



# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

**FOURTH SEMESTER – APRIL 2024**

**UPB 4501 – ANGIOSPERM TAXONOMY AND ECONOMIC BOTANY**

Date: 06-04-2024

Dept. No.

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

## SECTION A - K1 (CO1)

**Answer ALL the Questions**

**(10 x 1 = 10)**

**1. Fill in the blanks**

- a) Natural system of classification was proposed by \_\_\_\_\_.
- b) \_\_\_\_\_ are rejected until published with proper description.
- c) \_\_\_\_\_ placentation is a characteristic feature of Rutaceae.
- d) Didynamous condition is a feature pertaining to \_\_\_\_\_.
- e) Sandal oil is extracted from \_\_\_\_\_ part of the plant.

**2. State whether the following statements are TRUE or FALSE**

- a) Taxonomical hierarchy is the naming of the plant with genus and species name.
- b) Cladistics is used to establish evolutionary relationship between the species.
- c) Nymphaeaceae members belong to aquatic rhizomatous herbs.
- d) Gynostegium is a diagnostic feature of Rubiaceae.
- e) *Eucalyptus* yields terpenes on distillation.

## SECTION A - K2 (CO1)

**Answer ALL the Questions**  
**10)**

**(10 x 1 =**

**3. Choose the correct answer**

- a) The first herbarium specimen of a new species is known  
a) Paratype      b) type specimen      c) key specimen      d) hierarchy
- b) Vasculum is used to  
a) Press specimens      b) collect specimens      c) mount specimens      d) All of these
- c) Gynophore is a characteristic feature of  
a) Annonaceae      b) Capparidaceae      c) Anacardiaceae      d) Cucurbitaceae
- d) Lodicules are seen in  
a) Poaceae      b) Lamiaceae      c) Amaranthaceae      d) Apocyanaceae
- e) Oleoresin is obtained from the plant  
a) *Ocimum*      b) *Ficus*      c) *Ferula*      d) *Cajanus*

**4. Answer the following, each in about 50 words**

- a) What is indented key?
- b) Define Author citation.
- c) Recall Papilionaceous corolla.
- d) What is night shade family? Why it gets the name?
- e) Differentiate essential oil from edible oil.

## SECTION B - K3 (CO2)

**Answer any TWO of the following in 500 words**  
**20)**

**(2 x 10 =**

**Draw diagrams / flowcharts wherever necessary**

5.	Explain the rules related to effective and valid publication.
6.	Bring out the salient features of Annonaceae.
7.	Illustrate the diagnostic features of Euphorbiaceae.
8.	Write notes on narcotics and beverage plants.
<b>SECTION C – K4 (CO3)</b>	
	<b>Answer any TWO of the following in 500 words (2 x 10 = 20)</b> <b>Draw diagrams / flowcharts wherever necessary</b>
9.	Discuss the merits and demerits of APG system of classification.
10.	Describe the role of ICN in plant nomenclature.
11.	Compare and contrast Capparidaceae and Anacardiaceae.
12.	Bring out the salient diagnostic features of Poaceae.
<b>SECTION D – K5 (CO4)</b>	
	<b>Answer any ONE of the following in 1000 words (1 x 20 = 20)</b> <b>Draw diagrams / flowcharts wherever necessary</b>
13.	Briefly explain the steps involved in herbarium technique.
14.	Orchidaceae is considered as an advanced family - Justify.
<b>SECTION E – K6 (CO5)</b>	
	<b>Answer any ONE of the following in 1000 words (1 x 20 = 20)</b> <b>Draw diagrams / flowcharts wherever necessary</b>
15.	Compare the sub-families of Fabaceae and bring out the diagnostic features of each.
16.	Compile the information on the binomial, family and uses of 2 millets, spices, condiments, essential oil and fibres.

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