

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**BSc DEGREE EXAMINATION MAY 2026
(Sixth Semester)**

Branch – **BOTANY**

PLANT ECOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	The range of ecological conditions which a given species is able to carry on normal vital activities and tolerate various stresses is called the (i) Edge (ii) Temperature and Precipitation (iii) Soil and Precipitation (iv) Light and Wind	K1	CO1
	2	Presence of Sunken stomata is the characteristics of (i) Hydrophytes (ii) Xerophytes (iii) Mesophytes (iv) Halophytes	K2	CO1
2	3	Energy flow in an ecosystem is (i) Unidirectional (ii) Bidirectional (iii) Multidimensional (iv) No change	K1	CO2
	4	How do flow of energy and nutrient –cycling represented in an ecosystem? (i) by structure (ii) by nutrient pyramid (iii) by composition of ecosystem (iv) food chain	K2	CO2
3	5	The occurrence of high percentage of chamephytes in an area would indicate (i) Warm and dry climate (ii) Warm and Moist climate (iii) Cold climate (iv) Cold and dry climate	K1	CO3
	6	Which part of the World has a high density of organisms (i) Deciduous forests (ii) Grassland (iii) Tropical rain forest (iv) Dry deciduous forest	K2	CO3
4	7	An ecological state wherein a species is introduced to a location where they are unique. (i) Endangered species (ii) Exotic species (iii) Endemic species (iv) Rare species	K1	CO4
	8	For documenting rare and endangered species of animals and plants what is established? (i) Green data Book (ii) Blue data book (iii) Red data book (iv) White data book	K2	CO4
5	9	Global warming means (i) Increase in solar radiation (ii) Increase in Earths Body Temperature (iii) Acid Rain (iv) Increase of green house gases	K1	CO5
	10	Main source of acid rain is (i) Sulphur dioxide (ii) Nitrogen (iii) Carbon dioxide (iv) Carbon monoxide	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Outline the concept and importance of ecology.	K1	CO1
		(OR)		
	11.b.	Explain the role of aerenchyma tissue in hydorphytes and mangroves.		
2	12.a.	Summarize the food web and food chain that was disrupted by natural factors.	K2	CO2
		(OR)		
	12.b.	Illustrate how carbon is exchanged between biotic and abiotic components in an ecosystem with the illustration of carbon cycle		
3	13.a.	Categorize the quantitative characteristics of plant community.	K3	CO3
		(OR)		
	13.b.	Identify and explain the type of vegetation in India.		
4	14.a.	Compare the endemism with extinction and endangered species and explain how the endemic species get endangers.	K3	CO3
		(OR)		
	14.b.	Describe the biodiversity hotspot in India and its significance.		
5	15.a.	Discuss the effect of air pollution on human health and its control measures.	K4	CO4
		(OR)		
	15.b.	Compile the soil pollution with aquatic ecosystems.		

SECTION - C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Explain in detail the effect of positive and negative biotic interactions in plant ecology.	K1	CO1
2	17	Describe the functional aspects of ecosystem in terms of trophy levels.	K2	CO2
3	18	Exemplify different methods of sampling used in community studies.	K3	CO3
4	19	Determine the term Chipko movement and add a note on its significance.	K3	CO3
5	20	Critically review the process of global warming and ozone depletion.	K4	CO4

Z-Z-Z

END