

Department of Botany
School of Chemical & Life Sciences
Jamia Hamdard, New Delhi-110062

B.Sc. (HONS) BOTANY
I SEMESTER EXAMINATION JANUARY 2025

Paper Name: **Basics of Plant Identification**

Paper Code: **BBO-SEC101**

Time: **2 hours**

Maximum Marks: **45**

Note: This paper has 3 sections A, B, and C.

Section A: Answer all the questions. **Section B:** Attempt any 5 out of 6.

Section C: Attempt any 2 out of 3.

Abbreviations used:

CO-Course Outcomes

CLO1: Demonstrate a comprehensive understanding of the importance of plant identification in various fields such as botany, agriculture, horticulture, and ecology.

CLO2: Evaluate the role of herbaria and botanical gardens in plant identification and their significance in conservation and research.

CLO3: Analyze and identify plant specimens using various morphological and anatomical features and understand the importance of these features in plant identification.

CLO4: Demonstrate knowledge of the process of specimen preparation and drying, mounting, and labeling of plant specimens, and the importance of accurate labeling in plant identification.

CLO5: Apply critical thinking skills and the scientific method to accurately identify and classify plant specimens, and effectively communicate findings using appropriate scientific terminology and visual aids.

BTL-Bloom's Taxonomy Levels

1- Remembering, 2-Understanding, 3-Applying, 4-Analyzing, 5-Evaluating, 6-Creating

SECTION A

Very Short Type Question (15 questions)

15 x 1 = 15 marks

Q.No.	Questions		Marks	CO	BTL
	Match the following		1	5	1
1.	Polyandrus	A. Fabaceae	1	5	1
2.	Monoadelphous	B. Asteraceae	1	5	1
3.	Diadelphous	C. Rutaceae	1	5	1
4.	Polyadelphous	D. Cucurbitaceae	1	5	1
5.	Syngenesious	E. Ranunculaceae	1	5	1
6.	Synandrous	F. Malvaceae	1	5	1
7.	What is the botanical name of apple?		1	3	1
8.	Cucumber fruit has _____ type of placentation.		1	3	2
9.	The diagnostic feature of the family Asteraceae is _____		1	3	2
10.	Which is the largest herbarium in India?		1	2	1
11.	The Royal Botanic Gardens, Kew is located in_____		1	2	1
12.	Give an example of a plant having verticillaster inflorescence.		1	3	1

13.	Define “floral formula”.	1	5	2
14.	Based on internal structure, write one significant difference between dicot and monocot plant.	1	5	2
15.	What is stone fruit?	1	5	2

SECTION B

Short Type Question. (Attempt **ANY FIVE** out of six)

5 x 3 = 15 marks

Q.No.	Question	Marks	CO	BTL
1	Provide one representative species for each of the following families: Malvaceae, Lamiaceae, Rutaceae, Solanaceae, Apocynaceae, and Apiaceae.	3	5	1
2	Differentiate between Racemose and Cymose inflorescence.	3	3	4
3	Enumerate the various types of aggregate fruit with suitable example.	3	5	1
4	What is significance of plant identification in horticulture?	3	1	2
5	With suitable example, enlist the various types of modified tap root.	3	3	1
6	Differentiate between simple and compound leaf.	3	3	4

SECTION C

Long type Question (Attempt any two out of three)

2 x 7.5 = 15 marks

Q.No.	Question	Marks	CO	BTL
1	Describe various types of leaf venation found in the angiosperm with the help of suitable diagram.	7.5	3	2
2	What is the function of herbaria and botanical garden? Explain in detail.	7.5	2	2
3	Enumerate and define the various keywords used to describe a typical flower of an angiosperm.	7.5	5	2

END OF QUESTION PAPER