State its merits & demerits.
17. Describe the diagnostic features of Poaceae and write the economic importance of the family.
18. Give the botanical name, family and morphology of useful part and uses of Rice, Finger millet, Groundnut, Turmeric and Sweet flag.
19. Define pollination. Explain the contrivances of self and cross pollination.
20. Explain the development of embryo in Capsella.

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