

Quiz Chs 4 & 5 (ANSWER KEY)

Chapter 4: Evolution, Biodiversity, and Population Ecology

Multiple-Choice Questions

- 1) Endemic species _____.
- A) are generalists
 - B) cause disease
 - C) are invasive species that cause extinction
 - D) have high rates of mutations that lead to large numbers of offspring
 - E) are only found in one place on the planet
- 2) The functional role of a species in its community is its _____.
- A) habitat
 - B) trophic level
 - C) biotic potential
 - D) niche
 - E) carrying capacity
- 3) Groups of organisms with low biotic potential _____.
- A) are r-strategists
 - B) are K-strategists
 - C) are density-independent organisms
 - D) include the golden toads of Monteverde and many species of frogs
 - E) have slowly growing populations
- 4) Scientists hypothesize that the average time that a species spends on Earth is _____ years.
- A) 1,000-5,000
 - B) 100,000-400,000
 - C) 500,000
 - D) 1-10 million
 - E) 100 million
- 5) Charles Darwin and Alfred Wallace are best known for their ecological studies of _____.
- A) wolves and derived dog breeds
 - B) Brassica oleracea and crops such as broccoli, cauliflower, cabbage, and Brussels sprouts
 - C) golden toads in the cloud forests of Monteverde
 - D) exotic animals in the Galapagos Islands and Malay Archipelago
 - E) passenger pigeons
- 6) Approximately _____ species are thought to presently inhabit Earth.
- A) 1,000-100,000
 - B) 500,000
 - C) 1 million
 - D) 1.5-100 million
 - E) 1 billion
- 7) Which of the following best describes Costa Rica?
- A) Uniform habitat with low biodiversity.
 - B) Ecologically diverse tropical nation estimated to contain 5-6% of all known species.
 - C) Most of the species present in the country have been introduced into the area from elsewhere.
 - D) It is home to large expanses of dry savannah.
 - E) It is the only place left on Earth rich in biodiversity.
- 8) Which of the following is hypothesized to be true regarding Earth's mass extinction events?
- A) They have occurred over a dozen times.
 - B) The most recent extinction was due to massive volcanism.
 - C) They usually wipe out 10-20% of Earth's species each time they occur.
 - D) The most recent was the most massive.
 - E) The most recent occurred 65 million years ago and brought an end to the dinosaurs.
- 9) Which of the following are characteristics of K-selected species?
- A) long-lived, large size, small numbers of offspring
 - B) reproduce early in life, short-lived, rapidly dispersing
 - C) no parental care, high mortality of juveniles
 - D) chaotically fluctuating population size, close to carrying capacity
 - E) small size, reproduce early in life
- 10) A J-shaped population growth curve _____.
- A) is evident in populations restrained by limiting environmental factors
 - B) demonstrates growth by a fixed percentage over time
 - C) is typical for populations that are large and dense
 - D) was never predicted by early visionaries such as Thomas Malthus
 - E) demonstrates logistic growth