# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034



# B.Sc. DEGREE EXAMINATION - ADV. ZOOLOGY

### SECOND SEMESTER - APRIL 2014

## PB 2102 - ESSENTIALS OF PLANT BIOLOGY

Date: 07/04/2014 Dept. No. Time: 09:00-12:00	Max.: 100 Marks
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#### PART – A

# Answer the following, each within about 50 words only:

 $(10 \times 2 = 20)$ 

- 1. Write notes on *Nostoc*.
- 2. What is alternation of generations?
- 3. Cite the contribution of Linnaeus.
- 4. Write the floral formula of *Leucasaspera*.
- 5. What is aerenchyma?
- 6. State the *TunicaCorpus* theory.
- 7. What is an endosperm?
- 8. Define the term megasporogenesis.
- 9. Mention the binomial of *Ginger* and *Pepper*.
- 10. What are narcotic plants? Give any two examples.

## PART – B

## Answer the following, each answer within 500 words; Draw diagrams wherever necessary

(5 X 7 = 35)

11. (a) Describe the life cycle of *Lycopodium*.

Or

- (b) Write briefly on the lifecycle of Cycas.
- 12. (a) What is *ICBN*? Explain the basic rules of plant nomenclature.

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- (b) Enumerate the characteristic features of *Liliaceae* with *Asparagussp* as example.
- 13. (a) Write short notes on stomata and its types.

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- (b) Describe the anomalous secondary growth in *Bignonia*.
- 14. (a) Describe the process of anther development.

Or

(b) Draw and label the parts of a mature ovule.

15. (a) What are beverages? List the various alcoholic and non-alcoholic beverages.

Or

(b) Tabulate the various fibre-yielding and timber-yielding plants.

# PART – C

Answer any three of the following, each within 1200 words. Draw diagrams wherever necessary  $(3 \times 15 = 45)$ 

- 16. Give a detailed account on the lifecycle of *Puccinia*.
- 17. List the different types of classification? Give an account on the Natural system of classification with its merits and demerits.
- 18. Explain in detail on the different types of complex plant tissues.
- 19. Describe in detail the process of double fertilization.
- 20. List the binomial, family, useful part and uses of 3 members of cereals, pulses, spices, edible oils and fruits.

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