

Global Biological Geography

Biology · Answer Key · 20 Questions

1. Which terrestrial biome, characterized by permafrost and low biodiversity, is primarily located in the northern regions of Canada, Russia, and Scandinavia?

- A) Taiga
- B) Tundra**
- C) Alpine
- D) Steppe

2. The Wallace Line is a faunal boundary that separates the ecozones of Asia and Australia, running between which two Indonesian islands?

- A) Java and Sumatra
- B) Bali and Lombok**
- C) Borneo and Sulawesi
- D) Timor and Flores

3. Which freshwater lake, located in Siberia, contains approximately 20% of the world's unfrozen surface fresh water and supports a unique endemic species called the Nerpa?

- A) Lake Baikal**
- B) Lake Ladoga
- C) Lake Balkhash
- D) Lake Khanka

4. The Sundarbans, the world's largest contiguous mangrove forest, is primarily located within the delta of which two major rivers?

- A) Indus and Ganges
- B) Ganges and Brahmaputra**
- C) Mekong and Irrawaddy
- D) Yangtze and Yellow

5. The endemic flora of the Fynbos biome, known for its high species richness, is found almost exclusively in which specific region?

- A) Southwestern Cape of South Africa**
- B) Southern Andes of Chile
- C) Southwestern Australia
- D) Mediterranean Coast of Morocco

6. What is the primary factor limiting the growth of primary producers in the open ocean gyres of the South Pacific, often referred to as 'ocean deserts'?

- A) Pressure
- B) Temperature
- C) Nutrient availability**
- D) Salinity

7. The Great Barrier Reef off the coast of Australia is categorized as which type of ecosystem structure, primarily built by calcifying organisms?

- A) Barrier reef**
- B) Atoll
- C) Fringing reef
- D) Patch reef

8. Which mountain range is widely recognized as the center of origin for the majority of the world's temperate fruit-bearing trees?

- A) The Andes
- B) The Caucasus**
- C) The Himalayas
- D) The Pyrenees

9. What is the term for the geographical phenomenon where species diversity increases as one moves from the poles toward the equator?

- A) Latitudinal diversity gradient**
- B) Altitudinal zonation
- C) Island biogeography
- D) Climatic climax

10. The Galápagos Islands, essential to the theory of evolution, are located approximately 1,000 kilometers off the coast of which country?

- A) Panama
- B) Peru
- C) Ecuador**
- D) Colombia

11. Which desert, located in northern Chile, is recognized as the driest non-polar place on Earth, affecting the distribution of biological life?

- A) Atacama**
- B) Namib
- C) Gobi
- D) Kalahari

12. In the context of biogeography, the 'Nearctic' realm encompasses which geographic region?

- A) South America
- B) North America**
- C) Sub-Saharan Africa
- D) Indochina

13. The Valdivian temperate rain forest is a unique ecological refuge found predominantly in which two South American countries?

- A) Brazil and Argentina
- B) Chile and Argentina**
- C) Peru and Bolivia
- D) Colombia and Venezuela

14. Which deep-sea vent community, located on the East Pacific Rise, relies on chemosynthesis rather than photosynthesis due to the absence of sunlight?

- A) Hydrothermal vents**
- B) Cold seeps
- C) Abyssal plains
- D) Hadals

15. The Serengeti migration, one of the largest terrestrial mammal migrations, occurs primarily within the borders of which two East African nations?

- A) Kenya and Tanzania**
- B) Uganda and Rwanda
- C) Ethiopia and Somalia
- D) Zambia and Malawi

16. Which biome, characterized by fire-adapted vegetation and seasonal drought, covers large portions of central Brazil and is known as the 'Cerrado'?

- A) Tropical savanna**
- B) Tropical rainforest
- C) Temperate grassland
- D) Chaparral

17. The island of Madagascar is famous for the endemism of its primates, specifically which group?

- A) Chimpanzees
- B) Lemurs**
- C) Gibbons
- D) Macaques

18. What specific geological feature of the East African Rift Valley contributes to the high levels of speciation found in the African Great Lakes?

A) Volcanic activity

B) Tectonic isolation

C) High salinity

D) Extreme depth

19. The 'Ring of Fire' around the Pacific Ocean is a major focus for marine biologists because it creates what specific type of habitat?

A) Deep ocean trenches

B) Coastal coral lagoons

C) Arctic shelves

D) Estuarine mudflats

20. The species *Welwitschia mirabilis*, known for its extreme longevity, is a desert-adapted plant found only in which coastal region?

A) Sahara Desert

B) Namib Desert

C) Sonoran Desert

D) Arabian Desert