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B.Sc. (HONS WITH RESEARCH) / B.Sc. BOTANY
V SEMESTER EXAMINATION DECEMBER 2025

Paper Name: **Plant Ecology**Paper Code: **BBODSC501**Time: **2½ hours**Maximum Marks: **60**

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

CLO 1: Investigate and interpret the interactions between organisms and their environment, including biotic and abiotic factors.**CLO 2:** Analyze the structure and function of different ecosystems, including terrestrial, aquatic, and marine environments.**CLO 3:** Evaluate concepts such as ecological speciation, ecological amplitude, habitat and niche, and succession processes.**CLO 4:** Understand the spatial patterns of plant species distribution across different geographic regions and understand the factors influencing these patterns.**CLO 5:** Identify the biotic and abiotic factors that influence plant population growth and regulation, such as resource availability, environmental conditions, and disturbance regimes**BTL-Bloom's Taxonomy Levels**

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

SECTION A

A. Very Short Type Question (15 questions)

15 x 1 = 15 marks

Q.No.	Questions	Marks	CO	BTL
	Elucidate the following:			
1	Nebula	1	1	1
2	Climaxed air	1	1	1
3	Chemo autotrophs	1	2	1
4	Carrying capacity	1	2	1
5	Sustainable development	1	3	1
6	Continental drift	1	2	1
7	Ecological speciation	1	3	1
8	Major ecosystem	1	2	1
9	Ecological niche	1	3	1
10	Hypolimnion	1	5	1
11	Wormery	1	5	1
12	Humus	1	5	1

13	Psammosere	1	3	1
14	Serule	1	3	1
15	Vivipary	1	3	1

SECTION B

Short Type Question. (Attempt any five out of six)

5 x 5 = 25 marks

Q.No.	Question	Marks	CO	BTL
1	Primary and secondary succession.	5	3	3
2	What is environment ? Enlist the factors which influence the plant life.	5	1	3
3	Briefly explain the ecological pyramids.	5	2	3
4	How population fluctuate in the natural environment ?	5	4	4
5	What is structure of plant community?	5	4	3
6	How will you protect endangered and threatened plants?	5	5	3

SECTION C

Long type Question (Attempt any two out of three)

2 x 10 = 20 marks

Q.No.	Question	Marks	CO	BTL
1	What are effects of light on vegetation ? What is the significance of light to plant ?	10	1	4
2	What is meant by energy flow in an ecosystem ? What are the laws of thermodynamics ?	10	2	5
3	Briefly discuss about the characteristics of population.	10	5	4

END OF QUESTION PAPER