

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



**B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY**

**FIRST SEMESTER – NOVEMBER 2018**

**16/17/18UPB1AL01 – BASICS OF PLANT BIOLOGY**

Date: 02-11-2018

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

**PART A**

**(10 x 2 = 20 marks)**

*Answer the following, each within 50 words.*

1. Write the systematic position of *Puccinia*.
2. Draw and label the *Funaria* Gametophyte with Sporophyte.
3. Write any four plants with their scientific names belonging to the family Cucurbitaceae.
4. Mention any two Fruit yielding plants with their scientific name, family and uses.
5. What are nectaries?
6. What are Laticifers?
7. What is cross pollination?
8. What is allogamy?
9. State vital theory.
10. What is photophosphorylation?

**PART B**

**(5 x 7 = 35 marks)**

*Answer the following, each within 500 words. Draw diagrams and flowcharts wherever necessary.*

11a. Describe the Life cycle of *Ectocarpus*.

Or

b. Discuss the anatomical features of *Selaginella* stem.

12a. Describe the taxonomic features of the family Annonaceae.

Or

b. Write the binomial, family, useful part and uses of any two edible oil and Cereals.

13a. Describe the anatomy of the monocot leaf.

Or

b. Give a brief account on classification of Tissues.

14a. Explain the formation of female gametophyte.

Or

b. Elucidate the stages involved in the development of a dicot embryo.

15a. Explain the physiological effect of Auxins in plants.

Or

b. Explain the active and passive absorption of water by plants.

**PART C**

**(3 x 15 = 45 marks)**

Answer **any three** of the following, each within 1200 words. Draw diagrams and flowcharts wherever necessary.

16. Describe the life cycle of *Puccinia*.
17. Write the binomial, family, the morphology of the useful parts and uses of any two spices, medicinal plants, timber yielding plants and pulses.
18. Describe the anatomical features of dicot and monocot stem.
19. Write an essay on the process of fertilization.
20. Explain the process of cyclic and non cyclic phosphorylation.

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