



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

U.G. DEGREE EXAMINATION – ALLIED

FIRST SEMESTER – APRIL 2024

UPB 1301 – PLANT DIVERSITY - I

Date: 23-04-2024

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

SECTION A - K1 (CO1)

Answer ALL the Questions

(10 x 1 = 10)

1. Fill in the blanks

- Bentham and Hooker's system of classification was described in _____ volumes of Genera Plantarum.
- In *Ectocarpus*, the reserve food is a type of carbohydrate called _____.
- The study of Algae is known as _____.
- Wine is made from juice of grapes or other fruits by the process of _____.
- An oil is a combination of fatty acids and _____.

2. State whether the following statements are TRUE or FALSE

- Puccinia graminis* is a heteroecious fungus.
- Lycopodium* is commonly known as club moss.
- Bamboo belongs to the family Poaceae.
- Asafoetida* belongs to the family Apiaceae.
- The biological source of basil is fruits.

SECTION A - K2 (CO1)

Answer ALL the Questions
10)

(10 x 1 =

3. Choose the correct answer

- Puccinia graminis* causing
a. black rust b. brown rust c. yellow rust d. white rust
- In *Cycas* microsporophyll, the upper portion is pointed and sterile called
a. sporophyll b. scale leaf c. fertile leaf d. apophysis
- The book Genera plantarum published in the language
a. Greek b. French c. Latin d. English
- Acalypha indica* belongs to the family
a. Annonaceae b. Rutaceae c. Lamiaceae d. Euphorbiaceae
- The scientific name for Turmeric is
a. *Curcuma longa* b. *Syzygium aromaticum* c. *Shorea robusta* d. *Cannabis sativa*

4. Answer the following, each in about 50 words

- State the name of two taxonomists who proposed the natural system of classification.
- Define sporophyll.
- Explain caryopsis.
- Compare legitimate and illegitimate names.
- Infer the biological source and active principle of *Catharanthus roseus*.

SECTION B - K3 (CO2)

Answer any TWO of the following in 500 words
20)

(2 x 10 =

Draw diagrams / flowcharts wherever necessary

- Sketch out the vegetative reproduction of *Funaria*.
- Interpret the structure of the ovule of *Cycas*.
- Summarise the Herbarium techniques.
- Mention the scientific name, family, useful parts, and uses of green gram and papaya.

SECTION C – K4 (CO3)

	Answer any TWO of the following in 500 words (2 x 10 = 20) Draw diagrams / flowcharts wherever necessary
9.	Compare the different types of steles of the genus <i>Lycopodium</i> .
10.	Analyze the lifecycle of <i>Ectocarpus</i> .
11.	Examine the floral characters of <i>Annona squamosa</i> along with a floral formula and floral diagram
12.	Differentiate spices with condiments and essential oils with edible oils, give examples.

SECTION D – K5 (CO4)

	Answer any ONE of the following in 1000 words (1 x 20 = 20) Draw diagrams / flowcharts wherever necessary
13.	Compare the internal characteristic features of the normal and coralloid root of <i>Cycas</i> .
14.	Explain the characteristic features of the family Euphorbiaceae and add a note on its economic importance.

SECTION E – K6 (CO5)

	Answer any ONE of the following in 1000 words (1 x 20 = 20) Draw diagrams / flowcharts wherever necessary
15.	Describe the life cycle of <i>Puccinia</i> .
16.	Summarise the scientific name, family, active principle, and uses of goose berry, ginger, nilavembu and tulsi.

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