



Conservation Biology and Restoration Ecology

Answer Key

1. **Answer:** B

Explanation: “Biophilia” is coined by Harvard biologist E.O. Wilson to describe a sense of connection to nature and other forms of life.

2. **Answer:** Biodiversity

Explanation: Biodiversity encompasses more than one species. It includes the diversities of ecosystems, of species, and of their genetic diversity.

3. **Answer:** C

Explanation: Ecologists refer to the loss of a single population of species as extirpation and while the decline in population size is a signal that the species is in trouble, it is still possible to save it.

4. **Answer:** Ecosystem diversity

Explanation: As human populations encroach on ecosystems, we also remove the essential services these natural ecosystems offer. And as ecosystems are gradually lost, we also affect the ecosystem diversity or the populations of species that make up those communities.

5. **Answer:** C

Explanation: The enormous genetic diversity of all organisms benefits people. We have been domesticating plants and animals for food consumption but because we narrowed their genetic diversity, we often leave them vulnerable to pathogens. That is why we might see in the news the extent of damage pests or specific diseases can do to a large area of a crop field, or



To get more Biology review materials, visit
<https://filipiknow.net/biology-review/>

To God be the glory!



Conservation Biology and Restoration Ecology

Answer Key

we observe that some certain breeds of animals have specific diseases that are absent in others.

6. **Answer:** B

Explanation: Any factor that would drastically change the climate at a rate exceeding that which species would be able to adapt to is alarming for biodiversity. A trend is seen by scientists where global temperatures are rising, aptly called global warming. It came from different factors but most of it can be attributed to greenhouse gas emissions.

7. **Answer:** C

Explanation: More recently, scientists recognized microplastics as pollutants to many of our aquatic ecosystems. Because plastic is very durable, it can persist for a very, very, very long time and even if it breaks into smaller pieces, small plastic molecules which can not be seen with the naked eye could still persist in the environment.

8. **Answer:** B

Explanation: The ozone layer in the atmosphere helps prevent extreme amounts of ultraviolet light and radiation from directly coming into contact with living beings on the face of the Earth.

9. **Answer:** A

Explanation: Many toxins are also incorporated into the food chains and webs of our ecosystems. In a process called biological magnification, organisms at higher trophic levels accumulate toxins from ingesting contaminated food.



To get more Biology review materials, visit
<https://filipiknow.net/biology-review/>

To God be the glory!



Conservation Biology and Restoration Ecology

Answer Key

10. **Answer:** A

Explanation: Some organisms have already responded to climate change and this can be attributed to phenotypic plasticity, wherein there is a change in phenotype (expressed traits, features, characteristics) as a response to local environmental conditions. For example, some birds in temperate regions have adapted to the earlier arrival of warm weather in spring by breeding earlier.

11. **Answer:** A

Explanation: Conservation Biology seeks to understand and counter the loss of biodiversity. Some conservation biologists focus on protecting populations of threatened species and this requires understanding the behavior and ecological niche of the species. Threats posed by humans are also assessed. With this knowledge, scientists in the field can design, improve, and plan areas that can protect and support the species.

12. **Answer:** B

Explanation: Because clearing of natural habitats may cause them to fragment or become patchy, a movement corridor or wildlife corridor will allow those fragmented areas to be connected by allowing a narrow strip or series of habitats connecting those otherwise isolated patches. For example, building bridges or tunnels specifically for animals reduces the amount of roadkill.

13. **Answer:** C

Explanation: Landscape Ecology applies ecological principles to study the structure and dynamics of a collection of ecosystems.



To get more Biology review
materials, visit
<https://filipiknow.net/biology-review/>

To God be the glory!



Conservation Biology and Restoration Ecology

Answer Key

14. **Answer:** A

Explanation: Captive breeding programs are being used for many species with extremely low population numbers. Here in the Philippines, we have set these programs for the [Philippine Eagle](#) to boost their population numbers.

15. **Answer:** D

Explanation: Ecological fragmentation refers to when a natural area is divided into several parts.

16. **Answer:** C

Explanation: NIPAS (National Integrated Protected Areas System) Act classifies and administers all designated protected areas in the country. Tubbataha Reef in Palawan is one of the country's most well-known protected areas.

17. **Answer:** A

Explanation: The Philippines is considered a diversity hotspot for marine organisms and is part of an area considered to have the highest concentration of marine plants and animals in the world, called the "Coral Triangle".

18. **Answer:** A

Explanation: Endemic species are organisms found nowhere else in the world. Because endemic species are limited to specific areas, they are highly sensitive to habitat degradation.



To get more Biology review materials, visit <https://filipiknow.net/biology-review/>

To God be the glory!



Conservation Biology and Restoration Ecology

Answer Key

19. **Answer:** B

Explanation: Bioremediation uses living organisms to detoxify polluted ecosystems. These can range from bacteria to plants and researchers have utilized them to detoxify toxins in dumpsites, extract toxic metals from the soil, and ongoing studies are trying to see if they can be used to remove radioactive wastes from nuclear power plants.

20. **Answer:** C

Explanation: Sustainable development aims to meet the needs of people today without hindering the ability of future generations to meet their needs.



To get more Biology review
materials, visit
<https://filipiknow.net/biology-review/>

To God be the glory!