

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