Day 16. Prose Summary (2)

PRACTICE 02

Passage 4

Animal Communication

Due to the fact that animals either possess only basic auditory communication skills or lack them altogether, many animals rely on visual communication methods. Insects and birds, especially, possess very sophisticated visual systems of communication. These visual systems primarily belong to two different categories-passive signals and active signals-and may be used separately or in a combination of the two.

Passive signals require no energy expenditure on the part of the animal. This is due to the fact that passive signals are part of their physical appearance. For instance, butterflies come in a variety of colors and in a multitude of designs. With brightly colored eyespots, stripes and solid colors, butterflies are able to communicate their gender, age and species. These passive signals also inform creatures of other species that they are inedible or poisonous. Likewise, many species of birds display different patterns of colors for much the same reason as butterflies, especially to differentiate gender and to initiate reproduction.

The use of active signals is much more physical and requires energy from the creatures using them. Courtship and mating rituals are one area in which active signals are displayed with vigor. Some insects will perform intricate airborne dances to attract mates. At night, fireflies produce certain flashes that communicate that they are ready to reproduce or that they have already done so. Certain bird species also perform mating dances. A male prairie chicken may spend hours strutting and hopping in circles around a female trying to convince her to mate with him. Birds also make use of active signals to warn their flock of danger such as the approach of a predator by beating their wings or rapidly taking flight. These visual warnings quickly spread throughout the flock and are copied in turn by other members.

Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

Birds and insects have implemented visual measures to communicate.

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Answer Choices

A) Visual forms of communication are extremely obvious.

B) Active signals can show willingness and ability to mate as well as warn others of danger.

C) Birds use elaborate decoration to send out passive signals about their species.

D) Fireflies use flashes of light in a sequence that represents language.

E) Passive signals are sent unintentionally by the communicator's physical features.

F) There are two types of visual systems in animal communication.

Passage 6

The Columbian Exchange

Following the arrival of Christopher Columbus's expedition in the Caribbean, waves of conquerors and colonists came to the Americas. When these Europeans interacted with the Native Americans, they exchanged many things either intentionally or by chance. Much of this exchange took place in the form of actual trade. Whether positive or negative, these exchanges had dramatic effects on both the New World and the Old World.

Columbus brought back many souvenirs to his Spanish sponsors from the Caribbean. His original mission had been to open a new trade route to the spices and other riches of Asia. Having essentially failed that mission, the King and Queen of Spain took interest in what he did find. These included new crops like maize, tomatoes, potatoes, pumpkins and chocolate, some of which later became staples in the European diet. What interested the Spanish the most about the Americas; though, was gold because of its monetary value and rarity. The Spanish conquerors sent small armies of soldiers to explore the land they had claimed and bring back all of the gold. On the other hand, the Europeans introduced many crops to the Americas as well, the most important being sugar cane and coffee. They also brought many animals including chickens, pigs and cows, but the animal that became the most important to the Native Americans was the horse.

However, this exchange also had its downside. The Europeans brought warfare and oppression, but unknown to them at the time, they also brought something far worse than swords and guns: new diseases. Europe had suffered for centuries through many plagues that sometimes destroyed whole villages. Over time, the survivors of these plagues built up immunities to the epidemics. Diseases like Smallpox, Influenza, Cholera, Typhus, and the Pest were still serious in Europe, but they spread to the new land, and devastated the Native Americans. It is impossible to accurately estimate the mortality rate, but it is estimated that within 130 years, foreign diseases had killed 80 to 90 percent of Native Americans from Canada to Argentina. These diseases were spread through conquest, colonization and even brief trade meetings. When the English came later to colonize North America, only a small fraction of the local inhabitants remained.

Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

When Christopher Columbus discovered the New World, he opened the way for trade between Europe and the Americas.

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Answer Choices

A) The main goal of the expedition was a military takeover of valuable trading ports in Asia, but they failed to reach that continent.

B) The most significant exchanges at the time involved gold from the Americas and livestock from Europe.

C) The Spanish sent armies throughout Central and South America to find gold and they conquered many tribes.

D) These exchanges had lasting effects for the both continents in both positive and negative ways.

E) Despite their intent, the Europeans brought the diseases that nearly wiped out most of the native population.

F) Foreign crops, livestock, technology and riches all changed hands with the Native Americans.

Passage 8

History of Museums

The word 'museum', first used in English in the 17th century, evolved from the Greek term 'mouseion', or "seat of the Muses." The establishment of museums came about for several reasons, such as the wish to preserve culture, build social, political and economic status, and for the pursuit of knowledge. Though museums are dominantly Western in origin, the idea of museums is not absent from other regions of the world such as Africa and Asia.

The first museums were not like we know them today but were more like libraries or centers of scholarly endeavors. They were originally established to serve as sources of inspiration and intellectual enlightenment. In Egypt, Pharaoh Akhenaton had a huge library constructed to house the tributes and gifts given by his allies and the various subjects that lived under his rule. King Ptolemy, another ruler of Egypt, first used the term mouseion in the 3rd century B.C.E. Ptolemy founded the Museum of Alexandria in order to encourage studies in the sciences. Scholars from all around the world congregated in Alexandria to further the learning of science, philosophy, and literature, just to name a few disciplines.

The famous museums of Europe that we are familiar with today are able to trace their establishment back to the private collections of rich merchants, nobility, and church dignitaries. It became a type of competition as the royalty of England, France, and Spain strived to build grander collections than each other. These collections eventually grew to such a size that they required entire multi-winged buildings to house them. In fact, even entire palaces, such as the French Louvre, were given over completely to the storage of museum collections. In the 17th century, as world trade was becoming established and objects from abroad became a subject of interest, the wealthy took to forming private museums that showcased objects of human achievement and the natural world on a broader scale.

It was not until the 18th century that the collections of the rich from the Renaissance and the 17th century moved into the public arena. The first public museum opened in Europe with the rise of a wealthier middle class spurred on by the Industrial Revolution. This promoted an interest in the wonders of science and an interest in the arts in the general public. In the New World, Americans desired to keep up with Europe and began establishing museums as early as 1750. It was not until 1814, however, that the first building constructed specifically to serve as a museum, the Peale Museum, opened in Baltimore. Its collection of art, natural specimens, and various curiosities inspired the modern museums that we are familiar with today.

Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

Since ancient times, museums have represented economic, social, and intellectual developments.

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Answer Choices

A) The first museums were founded in Asia, with the concept spreading west.

B) In early times, building a museum could give one economic status.

C) The earliest museums were quite different from present-day museums because of their function as academic research centers.

D) The European elites displayed their private collections.

E) The Renaissance caused most museums to transition from private to public.

F) Many private collections eventually became part of public museums.

TEST PRACTICE

TEST 1

1. What is true according to earthquake engineering in paragraph 1?

A) Special, rare materials are required to build earthquake-resistant structures.

B) It doesn't cost much to build structures that can endure strong earthquakes.

C) It requires civil engineers to build structures against earthquakes.

D) It helps buildings avoid the danger of potential consequences of earthquakes.

2. What is NOT mentioned about the main objectives of earthquake engineers in paragraph 2?

A) Understanding the relationship between the civil infrastructure and the ground

B) Forecasting the possible consequences that powerful earthquakes can bring about

C) Building structures that would survive earthquake activities based on their knowledge

D) Designing powerful and modern structures that would cost less than expected

3. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.

A) A structure struck by an earthquake shakes because it is connected with other structures that have wide contact surface with the ground.

B) When an earthquakes hits a structure, the part that shakes most is the ground floor where it shares the ground with other structures nearby.

C) The trembling caused by the earthquake is concentrated near the contact planes between the structure and the ground or the structure and another structure.

Earthquake Engineering

A structure that has been properly engineered to withstand earthquakes of greater than average magnitude does not necessarily have to be extremely strong or expensive. In the past, people assumed that buildings had to be sturdier in order to withstand strong earthquakes, especially in areas where they frequently occurred, which meant a greater expense for materials. However, those who work in earthquake engineering offer a very different opinion. As a distinct subset of both structural and civil engineering, earthquake engineering is the study of building and structural behavior once they are subjected to seismic loading (earthquake activity).

Earthquake engineers essentially have two main objectives when designing buildings and other structures. First, they attempt to predict the potential consequences that strong earthquakes would pose in urban areas by trying to understand the interaction between the civil infrastructure (buildings, bridges, etc.) and the ground. Secondly, based upon their understanding and their predictions, they design, construct, and maintain structures that will withstand significant seismic activity and still remain able to be used by people, vehicles, etc.

Seismic loading is the application of agitation earthquakes generate to a sturucture. This agitation occurs at contact surfaces of the structure with the ground or with adjacent structures or with gravity waves from a tsunami. In other words, if the agitation affects where a structure sits, and if it is connected to a neighboring structure somehow, that neighboring structure will also be affected by the agitation. The severity of seismic loading from any one event depends on several factors: the anticipated earthquake's parameters at the site of the agitation, the geotechnical parameters of the site, and the parameters of the building. Analysis of these factors has allowed architects and engineers to construct much safer and taller buildings.

Ancient builders had a fatalistic view of earthquakes. [■A] For instance, the Greeks believed that earthquakes were a direct result of the wrath of gods, such as Poseidon, the god of the sea and the Greek pantheon's most notorious "Earth-Shaker." [■B] Nowadays, however, attitudes toward earthquakes have changed dramatically. [■C] It is now known that by compensating for seismic loading, structures can be built with the ability to resist earthquakes to varying extents. [■D]

D) The structures that have no other structures in the nearby areas are not subject to earthquakes because they share no structural connection.

4. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

Thus, these ancient people didn't think the effects of earthquakes could be resisted by humans.

Where would the sentence best fit?

5. Why does the author mention Poseidon in paragraph 4?

A) To point out how superstitious ancient people were

B) To illustrate the notoriety of the god of the sea

C) To explain the fatalistic view held by ancient people

D) To show that one of the gods was responsible for earthquakes

6. According to paragraph 5, which of the following can be inferred about the major building codes around the world?

A) Structures in cities are regulated by building codes, but those in the countryside are not.

B) Major cities are more likely to be struck by earthquakes than suburbs and rural areas.

C) Serviceable structures can also be considered safe structures after earthquakes hit.

D) Modern buildings are less susceptible to big-scale earthquakes than old buildings.

Most structures in major cities are now built with earthquake or seismic performance in mind. Earthquake or seismic performance is a structure's ability to maintain its safety and serviceability during or following an event of seismic activity. The structure is normally considered "safe" if it does not endanger the lives and well-being of those in or around it by collapsing, either partially or completely. A structure is considered "serviceable" after a seismic event if it is still able to fulfill the operational functions for which it was designed. For instance, if a bridge can still support the traffic it was built for after an earthquake, it would be considered serviceable. The basic concepts in modern earthquake engineering, which are implemented in the major building codes around the world, assume that a properly engineered structure will now survive "The Big One." This term refers to the likelihood of a major earthquake in a particularly vulnerable location, like California's Bay Area which lies close to the San Andreas Fault.

In order to best build structures that would survive major seismic events, engineers need to know the quantified level of an actual or anticipated seismic event in association with the direct damage to an individual structure subject to such an event. The best way to go about doing this is to put a detailed model of the structure in question on a shake-table. Shake tables are exactly what the name implies. They are tables, platforms, or stages that are capable of simulating seismic agitation, which allows engineers to observe and gauge the possibilities of a real-life event. This method has been in use for more than a century, and it has greatly helped with the construction of safer buildings.

The use of the shake-table is just a small part of what is known as seismic performance analysis, or just seismic analysis. Seismic analysis is an important intellectual tool of earthquake engineering. It breaks complex topics down into smaller more-manageable parts in order to gain a better understanding of the seismic performance of structures. Seismic analysis as a formal engineering concept is still a relatively recent development in the discipline. Generally, seismic analysis is based on the methods of structural dynamics—the behavior of structures exposed to seismic loading.

6. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

Earthquake engineering is the study of the behavior of structures that are subject to seismic loading.

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Answer Choices

A) Seismic loading is the effect of an earthquake on a structure determined by various factors.

B) Agitations from the earthquakes occur at the surfaces that connect the structure and the ground.

C) Seismic performance is how well buildings can continue their safety and serviceability after an earthquake.

D) Ancient people thought that earthquakes were deadly punishment from brutal gods such as Poseidon..

E) Engineers use virtual reality to analyze the dynamics of structures subject to earthquakes.

F) Engineers use shake-tables to predict the possible consequences of a real earthquake.

Paragraph Summary

- ✓ Paragraph 1 **definition & purpose of E.E**
- ✓ Paragraph 2 **objective of E.E (prediction & construction)**
- ✓ Paragraph 3 **seismic loading**
- ✓ Paragraph 4 **changes of attitude toward earthquakes (P vs P)**
- ✓ Paragraph 5 **constructions of serviceable structures**
- ✓ Paragraph 6 **anticipate seismic activities – shake -table**
- ✓ Paragraph 7 **importance of seismic analysis**

Answers

[Practice 02]

Passage 4 B), E), F)

동물의 의사소통	Animal Communication
동물은 지극히 기본적인 청각 의사소통 기술이 있거나 아예 없기 때문에, 많은 동물은 시각적인 의사소통 방법에 의존한다. 곤충과 새는 특히 매우 정교한 시각적인 의사소통 시스템을 갖고 있다. 이 시각 시스템은 주로 수동적인 신호와 능동적인 신호라는 두 개의 서론 다른 카테고리에 속하며 따로 사용되거나 혹은 두 개가 함께 사용될 수도 있다.	Due to the fact that animals either possess only basic auditory communication skills or lack them altogether, many animals rely on visual communication methods. Insects and birds, especially, possess very sophisticated visual systems of communication. These visual systems primarily belong to two different categories-passive signals and active signals-and may be used separately or in a combination of the two.
수동적인 신호는 동물 입장에서 아무런 에너지 소비도 필요로 하지 않는다. 이는 수동적인 신호가 그들의 신체적인 모양의 일부라는 사실에 기인한다. 예를 들어, 나비는 다양한 색과 무늬를 보여준다. 밝은 색의 안점, 줄무늬와 단색으로, 나비들은 그들의 성과 나이, 종이 무엇인지 알릴 수 있다. 이러한 수동적인 신호는 또한 그들이 먹을 수 없다거나 독이 있다는 것을 다른 종의 생물들에게 알린다. 마찬가지로, 나비와 같은 이유로, 여러 종류의 새는 특히 성을 구별하고 생식을 촉진하기 위해 다른 패턴의 색을 나타낸다.	Passive signals require no energy expenditure on the part of the animal. This is due to the fact that passive signals are part of their physical appearance. For instance, butterflies come in a variety of colors and in a multitude of designs. With brightly colored eyespots, stripes and solid colors, butterflies are able to communicate their gender, age and species. These passive signals also inform creatures of other species that they are inedible or poisonous. Likewise, many species of birds display different patterns of colors for much the same reason as butterflies, especially to differentiate gender and to initiate reproduction.
능동적인 신호의 사용은 더 신체적이며, 그것을 사용하는 생물체로부터의 에너지를 필요로 한다. 구애와 짝짓기 의식은 능동적인 신호가 활기차게 드러나는 영역이다. 몇몇 곤충들은 짝을 유혹하기 위해 복잡한 공중 춤을 춘다. 밤에 개똥벌레들은 그들이 생식할 준비가 되어 있거나 이미 생식을 마쳤다는 것을 나타내기 위해 어떤 불빛을 발산한다. 어떤 종의 새는 또한 짝짓기 춤을 춘다. 수컷 초원뇌조는 암컷에게 그와 짝짓기 하도록 확신을 주기 위해 그 주변을 원으로 뽐내며 걷거나 폴짝폴짝 뛰며 시간을 보낼 것이다. 그러나 새는 침입자의 접근과 같은 위험을 그들의 무리에 경고하기 위해 그들의 날개를 치거나 갑자기 하늘로 날아 올라가면서 능동적인 신호를 만들어낸다. 이러한 시각적인 경고는 빠르게 그 무리로 퍼지게 되며 다른 구성원들이 모방하게 된다.	The use of active signals is much more physical and requires energy from the creatures using them. Courtship and mating rituals are one area in which active signals are displayed with vigor. Some insects will perform intricate airborne dances to attract mates. At night, fireflies produce certain flashes that communicate that they are ready to reproduce or that they have already done so. Certain bird species also perform mating dances. A male prairie chicken may spend hours strutting and hopping in circles around a female trying to convince her to mate with him. Birds also make use of active signals to warn their flock of danger such as the approach of a predator by beating their wings or rapidly taking flight. These visual warnings quickly spread throughout the flock and are copied in turn by other members.
지문을 간략하게 요약한 글의 첫 문장이 아래에 제시되어 있다. 지문의 가장 중요한 내용을 표현하는 세 개의 선택지를 골라 요약문을 완성하시오. 일부 문장들은 지문에 제시되지 않았거나 지문의 지엽적인 내용을 표현하기 때문에 요약문에 포함되지 않는다. *이 문제의 배점은 2점이다.*	**Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***
새들과 곤충들은 의사소통을 위해서 시각적 수단을	**Birds and insects have implemented visual measures**

활용한다.	to communicate.
• B) 능동적 신호는 다른 개체들에 위험을 경고할 수 있을 뿐 아니라 교미하려는 의지와 능력을 보여줄 수 있다. • E) 수동적 신호는 전달자의 신체적 특징으로 표현된다. • F) 동물 의사소통에는 두 개의 시각적 체계가 있다.	• B) Active signals can show willingness and ability to mate as well as warn others of danger. • E) Passive signals are sent by the communicator's physical features. • F) There are two types of visual systems in animal communication.
A) 의사소통의 시각적 형태는 매우 명백하다. C) 새들은 종에게 수동적 신호를 보내기 위해 매우 정교한 장식을 사용한다. D) 개똥벌레는 언어를 표현하는 빛을 일정 순서로 보낸다.	A) Visual forms of communication are extremely obvious. C) Birds use elaborate decoration to send out passive signals about their species. D) Fireflies use flashes of light in a sequence that represents language.

어휘

auditory [|ɔ:dətɔ:ri] 청각의 | **sophisticated** [sə|fɪstɪkeɪtɪd] 정교한 | **expenditure** [ɪk|spendɪtʃə(r)] 소비 점 **stripe** [straɪp] 줄무늬 | **inedible** [ɪn|edəbl] 먹을 수 없는 | **mating** [|meɪtɪŋ] 짝짓기 | **ritual** [|rɪtʃuəl] 의식 **vigor** [vígər] 활기, 힘 | **intricate** [|ɪntrɪkət] 복잡한 | **airborne** [|erbɔ:rn] 공중의 | **flock** [flɑ:k] 무리

Passage 6 B), D), E)

콜럼버스의 교	The Columbian Exchange
크리스토퍼 콜럼버스의 원정대가 카리브 해에 도착한 이후로 정복자들과 식민지 개척자들의 물결이 아메리카 대륙으로 밀려들었다. 의도적이든 우연적이든 유럽인들은 북미 원주민들과 교류하며 많은 것들을 교환하였다. 이런 교환의 상당수는 실제 무역과 같은 형태로 이루어졌다. 긍정적이건 부정적이건 이런 교환들은 그 신, 구세계에 극적인 영향을 주었다.	Following the arrival of Christopher Columbus's expedition in the Caribbean, waves of conquerors and colonists came to the Americas. When these Europeans interacted with the Native Americans, they exchanged many things either intentionally or by chance. Much of this exchange took place in the form of actual trade. Whether positive or negative, these exchanges had dramatic effects on both the New World and the Old World.
콜럼버스는 자신의 스페인 후원자들에게 카리브 해에서 많은 기념품을 가지고 돌아왔다. 그의 본래 임무는 아시아의 향신료 및 다른 풍부한 자원을 향한 새로운 무역 항로를 개척하는 것이었다. 기본적으로 그 임무 완수에는 실패했으나 스페인의 왕과 왕비는 그가 발견한 것에 관심을 보였다. 그것에는 옥수수, 토마토, 감자, 호박, 초콜릿 같은 새로운 작물이 있었으며, 이들 중 일부는 후에 유럽인들의 주식이 되었다. 그렇지만 아메리카 대륙에서 스페인 사람들의 관심을 가장 많이 끌었던 것은 금전적 가치와 희소성을 지니고 있는 금이었다. 스페인 정복자들은 소규모의 군대를 파견해 자신들이 소유권을 주장했던 땅을 탐사하고 그곳의 금을 가져오게 하였다. 반면에 유럽인들은 가장 중요한 작물인 사탕수수와 커피를 비롯한 많은 농작물들을 아메리카에 전해주었다. 그들은 또한 닭, 돼지, 소를 포함한 많은 동물들을 가져왔는데 그중 아메리카 원주민들에게 가장 중요한 존재가 된 동물은 말이었다.	Columbus brought back many souvenirs to his Spanish sponsors from the Caribbean. His original mission had been to open a new trade route to the spices and other riches of Asia. Having essentially failed that mission, the King and Queen of Spain took interest in what he did find. These included new crops like maize, tomatoes, potatoes, pumpkins and chocolate, some of which later became staples in the European diet. What interested the Spanish the most about the Americas; though, was gold because of its monetary value and rarity. The Spanish conquerors sent small armies of soldiers to explore the land they had claimed and bring back all of the gold. On the other hand, the Europeans introduced many crops to the Americas as well, the most important being sugar cane and coffee. They also brought many animals including chickens, pigs and cows, but the animal that became the most important to the Native Americans was the horse.
하지만 이러한 교역에는 부정적인 면도 있었다. 유럽인들은	However, this exchange also had its downside. The Europeans brought warfare and oppression, but

그들에게 전쟁과 탄압을 가져다 주었으나 그들은 당시 자신도 모르는 사이에 검이나 총보다 훨씬 더 해로운 것을 전해주었다. 그것은 바로 신종 질병이었다. 때때로 마을 전체를 초토화시키는 여러 전염병 때문에 유럽은 수세기 동안 고통을 받았었다. 시간이 흐르면서 전염병 생존자들의 면역력이 생겼다. 천연두, 독감, 콜레라, 발진티푸스, 페스트 같은 질병은 유럽에서도 여전히 심각한 문제였지만 그 질병들은 신세계로 퍼져 아메리카 원주민들을 유린하였다. 사망률을 정확히 측정하는 것은 불가능하지만, 외국에서 들어온 질병이 인해 캐나다에서 아르헨티나에 이르기까지 원주민들의 80 ~ 90 퍼센트를 130 년 안에 사망에 이르게 한 것으로 추정된다. 이런 질병들은 정복, 식민지화, 심지어는 간단한 무역 회의를 통해서도 확산되었다. 이후에 영국인들이 북아메리카를 식민지화하기 위해 왔을 때에는 아주 적은 수의 지역 주민들만이 남아 있었다.

unknown to them at the time, they also brought something far worse than swords and guns: new diseases. Europe had suffered for centuries through many plagues that sometimes destroyed whole villages. Over time, the survivors of these plagues built up immunities to the epidemics. Diseases like Smallpox, Influenza, Cholera, Typhus, and the Pest were still serious in Europe, but they spread to the new land and devastated the Native Americans. It is impossible to accurately estimate the mortality rate, but it is estimated that within 130 years, foreign diseases had killed 80 to 90 percent of Native Americans from Canada to Argentina. These diseases were spread through conquest, colonization and even brief trade meetings. When the English came later to colonize North America, only a small fraction of the local inhabitants remained.

지문을 간략하게 요약한 글의 첫 문장이 아래에 제시되어 있다. 지문의 가장 중요한 내용을 표현하는 세 개의 선택지를 골라 요약문을 완성하시오. 일부 문장들은 지문에 제시되지 않았거나 지문의 지엽적인 내용을 표현하기 때문에 요약문에 포함되지 않는다. *이 문제의 배점은 2 점이다.*

Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

신세계를 발견했을 때 크리스토퍼 콜럼버스는 유럽과 아메리카 대륙 간의 교역의 장을 열었다.

When Christopher Columbus discovered the New World, he opened the way for trade between Europe and the Americas.

- **B) 당시의 가장 중요한 교환품에는 아메리카 대륙에서 온 금과 유럽에서 온 가축이 포함되어 있었다.**
- **D) 이런 교환은 양 대륙에 긍정적, 부정적 방식으로 지속적인 영향을 주었다.**
- **E) 그들의 의도와는 다르게 유럽인들은 질병을 가져다 주었고, 이는 원주민 인구의 대다수를 거의 몰살시켰다.**

- **B) The most significant exchanges at the time involved gold from the Americas and livestock from Europe.**
- **D) These exchanges had lasting effects for the both continents in both positive and negative ways.**
- **E) Despite their intent, the Europeans brought the diseases that nearly wiped out most of the native population.**

A) 그 원정대의 주 목적은 아시아의 중요한 무역항을 군사력으로 장악하는 것이었으나 그들은 그 대륙에 도달하지 못했다.
C) 스페인 사람들은 중남미 전역에 군대를 보내 금을 찾아오게 하였으며 많은 부족들을 정복했다.
F) 북미 원주민들과의 사이에서 외국산 농작물, 가축, 기술, 재물 등이 모두 거래되었다.

A) The main goal of the expedition was a military takeover of valuable trading ports in Asia, but they failed to reach that continent.
C) The Spanish sent armies throughout Central and South America to find gold and they conquered many tribes.
F) Foreign crops, livestock, technology and riches all changed hands with the Native Americans.

어휘

expedition [ˌekspəˈdɪʃn] 원정대 | **wave** [weɪv] 물결, 집단적 이동 | **conqueror** [ˈkɑːŋkərə(r)] 정복자

colonist [|kɑːlənɪst] 식민지 개척자 | **interact with** ~와 교류하다 | **exchange** [ɪks|tʃeɪndʒ] 교환하다
intentionally [inténʃənəli] 의도적으로 | **otherwise** [ʌ́ðərwàiz] 다른 방법으로 | **dramatic** [drəmǽtik] 극적인
souvenir [sùːvəníər] 기념품 | **sponsor** [spɑ́nsər] 후원자 | **trade route** 무역로, 항로 | **spice** [spais] 향신료
essentially [isénʃəli] 본질적으로 | **maize** [meiz] 옥수수 | **staple** [stéipl] 주요 산물 | **interest** [íntərəst] 관심을 끌다
sugar cane 사탕 수수 | **warfare** [wɔ́ːrfɛər] 전쟁 | **oppression** [əpréʃən] 압제 | **plague** [pleig] 전염병
immunity [imjúːnəti] 면역 | **devastate** [|devəsteɪt] 완전히 파괴하다 | **estimate** [|estɪmeɪt] 추정하다
conquest [|kɑːŋkwest] 정복 | **colonize** [|kɑːlənaɪz] 식민지화하다 | **fraction** [|frǽkʃn] 부분, 파편
inhabitant [ɪn|hæbɪtənt] 거주자 | **military takeover** 군부 집권, 군사 쿠데타 | **livestock** [|laɪvstɑːk] 가축
intent [ɪn|tent] 의도 | **wipe out** 말살하다, 파괴하다

Passage 8 C), D), F)

박물관의 역사	History of Museums
17세기 영국에서 처음으로 사용된 '박물관'이란 단어는"뮤즈신의 자리"라는 뜻의 그리스 단어 'museion'에서 발달된 것이다. 박물관의 설립은 문화를 보존하고 사회적, 정치적, 경제적 지위를 구축하려는 소망과 지식 추구에의 소망과 같은 여러 가지 이유에서 시작되었다. 박물관의 기원은 다분히 서구의 것이지만, 박물관이라는 아이디어가 아프리카나 아시아 같은 세계 다른 지역에서 없었던 것은 아니다.	The word 'museum', first used in English in the 17th century, evolved from the Greek term 'mouseion', or "seat of the Muses." The establishment of museums came about for several reasons, such as the wish to preserve culture, build social, political and economic status, and for the pursuit of knowledge. Though museums are dominantly Western in origin, the idea of museums is not absent from other regions of the world such as Africa and Asia.
최초의 박물관은 오늘날 우리가 아는 것과 달랐으며 대신 도서관이나 학문적인 노력의 중심지와 더 흡사했다. 박물관은 본래 영감과 지적인 계몽의 원천을 위해 지어졌다. 이집트에서 파라오 Akhenaton은 그의 동맹국과 그의 통치하에 있던 많은 피지배자들로부터 받은 진상품과 선물을 보관하기 위해 거대한 도서관을 건축하게 하였다. 이집트의 또 다른 통치자였던 Ptolemy 왕은 기원전 3세기에 museion이라는 용어를 최초로 사용했다. Ptolemy는 과학 분야의 연구를 진척시키기 위해 알렉산드리아 박물관을 세웠다. 전세계로부터 온 학자들은, 예를 들어, 과학과 철학, 문학과 같은 영역의 배움을 더 진척시키기 위해 알렉산드리아에 집합했다.	The first museums were not like we know them today but were more like libraries or centers of scholarly endeavors. They were originally established to serve as sources of inspiration and intellectual enlightenment. In Egypt, Pharaoh Akhenaton had a huge library constructed to house the tributes and gifts given by his allies and the various subjects that lived under his rule. King Ptolemy, another ruler of Egypt, first used the term mouseion in the 3rd century B.C.E. Ptolemy founded the Museum of Alexandria in order to encourage studies in the sciences. Scholars from all around the world congregated in Alexandria to further the learning of science, philosophy, and literature, just to name a few disciplines.
오늘날 우리에게 친숙한 유럽의 유명한 박물관들의 설립은 부유한 상인이나 귀족 그리고 교회 고위 성직자의 개인적인 수집에서 그 유래를 찾을 수 있다. 이것은 상대보다 더 많은 수집을 하고자 다투는 영국, 프랑스, 스페인의 귀족들 간의 경쟁과 같은 형태가 되었다. 이런 수집품들은 결국 그것들을 보관하기 위해 사방으로 뻗은 건물을 필요로 했다. 사실상, 프랑스 루브르와 같은 왕궁의 전체가 박물관 수집 저장고로 완전히 양도되기도 했다. 17세기에 세계 무역이 시작되고 해외로부터 온 물건이 관심의 대상이 되면서 부자들은 사람이 만든 것과, 더 넓은 범주로는 자연으로부터 얻은 물건을 전시하기 위한 개인 박물관을 건설하게 되었다.	The famous museums of Europe that we are familiar with today are able to trace their establishment back to the private collections of rich merchants, nobility, and church dignitaries. It became a type of competition as the royalty of England, France, and Spain strived to build grander collections than each other. These collections eventually grew to such a size that they required entire multi-winged buildings to house them. In fact, even entire palaces, such as the French Louvre, were given over completely to the storage of museum collections. In the 17th century, as world trade was becoming established and objects from abroad became a subject of interest, the wealthy took to forming private museums that showcased objects of human achievement and the natural world on a broader scale.
르네상스와 17세기로부터의 부자들의 수집품이 대중의 영역으로 옮겨온 것은 18세기가 되어서였다. 최초의 공공	It was not until the 18th century that the collections

박물관은 유럽에서 산업 혁명에 의해 급부상한 부유한 중산 계급과 함께 시작되었다. 이것은 일반 대중들의 과학에 대한 궁금증과 예술에 대한 흥미를 불러일으켰다. 신세계에서 미국인들은 유럽을 따라잡기를 갈망했었고, 따라서 1750년부터 박물관을 짓기 시작했다. 그러나 1814년이 되어서야 최초로 박물관 역할을 하기 위해 지어진 건물인 Peale 박물관이 볼티모어에서 개관하였다. 그곳의 예술과 자연 표본, 그리고 다양한 진기한 물건들은 오늘날 우리에게 친숙한 현대 박물관에 영감을 주었다.

of the rich from the Renaissance and the 17th century moved into the public arena. The first public museum opened in Europe with the rise of a wealthier middle class spurred on by the Industrial Revolution. This promoted an interest in the wonders of science and an interest in the arts in the general public. In the New World, Americans desired to keep up with Europe and began establishing museums as early as 1750. It was not until 1814, however, that the first building constructed specifically to serve as a museum, the Peale Museum, opened in Baltimore. Its collection of art, natural specimens, and various curiosities inspired the modern museums that we are familiar with today.

지문을 간략하게 요약한 글의 첫 문장이 아래에 제시되어 있다. 지문의 가장 중요한 내용을 표현하는 3개의 선택지를 골라 요약문을 완성하시오. 일부 문장들은 지문에 제시되지 않았거나 지문의 지엽적인 내용을 표현하기 때문에 요약문에 포함되지 않는다. *이 문제의 배점은 2점이다.*

Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.

고대부터, 박물관은 경제, 사회, 지적 발달의 역할을 했다.

- **C) 가장 초기의 박물관들은 학술적 연구의 센터로서의 기능 때문에 현대 박물관과는 사뭇 다르다.**
- **D) 유럽의 엘리트들은 그들의 소장품을 보여주는 박물관을 지음으로써 명성을 얻으려 했다.**
- **F) 많은 수의 개인 소장품들이 결국 공공 박물관의 일부가 되었다.**

Since ancient times, museums have represented economic, social, and intellectual developments.

- **C) The earliest museums were quite different from present-day museums because of their function as academic research centers.**
- **D) The European elites display private collections.**
- **F) Many private collections eventually became part of public museums.**

A) 최초의 박물관은 아시아에 건설되었고, 서양에 그 개념이 전해졌다.
B) 초기에, 박물관을 짓는 것은 경제적 지위를 부여하는 것이었다.
E) 르네상스는 대부분의 박물관들이 대중 영역으로 옮겨가게 했다.

A) The first museums were founded in Asia, with the concept spreading west.
B) In early times, building a museum could give one economic status.
E) The Renaissance caused most museums to transition from private to public.

어휘
evolve from ~로부터 발전시키다 | **come about** 생기다, 일어나다 | **dominantly** [dάmənəntli] 지배적으로
inspiration [ìnspəréiʃən] 영감 | **intellectual** [ìntəlékʧuəl] 지적인 | **enlightenment** [inláitnmənt] 계몽
tribute [|trɪbjuːt] 선물, 진상품 | **ally** [|æla ɪ] 동맹 | **congregate** [|kɑːŋgrɪgeɪt] 모이다, 집합하다
dignitary [|dɪgnɪteri] 고위 인사 | **house** [haʊz] 저장하다, 보관하다 | **achievement** [ə|tʃiːvmənt] 성취
prompt [prɑːmpt] 자극하다

Test 1 **1.** B **2.** D **3.** C **4.** B **5.** C **6.** D **7.** A, C, F

지진공학	Earthquake Engineering
보통 이상 규모의 지진을 견디도록 공학적으로 설계된 구조가 반드시 극도로 튼튼하거나 비용이 많이 들 필요는 없	structure that has been properly engineered to withstand earthquakes of greater than average

다. 과거에 사람들은 특히 지진이 자주 일어나는 지역에서 강한 지진에 견디려면 시공 중인 건물이 튼튼해야 하고, 이는 자재 비용이 더 많이 드는 것이라고 여겼다. 그러나 지진공학에 종사하는 이들은 아주 다른 의견을 제시한다. 구조공학과 토목 공학의 뚜렷한 하위 분류로서의 지진공학은 지진하중(지진 활동)을 받았을 때의 건축과 구조 성능에 대한 연구이다.	magnitude does not necessarily have to be extremely strong or expensive. In the past, people assumed that buildings had to be sturdier in order to withstand strong earthquakes, especially in areas where they frequently occurred, which meant a greater expense for materials. However, those who work in earthquake engineering offer a very different opinion. As a distinct subset of both structural and civil engineering, earthquake engineering is the study of building and structural behavior once they are subjected to seismic loading (earthquake activity).
지진공학자들은 건물이나 다른 구조물을 설계할 때, 근본적으로 두 가지 주요 목표를 가지고 있다. 첫째로 그들은 민간 기반 시설(건물, 교각 등)과 지반 사이의 상호작용을 이해하려는 함으로써 강력한 지진이 도시 지역에 미치는 잠재적인 결과를 예측하고자 한다. 두 번째로 그들은 자신들의 이해와 예측을 바탕으로 상당한 지진 활동을 견뎌내고도 사람들과 차량 등이 여전히 이용할 수 있는 구조물을 설계하고 건축하며 관리한다.	Earthquake engineers essentially have two main objectives when designing buildings and other structures. First, they attempt to predict the potential consequences that strong earthquakes would pose in urban areas by trying to understand the interaction between the civil infrastructure (buildings, bridges, etc.) and the ground. Secondly, based upon their understanding and their predictions, they design, construct, and maintain structures that will withstand significant seismic activity and still remain able to be used by people, vehicles, etc.
지진하중은 지진으로 발생한 동요가 구조물에 미치는 영향이다. 이러한 동요는 구조물의 접촉면이 땅과 닿는 곳이나 인접한 구조물과의 접촉면, 혹은 쓰나미의 중력파와의 접촉면에서 일어난다. 다시 말해서, 동요가 구조물이 있는 곳에 영향을 미친다면, 그리고 그것이 이웃한 구조물과 어떤 식으로든 이어져 있다면, 그 이웃한 구조물 또한 그 동요에 영향을 받을 것이다. 지진으로부터 오는 지진하중 강도는 여러 요인들, 즉 동요가 일어난 지점에서의 예상 지진의 변수, 그 지점의 지질공학적인 변수, 구조물의 변수에 달려 있다. 이러한 요인들의 분석은 건축가들과 공학자들로 하여금 자료에 대해 숙고하여 훨씬 더 안전하고 높은 건물을 건설하도록 해 왔다.	Seismic loading is the application of agitation earthquakes generate to a structure. This agitation occurs at contact surfaces of the structure with the ground or with adjacent structures or with gravity waves from a tsunami. In other words, if the agitation affects where a structure sits, and if it is connected to a neighboring structure somehow, that neighboring structure will also be affected by the agitation. The severity of seismic loading from any one event depends on several factors: the anticipated earthquake's parameters at the site of the agitation, the geotechnical parameters of the site, and the parameters of the building. Analysis of these factors has allowed architects and engineers to construct much safer and taller buildings.
고대 건축가들은 지진에 대해 운명론적인 시각을 가지고 있었다. **[■A]** 예를 들어, 그리스인들은 지진이 바다의 신이며 그리스 신전의 가장 악명 높은 "지구를 흔드는 신"인 포세이돈과 같은 신들의 분노의 직접적인 결과라고 믿었다. **[■B] 그래서 이런 고대인들은 지진의 영향을 인간이 저지할 수 있다고 생각하지 않았다.** 그러나 지금은 지진에 대한 태도는 급격히 변했다. **[■C]** 지진하중을 보충함으로써, 건축물은 다양한 정도로 지진에 저항하는 능력을 갖추어 지어질 수 있다는 것이 알려져 있다. **[■D]**	Ancient builders had a fatalistic view of earthquakes. **[■A]** For instance, the Greeks believed that earthquakes were a direct result of the wrath of gods, such as Poseidon, the god of the sea and the Greek pantheon's most notorious "Earth-Shaker." **[■B] Thus, these ancient people didn't think the effects of earthquakes could be resisted by humans.** Nowadays, however, attitudes toward earthquakes have changed dramatically. **[■C]** It is now known that by compensating for seismic loading, structures can be built with the ability to resist earthquakes to varying extents. **[■D]**
주요 도시에 있는 대부분의 구조물들은 지진 또는 내진성능을 염두에 두고 건축되었다. 내진성능은 지진 활동이 일	Most structures in major cities are now built with earthquake or seismic performance in mind. Earthquake or seismic performance is a structure's

어나는 동안 혹은 그 이후에 건물이나 구조물이 안전과 유용성를 지탱하는 능력이다. 건물은 일부 혹은 전체가 붕괴되어 건물 안팎의 사람들의 생명과 안전을 위험하게 하지 않는다면 보통 "안전"하다고 여겨진다. 건물이 지진 활동 이후에도 설계 목적에 맞게 운영 기능을 수행할 수 있다면 "유용하다"고 여겨진다. 예를 들어, 지진이 난 이후에 교각이 지어진 목적에 걸맞은 교통량을 지탱할 수 있다면 여겨질 것이다. 전세계적으로 주요 건축법에서 시행되고 있는 현대 지진공학의 기본 개념에 따르면 제대로 설계된 구조물은 "큰 지진"에도 끄덕 없을 것이다. 이 용어는 샌 안드레어스 단층 가까이 위치한 캘리포니아 베이 에이리어같이 특히 취약한 지역에 대규모 지진이 일어날 가능성을 나타낸다.

주요 지진 활동에도 견딜 수 있는 건물을 가장 잘 지으려면 기술자들은 지진 피해를 입기 쉬운 개별 건물들에 대한 직접적인 피해와 관련해서 실질적인 혹은 예상되는 지진 활동의 수량화된 수치를 알아야 한다. 이렇게 할 수 있는 가장 좋은 방법은 문제의 건물의 상세 모델을 진동판에 올려보는 것이다. 진동판은 그 이름이 의미하는 그대로다. 그들은 지진의 동요를 그대로 모방할 수 있는 판이나 단, 또는 대로 기술자들은 이 흔들림을 보고 실제 지진 상황에서의 가능성을 관찰하고 측정할 수 있다. 이 방법은 100년 이상 사용되었으며 더 안전한 건물 건설에 크게 도움이 되어왔다.

진동판의 활용은 내진성능분석 혹은 지진분석의 작은 일부일 뿐이다. 지진분석은 지진공학의 중요한 지능적 도구이다. 그것은 건물의 내진성능을 더 잘 이해할 수 있도록 복잡한 주제들을 다루기 쉬운 더 작은 부분으로 분할한다. 공식적인 공학 개념으로의 지진분석은 학문분야에서 상대적으로 최근에 생겨난 개념이다. 일반적으로 지진분석은 구조적 역학이라는 체계에 근거하며 이는 지진하중에 노출된 건물의 작용을 말한다.

1. 단락 1에서 지진공학에 대한 내용으로 다음 중 사실인 것은?

A) 지진에 견디는 구조물 건설을 위해 특수하고 드문 자재들이 필요하다.

B) 강력한 지진에 견딜 수 있는 구조물 건설에 많은 비용이 들지 않는다.

C) 지진에 대항한 구조물 건설을 위해 토목 기사들을 필요로 한다.

D) 건물들이 지진으로 인해 일어날 수도 있는 재앙의 위

ability to maintain its safety and serviceability during or following an event of seismic activity. The structure is normally considered "safe" if it does not endanger the lives and well-being of those in or around it by collapsing, either partially or completely. A structure is considered "serviceable" after a seismic event if it is still able to fulfill the operational functions for which it was designed. For instance, if a bridge can still support the traffic it was built for after an earthquake, it would be considered serviceable. The basic concepts in modern earthquake engineering, which are implemented in the major building codes around the world, assume that a properly engineered structure will now survive "The Big One." This term refers to the likelihood of a major earthquake in a particularly vulnerable location, like California's Bay Area which lies close to the San Andreas Fault.

In order to best build structures that would survive major seismic events, engineers need to know the quantified level of an actual or anticipated seismic event in association with the direct damage to an individual structure subject to such an event. The best way to go about doing this is to put a detailed model of the structure in question on a shake-table. Shake tables are exactly what the name implies. They are tables, platforms, or stages that are capable of simulating seismic agitation, which allows engineers to observe and gauge the possibilities of a real-life event. This method has been in use for more than a century, and it has greatly helped with the construction of safer buildings.

The use of the shake-table is just a small part of what is known as seismic performance analysis, or just seismic analysis. Seismic analysis is an important intellectual tool of earthquake engineering. It breaks complex topics down into smaller more-manageable parts in order to gain a better understanding of the seismic performance of structures. Seismic analysis as a formal engineering concept is still a relatively recent development in the discipline. Generally, seismic analysis is based on the methods of structural dynamics—the behavior of structures exposed to seismic loading.

1. What is true according to earthquake engineering in paragraph 1?

A) Special, rare materials are required to build earthquake-resistant structures.

B) It doesn't cost much to build structures that can endure strong earthquakes.

C) It requires civil engineers to build structures against earthquakes.

D) It helps buildings avoid the danger of potential

험을 피할 수 있게 도움을 준다.

2. 단락 2에 따르면, 다음 중 지진 공학자들의 주요 목표로 언급되지 않은 것은?

A) 토목구조물과 지반 사이의 관계 이해

B) 강력한 지진이 야기할 수 있는 잠재적인 결과 예측

C) 그들의 지식을 바탕으로 지진 활동을 견뎌낼 수 있는 구조물 건축

D) 예상보다 비용이 덜 드는 강력하며 현대적인 구조물 설계

3. 다음 문장 중 지문의 음영 표시된 문장의 핵심 정보를 가장 잘 표현한 것은? 오답은 문장의 의미가 크게 왜곡되거나 핵심 정보가 누락되어 있다.

A) 지진이 가해진 구조물은 지면과 넓은 접촉면을 가지고 있는 다른 구조물과 연결되어 있기 때문에 흔들린다.

B) 지진이 구조물을 강타할 때 가장 크게 흔들리는 부분은 근처의 다른 구조물과 땅을 공유하는 1층이다.

C) 지진에 의해 야기된 흔들림은 구조물과 땅 사이 또는 구조물과 다른 구조물 사이의 접촉면 근처에 집중된다.

D) 근처 지역에 다른 구조물이 없는 구조물들은 구조적 연결을 공유하지 않기 때문에 지진의 영향을 받지 않는다.

4. 지문에 다음 문장이 들어갈 수 있는 곳을 나타내는 네 개의 [■]를 보시오.

그래서 이런 고대인들은 지진의 영향을 인간이 저지할 수 있다고 생각하지 않았다.

주어진 문장이 들어가기에 가장 알맞은 곳은?

5. 단락 4에서 글쓴이가 포세이돈을 언급하는 이유는 무엇인가?

A) 고대인들이 얼마나 미신적이었는지를 지적하기 위해

B) 바다의 신의 악명을 설명하기 위해

C) 고대인들이 믿었던 운명론적인 견해를 설명하기 위해

D) 신들 중 하나가 지진에 책임이 있다는 것을 보여주기 위해

6. 단락 5에 따르면, 다음 중 전세계적인 주요 건축법에 대

consequences of earthquakes.

2. What is NOT mentioned about the main objectives of earthquake engineers in paragraph 2?

A) Understanding the relationship between the civil infrastructure and the ground

B) Forecasting the possible consequences that powerful earthquakes can bring about

C) Building structures that would survive earthquake activities based on their knowledge

D) Designing powerful and modern structures that would cost less than expected

3. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

A) A structure struck by an earthquake shakes because it is connected with other structures that have wide contact surfaces with the ground.

B) When an earthquake hits a structure, the part that shakes most is the ground floor where it shares the ground with other structures nearby.

C) The trembling caused by the earthquake is concentrated near the contact planes between the structure and the ground or the structure and another structure.

D) The structures that have no other structures in the nearby areas are not subject to earthquakes because they share no structural connections.

4. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

Thus, these ancient people didn't think the effects of earthquakes could be resisted by humans.

Where would the sentence best fit?

5. Why does the author mention Poseidon in paragraph 4?

A) To point out how superstitious ancient people were

B) To illustrate the notoriety of the god of the sea

C) To explain the fatalistic view held by ancient people

D) To show that one of the gods was responsible for earthquakes

6. According to paragraph 5, which of the following

해 유추할 수 있는 것은?

A) 도시 건축물들은 건축법에 의해 규제되지만 시골에 있는 건물들은 그렇지 않다.
B) 주요 도시들은 교외와 시골 지역보다 지진이 일어날 가능성이 더 높다.
C) 활용도 있는 구조물은 또한 지진이 가해진 이후 안전한 구조물로 여겨진다.
D) 현대 건물들은 오래된 건물들보다 대규모 지진에 영향을 덜 받는다.

7. 지문을 간략하게 요약한 글의 첫 문장이 아래에 제시되어 있다. 지문의 가장 중요한 내용을 표현하는 세 개의 선택지를 골라 요약문을 완성하시오. 일부 문장들은 지문에 제시되지 않았거나 지문의 지엽적인 내용을 표현하기 때문에 요약문에 포함되지 않는다. ***이 문제의 배점은 2점이다.***

지진 공학은 지진하중에 피해를 입기 쉬운 구조물에 관한 연구이다.

- **A) 지진하중은 다양한 요인에 의해 결정되는 구조물에 미치는 지진의 영향이다.**
- **C) 내진 성능은 건물들이 지진 후에 안전성과 활용도를 얼마나 잘 유지할 수 있는지 여부이다.**
- **F) 공학자들은 실제 지진의 잠재적인 결과를 예측하기 위해 진동판을 사용한다.**

B) 지진으로 인한 동요는 구조물과 땅을 연결하는 표면에서 발생한다
D) 고대인들은 지진은 포세이돈과 같은 포악한 신이 내리는 치명적인 형벌이라고 생각했다.
E) 공학자들은 지진에 영향을 받기 쉬운 구조물의 역할을 분석하기 위해 가상 현실을 이용한다.

can be inferred about the major building codes around the world?

A) Structures in cities are regulated by building codes, but those in the countryside are not.
B) Major cities are more likely to be struck by earthquakes than suburbs and rural areas.
C) Serviceable structures can also be considered safe structures after earthquakes hit.
D) Modern buildings are less susceptible to big-scale earthquakes than old buildings.

7. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

Earthquake engineering is the study of the behavior of structures that are subject to seismic loading.

- **A) Seismic loading is the effect of an earthquake on a structure determined by various factors.**
- **C) Seismic performance is how well buildings can continue their safety and serviceability after an earthquake.**
- **F) Engineers use shake-tables to predict the possible consequences of a real earthquake.**

B) Agitations from earthquakes occur at the surfaces that connect a structure and the ground.
D) Ancient people thought that earthquakes were deadly punishment from brutal gods such as Poseidon.
E) Engineers use virtual reality to analyze the dynamics of structures subject to earthquakes.

어휘

engineering [|endʒɪ|nɪrɪŋ] 공학 (기술) | **withstand** [wɪð|stænd] 견뎌내다 | **magnitude** [|mægnɪtu:d] 지진 규모
sturdy [|st3:rdi] 튼튼한 | **distinct** [dɪ|stɪŋkt] 뚜렷한, 분명한 | **subset** [|sʌbset] 부분 집합 | **civil engineering** 토목 공학
infrastructure [|ɪnfrəstrʌktʃə(r)] 사회 기반 시설 | **seismic loading** 지진하중 | **agitation** [|ædʒɪ|teɪʃn] 불안, 동요
adjacent [ə|dʒeɪsnt] 인접한 | **tsunami** [tsu:|nɑ:mi] 쓰나미 | **severity** [səvérəti] 강도, 격렬, 혹독
parameter [pə|ræmɪtə(r)] 한도, 변수 | **fatalistic** [|feɪtə|lɪstɪk] 운명론적인 | **wrath** [ræθ] 격노
notorious [noʊ|tɔ:riəs] 악명 높은 | **serviceable** [|s3:rvɪsəbl] 쓸 만한 | **collapse** [kə|læps] 무너지다
implement [|ɪmplɪment] 시행하다 | **likelihood** [|laɪklihʊd] 가능성 | **vulnerable** [|vʌlnərəbl] 취약한
quantify [|kwɑ:ntɪfaɪ] 수량화하다 | **gauge** [geɪdʒ] 측정하다 | **methodology** [|meθə|dɑ:lədʒi] 방법론
seismic analysis 지진분석, 내진해석 | **tremble** [|trembl] 떨다, 흔들리다 | **superstitious** [|su:pər|stɪʃəs] 미신적인
suburb [|sʌb3:rb] 교외 | **susceptible** [sə|septəbl] 민감한