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

#### **B.Sc.** DEGREE EXAMINATION – **PLANT BIOLOGY & BIOTECH.**

#### THIRD SEMESTER – NOVEMBER 2013

## PB 3506/PB 3502 – ANGIOSPERM TAXONOMY, ECONOMIC BOTANY & EMBRYOLOGY

Date : 06/11/2013 Time : 9:00 - 12:00 Dept. No.

Max.: 100 Marks

#### PART – A

#### ANSWER THE FOLLOWING, EACH ANSWER WITHIN 50 WORDS ONLY: $(10 \times 2 = 20)$

- 1. What is author citation? Give one example.
- 2. Define Molecular taxonomy define.
- 3. Mention the floral formulae in Capparidaceae.
- 4. What is Actinomorphic flower.
- 5. Give the binomial of Asafoetida and give any one use of it.
- 6. Give the binomial of Finger millet and any one use of it.
- 7. Define cleistogamy.
- 8. Explain tapetum.
- 9. What is chalazogamy?
- 10. Define endosperm.

#### PART –B

# ANSWER THE FOLLOWING, EACH ANSWER WITHIN 500 WORDS: DRAW DIAGRAMS WHEREVER NECESSARY:

 $(5 \times 7 = 35)$ 

11. a) Explain briefly chemo taxonomy.

(Or)

b) Explain the importance of botanical keys in plant identification.

12. a) Describe the taxnomic features of Cucurbitaceae and mention the importance any 4 important genera.

(Or)

b) Explain the characteristic features of Poaceae and add a note on its economic importance.

- 13. a) Give the Binomial, Family and Morphology of the useful part and uses of Saffron, Oats and Tobacco.
  - (Or) b ) Give the Binomial, Family, Morphology of the useful part and uses of Red gram, Clove and Belladona.
- 14. a) Describe the structure of a mature microsporangium.

b) Define pollination and explain the contrievances over cross -pollination.

15. a) Draw a neat labeled diagram of a mature ovule.

(Or)

b) Describe double fertilization.

#### PART - C

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

- 16. Explain in detail the classification of Bentham & Hooker.
- 17. Describe the vegetative and floral characteristics of Euphorbiaceaeand mention the economic importance of the family.
- 18. Give the Binomial, Family, and Morphology of the useful part and uses of Barley, Opium, Cardamom, Pepper and Teak.
- 19. Describe the development of female gametophyte in Peperomia.
- 20. Define and differentiate Polyembryony and Parthenocarpy.

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