

B.Sc. Semester - 2 (CBCS) Examination
March/April – 2025 (New Course)
BOTANY (CORE)

Time: 2.30 Hours

Marks: 70

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate marks.

Que.1 (A)	Answer the following questions.	(04)
	1) State the types of palmately compound leaf. 2) Define: Habitat 3) Give examples for “Adnate” type of stipule. 4) What is reticulate venation	
Que.1(B)	Answer the following question. (Any One)	(03)
	1) Explain: Types of root. 2) Give the functions and Characteristics of stem.	
Que.1(C)	Answer the following question. (Any One)	(07)
	1) Explain: difference between compound leaf & simple leaves. 2) What is phyllotaxy? Describe opposite phyllotaxy.	
Que.2 (A)	Answer the following questions.	(04)
	1) Give example of berry fruits. 2) Give the term, if tepals are bright in colour and resemble with petal. 3) What is zygomorphic flower? 4) Which type of special inflorescence is observed in genus Ficus?	
Que.2(B)	Answer the following question. (Any One)	(03)
	1) Define: Vaxillary astivation with diagram and example. 2) Discuss: Function of carpel.	
Que.2(C)	Answer the following question. (Any One)	(07)
	1) Explain with an examples: Simple dry fruits. 2) Describe: Various types of placentation.	
Que.3(A)	Answer the following questions.	(04)
	1) Which family having segitate anther? 2) Which family having monodelphous stamen? 3) Give the vernacular names of Abutilon indicum. 4) Which family plants have caryopsis type of fruit?	
Que.3(B)	Answer the following question. (Any One)	(03)
	1) State the merits of Bentham and Hookers classification system. 2) Write salient features of Red oleander (Apocynaceae) Family.	
Que.3(C)	Answer the following question. (Any One)	(07)
	1) Describe: The characteristic of Nyctaginaceae family in detail. 2) Describe: The characteristic of Malvaceae family in detail.	
Que.4(A)	Answer the following questions.	(04)
	1) Which type of paper is used in paper chromatography? 2) Give the name of electrodes used in pH meter. 3) The power of objective is 20X and the power of eyepiece is 15X what is the magnification of that microscope? 4) Full form of SEM.	
Que.4(B)	Answer the following question. (Any One)	(03)
	1) Give the Principle of colorimeter. 2) Write notes on: Nutrient media.	

- Que.4(C) Answer the following question. (Any One) (07)
- 1) Describe the structure of light microscope.
 - 2) Discuss principal and method for paper chromatography technique.
- Que.5(A) Answer the following questions. (04)
- 1) Give the genotype ratio of monohybrid cross.
 - 2) Define: Transcription.
 - 3) What do you mean by “P” and “A” site on Ribosomes?
 - 4) Which enzyme unwind the DNA strands?
- Que.5(B) Answer the following question. (Any One) (03)
- 1) Draw the pathway of β -oxidation.
 - 2) Discuss: The difference between Cofactors and Coenzyme.
- Que.5(C) Answer the following question. (Any One) (07)
- 1) Explain: Mechanism of Enzyme Action.
 - 2) Describe: The process of translation in protein synthesis.
