



Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD (now MoE)

Re-accredited with an 'A++' Grade by NAAC CGPA 3.65/4, Category I by UGC

Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment Test II - October 2025

SEMESTER V

Class: III UG

Time: 2 hours

Major: Botany

Maximum Marks: 60

23BBOC09 Plant Ecology and Phytogeography

Course outcomes

CO1: Understand core concepts of biotic and abiotic components and types and components of soil

CO2: Classify the water on the basis of physical, chemical and biological components

CO3: Gain knowledge on ecological adaptations and population ecology

CO4: Evaluate the basic concepts of plant communities and ecosystem

CO5: Analyse the phytogeography or phytogeographical divisions of India and energy sources of ecological system

6x1=6

Part A

Choose the correct answer

1. In parasitism, CO3K1
 - a) Both species benefit b) One benefits, the other is harmed
 - c) Both are harmed d) Neither benefits nor is harmed
2. Which growth model shows a sigmoid (S-shaped) curve? CO3K2
 - a) Exponential growth b) Logistic growth c) Geometric growth d) Random growth
3. Which ecosystem has the maximum biomass? CO4K1
 - a) Forest ecosystem b) Lake ecosystem c) Pond ecosystem d) Grassland ecosystem
4. Energy flow in ecosystem CO4K1
 - a) Unidirectional b) bidirectional c) Multidirectional d) All the above
5. Which of the following uses maximum energy? CO5K1
 - a) Primary consumer b) Secondary consumer c) Decomposer d) Primary Producers
6. Which one of the following, energy enters in an ecosystem? CO5K1
 - a) Herbivores b) Producer c) Decomposer d) Primary producers

Part B

3x6=18

Answer ALL Questions

(Answer should not exceed 400 words or two pages)

- 7a. Define mutualism and commensalism with suitable examples. CO3K2

(Or)
- 7b. Differentiate between herbivory, carnivory, and parasitism CO3K2
- 8a. Give a brief note on succession CO4K2

(Or)
- 8b. Describe about food chain CO4K2
- 9a. Explain the schematic representation of carbon cycle CO5K2

(Or)
- 9b. Recall the phytogeographical division of India- Explain CO5K4

Part C

3x12=36

Answer ALL Questions

(Answer should not exceed 800 words or four pages)

- 10a. Discuss the different types of species interactions: ammensalism, mutualism, commensalism, parasitism, herbivory, and carnivory with example CO3K2

(Or)
- 10b. Evaluate the factors that regulate population growth (density-dependent vs density-independent). Provide suitable case studies CO3K2
- 11a. Write an essay on community characteristics CO4K2

(Or)
- 11b. Enumerate nitrogen cycle with suitable illustration CO4K2
- 12a. Discuss about continental drift theory CO5K2

(Or)
- 12b. Write a brief note on tropical and temperate biomes with examples CO5K2