

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



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

THIRD SEMESTER – NOVEMBER 2017

PB 3506 – ANGIOSPERM, TAXONOMY, ECO.BOTANY & EMBRYOLOGY

Date: 07-11-2017

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

PART-A

Answer the following, each within 50 words.

(10 x 2 = 20 Marks)

1. Define natural system of classification.
2. What is authorcitation?
3. Comment on androecium in cucurbitaceae.
4. State the floral morphology of orchidaceae.
5. What is meant by fibre crops?
6. Cite the family and the binomial of groundnut.
7. What is palynology?
8. Define cross pollination.
9. What is syngamy?
- 10 Define helobial endosperm

PART- B

ANSWER THE FOLLOWING, EACH WITHIN 500 WORDS. DRAW DIAGRAMS AND FLOWCHARTS WHENEVER NECESSARY

(5 x 7 = 35 Marks)

- 11 (a) Explain the phylogenetic system of classification (Engler and Prantle)

(OR)

- (b) Give a brief note on the principles of ICBN.

- 12 (a) Compare the androecium and gynoecium of Rubiaceae and Apocynaceae.

(OR)

- (b) Enumerate the salient features of family Poaceae.

- 13 (a) Explain how is Opium obtained and how it is used?

(OR)

- (b) Give botanical names of timber yielding plants in India and state their importance.

14 (a) Explain the development of female gametophyte within the ovule.

(OR)

(b) Describe the types and modes of pollination.

15 (a) Explain double fertilization and mention its process.

(OR)

(b) Explain the development and types of endosperms with examples.

PART-C

**ANSWER ANY THREE OF THE FOLLOWING, EACH WITHIN 1200 WORDS, DRAW
DIAGRAMS WHENEVER NECESSARY .**

(3 x 15 = 45 Marks)

16. Describe the principles and advantages of numerical taxonomy

17. Explain the features and economic importance of Euphorbiaceae family

18. Give a brief note on the different sources of essential oil

19. Write an essay on structure of mature anther.

20. Describe the development of dicot embryo and state how it differs from monocot embryo
