

Advanced Environmental Science: Fauna and Flora Facts

Environmental Science · Practice Test · 15 Questions

1. Which marine mammal possesses the largest brain by mass, relative to its body size, among all animals?

- A) Sperm Whale
- B) Orca (Killer Whale)
- C) Bottlenose Dolphin
- D) Fin Whale

2. The Great Barrier Reef, the world's largest coral reef system, is primarily composed of which class of marine invertebrate?

- A) Mollusca
- B) Cnidaria
- C) Echinodermata
- D) Crustacea

3. What is the primary chemical compound that gives the Amazon rainforest its distinctive, earthy smell, particularly after rain?

- A) Isoprene
- B) Volatile Organic Compounds (VOCs)
- C) Geosmin
- D) Methane

4. Which plant species is known for its ability to fix atmospheric nitrogen into the soil through a symbiotic relationship with Rhizobium bacteria in its root nodules?

- A) Maize (Zea mays)
- B) Wheat (Triticum aestivum)
- C) Soybean (Glycine max)
- D) Rice (Oryza sativa)

5. The phenomenon of 'bioluminescent bays' is primarily caused by the presence of which type of microorganism?

- A) Cyanobacteria
- B) Dinoflagellates
- C) Diatoms
- D) Phytoplankton

6. What is the approximate percentage of Earth's total water that is freshwater, readily available for human consumption?

- A) 71%
- B) 2.5%
- C) 10%
- D) 0.5%

7. Which terrestrial ecosystem is characterized by permafrost, low precipitation, and extremely cold temperatures, supporting mosses, lichens, and dwarf shrubs?

- A) Temperate Rainforest
- B) Savanna
- C) Taiga (Boreal Forest)
- D) Tundra

8. The largest single-celled organism known is a species of slime mold called?

- A) Amoeba proteus
- B) Physarum polycephalum
- C) Paramecium caudatum
- D) Euglena gracilis

9. Which bird species has the longest known migratory journey, traveling from the Arctic to the Antarctic and back annually?

- A) Arctic Tern
- B) Wandering Albatross
- C) Bar-tailed Godwit
- D) Sooty Shearwater

10. The process by which plants absorb carbon dioxide from the atmosphere and convert it into organic compounds is called?

- A) Respiration
- B) Transpiration
- C) Photosynthesis
- D) Evaporation

11. What is the scientific term for the symbiotic relationship between fungi and plant roots, crucial for nutrient uptake?

- A) Lichens
- B) Mycorrhizae
- C) Endophytes
- D) Rhizosphere

12. Which of the following is the most abundant greenhouse gas in Earth's atmosphere, excluding water vapor?

- A) Methane (CH₄)
- B) Nitrous Oxide (N₂O)
- C) Carbon Dioxide (CO₂)
- D) Ozone (O₃)

13. The 'Ring of Fire' is a major area in the basin of the Pacific Ocean where a large number of earthquakes and volcanic eruptions occur. This geological activity is primarily due to which process?

- A) Continental drift
- B) Plate tectonics
- C) Earth's magnetic field fluctuations
- D) Ocean currents

14. What is the specific term for the collective biomass of all organisms living in a particular habitat or region?

- A) Biome
- B) Habitat
- C) Ecosystem
- D) Biota

15. The process of biomagnification describes the increasing concentration of a substance, such as a toxic chemical, in organisms at successively higher levels in a food chain. Which class of chemicals is most notoriously known for this effect?

- A) Nitrates
- B) Phosphates
- C) Persistent Organic Pollutants (POPs)
- D) Heavy Metals