TOEFL iBT® Online Prep Course | Activity 3 | Reading

Reading > Lesson 4: Purpose/Method/Opinion Questions > Exercise 4.2

FOCUS: Answering multiple-choice purpose, method, and opinion questions about longer passages.

Continue

TOEFL iBT® Online Prep Course | Activity 3 | Reading

Reading > Lesson 4: Purpose/Method/Opinion Questions > Exercise 4.2

DIRECTIONS: Read the passage. Then click on the answer choice that best answers the question.

Continue

Coral Reefs

DIRECTIONS: Read the passage. Then click on the answer choice that best answers the question.

Coral reefs form in clear, warm coastal waters of the tropics and subtropics. These stunningly beautiful natural wonders are among the world's oldest, most diverse, and most productive ecosystems. In terms of biodiversity, they are the marine equivalents of tropical rain forests.

Coral reefs are formed by massive colonies of tiny animals called *polyps*. Polyps slowly build reefs by secreting a protective crust of limestone (calcium carbonate) around their soft bodies. When polyps die, their empty crusts remain behind as a platform for more reef growth. The resulting elaborate network of **crevices**, ledges, and holes serves as calcium carbonate "condominiums" for a variety of marine animals.

Coral reefs are the result of a mutually beneficial relationship between polyps and tiny single-celled algae called *zooxanthellae* that live in the tissues of the polyps. The algae provide the polyps with color, food, and oxygen through **photosynthesis**, and help produce calcium carbonate, which forms the coral skeleton. The polyps, in turn, provide the algae with a well-protected home and some of their nutrients. Although coral reefs occupy only about 0.1 percent of the world's ocean area, they provide numerous free ecological and economic services. They help moderate atmospheric temperatures by removing carbon dioxide from the atmosphere, act as natural barriers that help protect 15 percent of the world's coastlines from erosion by waves and storms, and provide habitats for a variety of marine organisms.

Economically, coral reefs produce about one-tenth of the global fish catch and one-fourth of the catch in developing countries, and they provide jobs and building materials for some of the world's poorest countries. They also support fishing and tourism industries worth billions of dollars each year. Finally, these biological treasures give us an underwater world to study and enjoy. Each year more than 1 million scuba divers visit coral reefs to experience these wonders of biodiversity.

However, coral reefs are vulnerable to damage because they grow slowly and are disrupted easily. One problem is coral bleaching. It occurs when a coral becomes stressed and the algae on which it depends for food and color die out, leaving an underlying white or bleached skeleton of calcium carbonate. Two causes of bleaching are increased water temperature and runoff of silt from the land that covers the coral and prevents photosynthesis. The biodiversity of coral reefs can also be reduced by natural disturbances such as severe storms, freshwater floods, and invasions of predatory fish. Today the biggest threats to the survival and biodiversity of many of the world's coral reefs come from human activities.

In 2004, 240 experts from ninety-six countries estimated that 20 percent of the world's coral reefs are so damaged that they are unlikely to recover. They also projected that by 2050 another 30 percent to 50 percent of the world's coral reefs could be lost due to climate change, habitat loss, pollution, and overfishing. Only about 300 of the world's 6,000 coral reefs are protected as reserves or parks. According to a recent study, coral reefs are worth $100,000 to $600,000 per square kilometer ($260,000-$1.6 million per square mile) per year, depending on location. These estimates are based on using the reefs mainly for sustainable small-scale fishing, tourism, and selling aquarium fish and exclude their much larger ecological values. If these economic and ecological values are included, it is much cheaper to protect coral reefs than to damage them and use them unsustainably.

However, scientists have recently discovered an encouraging finding. There is growing evidence that coral reefs can recover when protected by restricting fishing and reducing inputs of nutrients and other pollutants. Also, in 2004, scientists found that coral can form relationships with more heat-tolerant types of algae. This could allow coral in some areas to survive at higher temperatures.

1 The author's main purpose in paragraph 2 is

- to describe the development of coral reefs
- to illustrate the biodiversity of coral reefs
- to compare coral reefs and polyps
- to contrast a marine ecosystem with a land ecosystem

Coral reefs form in clear, warm coastal waters of the tropics and subtropics. These stunningly beautiful natural wonders are among the world's oldest, most diverse, and most productive ecosystems. In terms of biodiversity, they are the marine equivalents of tropical rain forests.

Coral reefs are formed by massive colonies of tiny animals called *polyps*. Polyps slowly build reefs by secreting a protective crust of limestone (calcium carbonate) around their soft bodies. When polyps die, their empty crusts remain behind as a platform for more reef growth. The resulting elaborate network of **crevices**, ledges, and holes serves as calcium carbonate "condominiums" for a variety of marine animals.

Coral reefs are the result of a mutually beneficial relationship between polyps and tiny single-celled algae called *zooxanthellae* that live in the tissues of the polyps. The algae provide the polyps with color, food, and oxygen through **photosynthesis**, and help produce calcium carbonate, which forms the coral skeleton. The polyps, in turn, provide the algae with a well-protected home and some of their nutrients. Although coral reefs occupy only about 0.1 percent of the world's ocean area, they provide numerous free ecological and economic services. They help moderate atmospheric temperatures by removing carbon dioxide from the atmosphere, act as natural barriers that help protect 15 percent of the world's coastlines from erosion by waves and storms, and provide habitats for a variety of marine organisms.

Economically, coral reefs produce about one-tenth of the global fish catch and one-fourth of the catch in developing countries, and they provide jobs and building materials for some of the world's poorest countries. They also support fishing and tourism industries worth billions of dollars each year. Finally, these biological treasures give us an underwater world to study and enjoy. Each year more than 1 million scuba divers visit coral reefs to experience these wonders of biodiversity.

However, coral reefs are vulnerable to damage because they grow slowly and are disrupted easily. One problem is coral bleaching. It occurs when a coral becomes stressed and the algae on which it depends for food and color die out, leaving an underlying white or bleached skeleton of calcium carbonate. Two causes of bleaching are increased water temperature and runoff of silt from the land that covers the coral and prevents photosynthesis. The biodiversity of coral reefs can also be reduced by natural disturbances such as severe storms, freshwater floods, and invasions of predatory fish. Today the biggest threats to the survival and biodiversity of many of the world's coral reefs come from human activities.

In 2004, 240 experts from ninety-six countries estimated that 20 percent of the world's coral reefs are so damaged that they are unlikely to recover. They also projected that by 2050 another 30 percent to 50 percent of the world's coral reefs could be lost due to climate change, habitat loss, pollution, and overfishing. Only about 300 of the world's 6,000 coral reefs are protected as reserves or parks. According to a recent study, coral reefs are worth $100,000 to $600,000 per square kilometer ($260,000-$1.6 million per square mile) per year, depending on location. These estimates are based on using the reefs mainly for sustainable small-scale fishing, tourism, and selling aquarium fish and exclude their much larger ecological values. If these economic and ecological values are included, it is much cheaper to protect coral reefs than to damage them and use them unsustainably.

However, scientists have recently discovered an encouraging finding. There is growing evidence that coral reefs can recover when protected by restricting fishing and reducing inputs of nutrients and other pollutants. Also, in 2004, scientists found that coral can form relationships with more heat-tolerant types of algae. This could allow coral in some areas to survive at higher temperatures.

2 Why does the author discuss the roles and products of coral reefs?

- ◯ To explain the biological composition of coral reefs
- ◯ To detail the importance of algae in the formation of coral reefs
- ◯ To provide support for making coral reefs more biologically diverse
- ◯ To show the advantages of coral reefs to the environment and humans

Coral reefs form in clear, warm coastal waters of the tropics and subtropics. These stunningly beautiful natural wonders are among the world's oldest, most diverse, and most productive ecosystems. In terms of biodiversity, they are the marine equivalents of tropical rain forests.

Coral reefs are formed by massive colonies of tiny animals called *polyps*. Polyps slowly build reefs by secreting a protective crust of limestone (calcium carbonate) around their soft bodies. When polyps die, their empty crusts remain behind as a platform for more reef growth. The resulting elaborate network of **crevices**, ledges, and holes serves as calcium carbonate "condominiums" for a variety of marine animals.

Coral reefs are the result of a mutually beneficial relationship between polyps and tiny single-celled algae called *zooxanthellae* that live in the tissues of the polyps. The algae provide the polyps with color, food, and oxygen through **photosynthesis**, and help produce calcium carbonate, which forms the coral skeleton. The polyps, in turn, provide the algae with a well-protected home and some of their nutrients. Although coral reefs occupy only about 0.1 percent of the world's ocean area, they provide numerous free ecological and economic services. They help moderate atmospheric temperatures by removing carbon dioxide from the atmosphere, act as natural barriers that help protect 15 percent of the world's coastlines from erosion by waves and storms, and provide habitats for a variety of marine organisms.

Economically, coral reefs produce about one-tenth of the global fish catch and one-fourth of the catch in developing countries, and they provide jobs and building materials for some of the world's poorest countries. They also support fishing and tourism industries worth billions of dollars each year. Finally, these biological treasures give us an underwater world to study and enjoy. Each year more than 1 million scuba divers visit coral reefs to experience these wonders of biodiversity.

However, coral reefs are vulnerable to damage because they grow slowly and are disrupted easily. One problem is coral bleaching. It occurs when a coral becomes stressed and the algae on which it depends for food and color die out, leaving an underlying white or bleached skeleton of calcium carbonate. Two causes of bleaching are increased water temperature and runoff of silt from the land that covers the coral and prevents photosynthesis. The biodiversity of coral reefs can also be reduced by natural disturbances such as severe storms, freshwater floods, and invasions of predatory fish. Today the biggest threats to the survival and biodiversity of many of the world's coral reefs come from human activities.

In 2004, 240 experts from ninety-six countries estimated that 20 percent of the world's coral reefs are so damaged that they are unlikely to recover. They also projected that by 2050 another 30 percent to 50 percent of the world's coral reefs could be lost due to climate change, habitat loss, pollution, and overfishing. Only about 300 of the world's 6,000 coral reefs are protected as reserves or parks. According to a recent study, coral reefs are worth $100,000 to $600,000 per square kilometer ($260,000-$1.6 million per square mile) per year, depending on location. These estimates are based on using the reefs mainly for sustainable small-scale fishing, tourism, and selling aquarium fish and exclude their much larger ecological values. If these economic and ecological values are included, it is much cheaper to protect coral reefs than to damage them and use them unsustainably.

However, scientists have recently discovered an encouraging finding. There is growing evidence that coral reefs can recover when protected by restricting fishing and reducing inputs of nutrients and other pollutants. Also, in 2004, scientists found that coral can form relationships with more heat-tolerant types of algae. This could allow coral in some areas to survive at higher temperatures.

3 How does the author support the idea that coral reefs can be harmed?

- By suggesting that they can form relationships with heat-tolerant algae
- By presenting the costs of protecting them
- By describing coral bleaching
- By pointing out that they house a variety of aquatic life

Coral reefs form in clear, warm coastal waters of the tropics and subtropics. These stunningly beautiful natural wonders are among the world's oldest, most diverse, and most productive ecosystems. In terms of biodiversity, they are the marine equivalents of tropical rain forests.

Coral reefs are formed by massive colonies of tiny animals called *polyps*. Polyps slowly build reefs by secreting a protective crust of limestone (calcium carbonate) around their soft bodies. When polyps die, their empty crusts remain behind as a platform for more reef growth. The resulting elaborate network of **crevices**, ledges, and holes serves as calcium carbonate "condominiums" for a variety of marine animals.

Coral reefs are the result of a mutually beneficial relationship between polyps and tiny single-celled algae called *zooxanthellae* that live in the tissues of the polyps. The algae provide the polyps with color, food, and oxygen through **photosynthesis**, and help produce calcium carbonate, which forms the coral skeleton. The polyps, in turn, provide the algae with a well-protected home and some of their nutrients. Although coral reefs occupy only about 0.1 percent of the world's ocean area, they provide numerous free ecological and economic services. They help moderate atmospheric temperatures by removing carbon dioxide from the atmosphere, act as natural barriers that help protect 15 percent of the world's coastlines from erosion by waves and storms, and provide habitats for a variety of marine organisms.

Economically, coral reefs produce about one-tenth of the global fish catch and one-fourth of the catch in developing countries, and they provide jobs and building materials for some of the world's poorest countries. They also support fishing and tourism industries worth billions of dollars each year. Finally, these biological treasures give us an underwater world to study and enjoy. Each year more than 1 million scuba divers visit coral reefs to experience these wonders of biodiversity.

However, coral reefs are vulnerable to damage because they grow slowly and are disrupted easily. One problem is coral bleaching. It occurs when a coral becomes stressed and the algae on which it depends for food and color die out, leaving an underlying white or bleached skeleton of calcium carbonate. Two causes of bleaching are increased water temperature and runoff of silt from the land that covers the coral and prevents photosynthesis. The biodiversity of coral reefs can also be reduced by natural disturbances such as severe storms, freshwater floods, and invasions of predatory fish. Today the biggest threats to the survival and biodiversity of many of the world's coral reefs come from human activities.

In 2004, 240 experts from ninety-six countries estimated that 20 percent of the world's coral reefs are so damaged that they are unlikely to recover. They also projected that by 2050 another 30 percent to 50 percent of the world's coral reefs could be lost due to climate change, habitat loss, pollution, and overfishing. Only about 300 of the world's 6,000 coral reefs are protected as reserves or parks. According to a recent study, coral reefs are worth $100,000 to $600,000 per square kilometer ($260,000-$1.6 million per square mile) per year, depending on location. These estimates are based on using the reefs mainly for sustainable small-scale fishing, tourism, and selling aquarium fish and exclude their much larger ecological values. If these economic and ecological values are included, it is much cheaper to protect coral reefs than to damage them and use them unsustainably.

However, scientists have recently discovered an encouraging finding. There is growing evidence that coral reefs can recover when protected by restricting fishing and reducing inputs of nutrients and other pollutants. Also, in 2004, scientists found that coral can form relationships with more heat-tolerant types of algae. This could allow coral in some areas to survive at higher temperatures.

4 How does the author illustrate the financial significance of coral reefs?

- ◯ By noting the cost of preserving coral reefs
- ◯ By discussing the value of coral reefs to sustaining trade and commerce
- ◯ By citing the results of a research study on the survivability of coral reefs
- ◯ By highlighting the worth of coral reefs to entrepreneurs

Coral reefs form in clear, warm coastal waters of the tropics and subtropics. These stunningly beautiful natural wonders are among the world's oldest, most diverse, and most productive ecosystems. In terms of biodiversity, they are the marine equivalents of tropical rain forests.

Coral reefs are formed by massive colonies of tiny animals called *polyps*. Polyps slowly build reefs by secreting a protective crust of limestone (calcium carbonate) around their soft bodies. When polyps die, their empty crusts remain behind as a platform for more reef growth. The resulting elaborate network of **crevices**, ledges, and holes serves as calcium carbonate "condominiums" for a variety of marine animals.

Coral reefs are the result of a mutually beneficial relationship between polyps and tiny single-celled algae called *zooxanthellae* that live in the tissues of the polyps. The algae provide the polyps with color, food, and oxygen through **photosynthesis**, and help produce calcium carbonate, which forms the coral skeleton. The polyps, in turn, provide the algae with a well-protected home and some of their nutrients. Although coral reefs occupy only about 0.1 percent of the world's ocean area, they provide numerous free ecological and economic services. They help moderate atmospheric temperatures by removing carbon dioxide from the atmosphere, act as natural barriers that help protect 15 percent of the world's coastlines from erosion by waves and storms, and provide habitats for a variety of marine organisms.

Economically, coral reefs produce about one-tenth of the global fish catch and one-fourth of the catch in developing countries, and they provide jobs and building materials for some of the world's poorest countries. They also support fishing and tourism industries worth billions of dollars each year. Finally, these biological treasures give us an underwater world to study and enjoy. Each year more than 1 million scuba divers visit coral reefs to experience these wonders of biodiversity.

However, coral reefs are vulnerable to damage because they grow slowly and are disrupted easily. One problem is coral bleaching. It occurs when a coral becomes stressed and the algae on which it depends for food and color die out, leaving an underlying white or bleached skeleton of calcium carbonate. Two causes of bleaching are increased water temperature and runoff of silt from the land that covers the coral and prevents photosynthesis. The biodiversity of coral reefs can also be reduced by natural disturbances such as severe storms, freshwater floods, and invasions of predatory fish. Today the biggest threats to the survival and biodiversity of many of the world's coral reefs come from human activities.

In 2004, 240 experts from ninety-six countries estimated that 20 percent of the world's coral reefs are so damaged that they are unlikely to recover. They also projected that by 2050 another 30 percent to 50 percent of the world's coral reefs could be lost due to climate change, habitat loss, pollution, and overfishing. Only about 300 of the world's 6,000 coral reefs are protected as reserves or parks. According to a recent study, coral reefs are worth $100,000 to $600,000 per square kilometer ($260,000-$1.6 million per square mile) per year, depending on location. These estimates are based on using the reefs mainly for sustainable small-scale fishing, tourism, and selling aquarium fish and exclude their much larger ecological values. If these economic and ecological values are included, it is much cheaper to protect coral reefs than to damage them and use them unsustainably.

However, scientists have recently discovered an encouraging finding. There is growing evidence that coral reefs can recover when protected by restricting fishing and reducing inputs of nutrients and other pollutants. Also, in 2004, scientists found that coral can form relationships with more heat-tolerant types of algae. This could allow coral in some areas to survive at higher temperatures.

5 It can be inferred that the author of this passage

- ◯ supports overfishing and other practices that affect coral reefs
- ◯ opposes spending a lot of money to protect coral reefs
- ◯ believes that preserving coral reefs is a good investment
- ◯ disagrees with researchers' negative predictions about coral reefs

Coral reefs form in clear, warm coastal waters of the tropics and subtropics. These stunningly beautiful natural wonders are among the world's oldest, most diverse, and most productive ecosystems. In terms of biodiversity, they are the marine equivalents of tropical rain forests.

Coral reefs are formed by massive colonies of tiny animals called *polyps*. Polyps slowly build reefs by secreting a protective crust of limestone (calcium carbonate) around their soft bodies. When polyps die, their empty crusts remain behind as a platform for more reef growth. The resulting elaborate network of **crevices**, ledges, and holes serves as calcium carbonate "condominiums" for a variety of marine animals.

Coral reefs are the result of a mutually beneficial relationship between polyps and tiny single-celled algae called *zooxanthellae* that live in the tissues of the polyps. The algae provide the polyps with color, food, and oxygen through **photosynthesis**, and help produce calcium carbonate, which forms the coral skeleton. The polyps, in turn, provide the algae with a well-protected home and some of their nutrients. Although coral reefs occupy only about 0.1 percent of the world's ocean area, they provide numerous free ecological and economic services. They help moderate atmospheric temperatures by removing carbon dioxide from the atmosphere, act as natural barriers that help protect 15 percent of the world's coastlines from erosion by waves and storms, and provide habitats for a variety of marine organisms.

Economically, coral reefs produce about one-tenth of the global fish catch and one-fourth of the catch in developing countries, and they provide jobs and building materials for some of the world's poorest countries. They also support fishing and tourism industries worth billions of dollars each year. Finally, these biological treasures give us an underwater world to study and enjoy. Each year more than 1 million scuba divers visit coral reefs to experience these wonders of biodiversity.

However, coral reefs are vulnerable to damage because they grow slowly and are disrupted easily. One problem is coral bleaching. It occurs when a coral becomes stressed and the algae on which it depends for food and color die out, leaving an underlying white or bleached skeleton of calcium carbonate. Two causes of bleaching are increased water temperature and runoff of silt from the land that covers the coral and prevents photosynthesis. The biodiversity of coral reefs can also be reduced by natural disturbances such as severe storms, freshwater floods, and invasions of predatory fish. Today the biggest threats to the survival and biodiversity of many of the world's coral reefs come from human activities.

In 2004, 240 experts from ninety-six countries estimated that 20 percent of the world's coral reefs are so damaged that they are unlikely to recover. They also projected that by 2050 another 30 percent to 50 percent of the world's coral reefs could be lost due to climate change, habitat loss, pollution, and overfishing. Only about 300 of the world's 6,000 coral reefs are protected as reserves or parks. According to a recent study, coral reefs are worth $100,000 to $600,000 per square kilometer ($260,000-$1.6 million per square mile) per year, depending on location. These estimates are based on using the reefs mainly for sustainable small-scale fishing, tourism, and selling aquarium fish and exclude their much larger ecological values. If these economic and ecological values are included, it is much cheaper to protect coral reefs than to damage them and use them unsustainably.

However, scientists have recently discovered an encouraging finding. There is growing evidence that coral reefs can recover when protected by restricting fishing and reducing inputs of nutrients and other pollutants. Also, in 2004, scientists found that coral can form relationships with more heat-tolerant types of algae. This could allow coral in some areas to survive at higher temperatures.

6 What does the author mention in the conclusion as an example of support to coral reefs?

- ◯ Laws that limit fishing and polluting
- ◯ Evidence that overfishing is harmful
- ◯ Efforts to minimize climate change
- ◯ Reducing their biodiversity

Coral reefs form in clear, warm coastal waters of the tropics and subtropics. These stunningly beautiful natural wonders are among the world's oldest, most diverse, and most productive ecosystems. In terms of biodiversity, they are the marine equivalents of tropical rain forests.

Coral reefs are formed by massive colonies of tiny animals called *polyps*. Polyps slowly build reefs by secreting a protective crust of limestone (calcium carbonate) around their soft bodies. When polyps die, their empty crusts remain behind as a platform for more reef growth. The resulting elaborate network of **crevices**, ledges, and holes serves as calcium carbonate "condominiums" for a variety of marine animals.

Coral reefs are the result of a mutually beneficial relationship between polyps and tiny single-celled algae called *zooxanthellae* that live in the tissues of the polyps. The algae provide the polyps with color, food, and oxygen through **photosynthesis**, and help produce calcium carbonate, which forms the coral skeleton. The polyps, in turn, provide the algae with a well-protected home and some of their nutrients. Although coral reefs occupy only about 0.1 percent of the world's ocean area, they provide numerous free ecological and economic services. They help moderate atmospheric temperatures by removing carbon dioxide from the atmosphere, act as natural barriers that help protect 15 percent of the world's coastlines from erosion by waves and storms, and provide habitats for a variety of marine organisms.

Economically, coral reefs produce about one-tenth of the global fish catch and one-fourth of the catch in developing countries, and they provide jobs and building materials for some of the world's poorest countries. They also support fishing and tourism industries worth billions of dollars each year. Finally, these biological treasures give us an underwater world to study and enjoy. Each year more than 1 million scuba divers visit coral reefs to experience these wonders of biodiversity.

However, coral reefs are vulnerable to damage because they grow slowly and are disrupted easily. One problem is coral bleaching. It occurs when a coral becomes stressed and the algae on which it depends for food and color die out, leaving an underlying white or bleached skeleton of calcium carbonate. Two causes of bleaching are increased water temperature and runoff of silt from the land that covers the coral and prevents photosynthesis. The biodiversity of coral reefs can also be reduced by natural disturbances such as severe storms, freshwater floods, and invasions of predatory fish. Today the biggest threats to the survival and biodiversity of many of the world's coral reefs come from human activities.

In 2004, 240 experts from ninety-six countries estimated that 20 percent of the world's coral reefs are so damaged that they are unlikely to recover. They also projected that by 2050 another 30 percent to 50 percent of the world's coral reefs could be lost due to climate change, habitat loss, pollution, and overfishing. Only about 300 of the world's 6,000 coral reefs are protected as reserves or parks. According to a recent study, coral reefs are worth $100,000 to $600,000 per square kilometer ($260,000-$1.6 million per square mile) per year, depending on location. These estimates are based on using the reefs mainly for sustainable small-scale fishing, tourism, and selling aquarium fish and exclude their much larger ecological values. If these economic and ecological values are included, it is much cheaper to protect coral reefs than to damage them and use them unsustainably.

However, scientists have recently discovered an encouraging finding. There is growing evidence that coral reefs can recover when protected by restricting fishing and reducing inputs of nutrients and other pollutants. Also, in 2004, scientists found that coral can form relationships with more heat-tolerant types of algae. This could allow coral in some areas to survive at higher temperatures.