



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

U.G. DEGREE EXAMINATION – ALLIED

FIRST SEMESTER – APRIL 2022

16/17/ 18UPB1AL01 – BASICS OF PLANT BIOLOGY

Date: 27-06-2022

Dept. No.

Max. : 100 Marks

Time: 09:00 AM – 12:00 NOON

Part A

Answer all questions, each within 50 words

(10 x 2 = 20 marks)

1. Draw and label the habit of *Funaria*.
2. Mention the names of the two-host involved in the life cycle of *Puccinia*?
3. Write scientific names of any four plants belonging the family Cucurbitaceae.
4. Write the scientific name, family and uses of any two fruit yielding plants.
5. What is salt gland?
6. What are nectaries?
7. What is triple fusion?
8. What is double fertilization?
9. Define photosynthesis.
10. What is dark reaction?

PART B

(5 x 7 = 35 marks)

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

11a. Draw and briefly discuss the life cycle of *Ectocarpus*.

Or

b. Describe the structure of the sporophyte of *Funaria*.

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

Or

b. Write the common name, binomial, family, useful part and uses of any two each of beverages and fibre yielding plants.

13a. Describe the anatomy of a dicot root.

Or

b. Give a brief account on different types of stomata.

14a. What is endosperm? Write about the types of endosperms with example.

Or

b. Give a brief account on microsporogenesis?

15a. Describe the reactions of glycolysis.

Or

b. Discuss the role of growth hormones and their applications.

PART C

(3 x 15 = 45 marks)

Answer the following, each within 1200 words only. Draw diagrams and flowcharts wherever necessary.

16. Describe the life cycle of *Puccinia*.
17. Write the common name, binomial, family, the morphology of the useful parts and uses of any two each of spices, edible oils, vegetables and cereals.
18. Distinguish between dicot and monocot stem.
19. Write an essay on the development of embryo in *Capsella*.
20. Discuss elaborately the process of Calvin cycle.

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