

Short Quiz - Population Ecology

Part I – Match the Concept with the Correct Word: Write the correct letter on the line.

- A. Population density B. Carrying capacity C. Density-dependent factor
D. Immigration E. Logistic growth

1. _____ The maximum number of individuals an environment can support long term.
2. _____ The number of organisms per unit area.
3. _____ Growth that slows and forms an S-shaped curve.
4. _____ Environmental factor that depends on how crowded a population is.
5. _____ Movement of individuals into a population.

Part II – Case Studies: Distribution & Limiting Factors: Read each case and select the correct answer.

6. A group of penguins nests close together on a small rocky island for protection from predators. What type of dispersion is shown?
 - a) Uniform
 - b) Clumped
 - c) Random
7. After a severe hurricane, many trees in a forest are destroyed. The deer population decreases even though there was no shortage of predators. This is an example of:
 - a) Density-dependent factor
 - b) Density-independent factor
 - c) Immigration
 - d) Competition
8. In a forest, each owl defends its own territory and keeps equal distance from other owls. What type of dispersion is represented?
 - a) Clumped
 - b) Random
 - c) Uniform
 - d) Exponential

Part III – Terminology Multiple Choice: Read the question and select the answer.

9. Which of the following is a density-dependent factor?
 - a) Flood
 - b) Drought
 - c) Disease
 - d) Hurricane
10. Which situation best describes exponential growth?
 - a) Population stays stable near carrying capacity
 - b) Population grows rapidly without limiting factors
 - c) Birthrate equals death rate
 - d) Death rate exceeds birthrate