



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

THIRD SEMESTER – APRIL 2017

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

Date: 02-05-2017
09:00-12:00

Dept. No.

Max. : 100 Marks

PART-A(10 x 2 = 20 Marks)

Answer the following, each within 50 words

1. Define numerical taxonomy.
2. What is binomial nomenclature?
3. Mention the types of roots in orchidaceae.
4. What is Cyathium?
5. Name any two fiber yielding plant and mention their uses.
6. What are the major cereals grown in India?
7. Define palynology.
8. What is meant by self pollination?
9. Define Parthenocarpy.
10. What is polyembryony?

PART- B(5 x 7 = 35 Marks)

Answer the following, each within 500 words, Draw Diagrams and flow charts wherever necessary.

11(a) Compare the system of classification proposed by Bentham & Hooker and Engler and Prantl.

(OR)

(b) Write a short note on biochemical and molecular systematics.

12 (a) Explain the salient features of family Cucurbitaceae.

(OR)

(b) Describe the spikelet in Poaceae.

13 (a) Mention the morphology and uses of clove and cardamom.

(OR)

(b) Explain the economic uses of any three timber yielding plants.

14 (a) Give a brief account on the structure of mature anther.

(OR)

(b) Describe the structure and development of female gametophyte in *Polygonum*.

15 (a) Write a brief note on apomixes.

(OR)

(b) Explain the various types of endosperm.

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. Describe the different types of botanical keys and explain their applications
17. Compare the salient features of Apocynaceae and Solanaceae.
18. Mention the binomial, family, parts used and uses of any five essential oil yielding plants.
19. Discuss about self and cross pollination.
20. Explain about double fertilization; triple fusion and post fertilization changes.
