以下为新第 5 套的听力原文,网站上每篇做完后点击 quit/save 查看对错情况,要回听音频重新点击进去,下面的音频进度条是可以拖动和调节的。新十套的音频只有网站上才有,可以随时播放,点击 quit/save 可以查看正确答案。

新第五套

Listen to a conversation between a student and an employee in the university transportation office

【公众号"四箭齐发托福"】(man) Hi, I got this letter.

(woman) Uh, let me guess, about the parking situation?

(man) Yeah, about the closing of lot 3 and how all the students in my residence hall will be assigned a new parking lot

(*woman*) Yes, the university's gonna take that space where lot 3 is and build a new residence hall there. You know about the housing shortage, I guess.

(*man*) I do and, well, they may be solving one problem but they're just creating another, if you ask me. I mean, we're also having major problems with parking, right?

(woman) That's true and a lot of people agree with you, but the university spent a lot of time studying the problem and this is their decision, so, anyway, do you have your current parking tag from your vehicle? (man) Uh, no, it's still in my car. I didn't know if I should bring it in. I was worried I would get a ticket if my car didn't have a parking tag displayed in the window.

(*woman*) Well, since we're in transition right now, if the parking enforcement officers see a car parked without a parking tag, they'd check the license plate number in their computer system and they won't give you a ticket as long as it shows that you're registered to park there.

(man) Oh, OK

(woman) And the parking tag for lot 3 won't do you much good in about a month anyway.

(man) Oh, that soon?

(woman) Yes, we were pretty surprised that they are moving so quickly. But, in any case, students in your residence hall have been assigned the north parking lot.

(man) OK, but, there's nothing available in lots 1 or 2? I'd like to keep my car as close to my residence hall as possible.

(woman) A lot of students have been complaining, but, only the north lot is available.

(*man*) But you see I work as a lab technician for the Chemistry department on the other side of campus and it's like really odd shifts, evenings, weekends. Sometimes I'd have to set my alarm and go out in the middle of the night. It's a pretty, uh, demanding job.

(woman) I can certainly see how this'll make life difficult for you. Unfortunately, it's out of my hands.

(*man*) Well, there are spaces for visitors right in front of my residence hall. I wonder do you think I can get a special permit to park there. I mean, because of, you know, like my situation.

(woman) Well, in your case, that wouldn't be unreasonable. But, you'd have to submit a special request form to the head of transportation.

(man) OK

(woman) And she's reviewed at least 25 of those requests in the last two weeks and she's granted a grand total of, well, one.

- 1. Why does the man to go see the woman?
 - A) To report a lost parking tag
 - B) To apply for housing in a new residence hall
 - C) To discuss a change in his parking lot assignment
 - D) To find out why he was issued a parking ticket
- 2. What can be inferred about the man when he discussed the new residence hall that the university plans to build?
 - A) He thinks that building the residence hall will make the parking problem worse.
 - B) He is glad that the residence hall will be located near his job.
 - C) He hopes to have a chance to live in the residence hall.
 - D) He is not convinced that the residence hall will help the housing shortage problem.
- 3. Why does the woman mention that parking enforcement officers are using a computer system to check license plates?
 - A) To explain why the transportation office contracted the man
 - B) To caution the man against parking in restricted parking lots
 - C) To emphasize that the man must register his car immediately
 - D) To explain why the man does not have to worry about getting a parking ticket
- 4. Why is the man unhappy when he learns that he will have to park his car in the north lot?
 - A) He will have to pay a higher fee to park in the north lot.
 - B) The north lot is not conveniently located for him.
 - C) The gate to the north lot is locked at night.
 - D) The north lot has no parking spaces for visitors.
- 5. What does the woman imply about the man's request to use a visitor's parking space? [choose two answers]
 - A) The man should go to speak directly with the head of transportation.
 - B) The reason for the man's request seems appropriate.

- C) The man's chances of receiving approval for his request are not good.
- D) The request might take a long time to process.

Listen to part of a lecture in an Astronomy class

【公众号"四箭齐发托福】((male professor) The main thing to keep in mind as we study the Sun is magnetism. The Sun's magnetic field is produced by the flow of electrically charged particles. And you've all heard of sunspots, right, those dark spots on the surface of the Sun? OK, well, sunspots appear when very intense regions of magnetism rise to the Sun's surface. The locations where sunspots appear drift back and forth between the Sun's equator and the poles. That we've known about for a long time. They appear closer and closer to the Sun's equator over the course of about an eleven-year cycle before circling back to the poles for the next eleven or so years.

And this continual movement of the location of sunspots, these shifting magnetic fields, is the cause of pretty much all solar activity what we call solar storms, such as flares, solar wind, and so on. And this is important to know because solar storms send radiation into space often disrupting communication systems here on Earth. Very strong storms affect our weather satellites and even mobile phones so it's helpful to know when they might happen.

OK, so, sunspots are areas of concentrated magnetic fields and the movement of sunspots is directly related to the intensity of solar storms. And just like weather on Earth, solar storms can be intense or mild depending on how much sunspot activity there is. Well, we've recently discovered what causes the Sun's magnetic fields to move and in doing so we've learned a way to predict the strength of solar storms.

It turns out that sunspots are moved by a giant circulation system about 200 kilometers below the Sun's surface, a great conveyor belt as we call it. It's actually two belts. See here?

One above the Sun's equator and the other below. And these conveyor belts move the sunspots in a loop, between the solar equator and the poles. Now, remember, there's a similar circulation system here on Earth. It's the **Great Ocean Conveyor Belt**.

The great ocean conveyor belt is a network of currents that carry water from ocean to ocean and it controls the weather on Earth. Well, in much the same way the Sun's conveyor belt controls the weather on the Sun. But instead of carrying water, it carries gas. And as the belt moves, it sweeps up, it collects magnetic fields, and it affects the development of future sunspots.

Now, how do you observe a gas belt that's 200 kilometers below the Sun's surface? Well, it was the movement of sunspots that led to the discovery of this belt. By measuring the speed that sunspots drift toward the equator or poles, we get an idea of the speed of the belt. OK, now, as I said, the average sunspot cycle is eleven years. It varies somewhat. In shorter cycles the circulation of the Sun's conveyor belt is faster and in longer cycles it's slower. And we can predict the intensity of solar storms by looking at the speed of the sunspot cycle. In other words, the circulation of the belt influences the time it takes for sunspots to drift to the equator or poles. But it also influences the strength of future sunspot activities and the intensity of solar storms.

Let me explain. The faster the belt moves the more magnetic fields it sweeps up. That means the number and size of the sunspots will be larger two sunspot cycles later. An intense sunspot cycle will mean more solar storms and vice versa. And that's important because, well, think about the safety of space flight, for example. This next sunspot cycle is supposed to be intense. We've determined that from calculating the belt speed about twenty years ago. And when solar activity is intense, it means there'll be dangerous radiation storms in space. In recent years, the movement of the belt has slowed down considerably, which means that about twenty years from now, there'll be a weak sunspot cycle and we probably won't have to worry about radiation storms. Good news for astronauts!

Now, can we use the conveyor belt to predict the solar maximum? Uh, the solar maximum is the time of the most intense solar storms during a cycle. That's something we wanted to do for a long time personally, that would be nice, but, well, while the Sun's conveyor belt does give us a solid way to predict the general intensity of solar storms, we are a long way off from more specific predictions.

- 1. What is the lecture mainly about?
 - A) A potential way of predicting the intensity of solar activity
 - B) The weakening of the Sun's magnetic field over time
 - C) The difference between weather on the Sun and on Earth
 - D) Different theories about the location of sunspots
- 2. What does the professor say is the main source of solar storms on the Sun?
 - A) A collision between the Sun's two solar conveyor belts
 - B) The creation of new sunspots near the Sun's poles
 - C) The excess radiation the Sun sends into space
 - D) The movement of the Sun's magnetic fields
- 3. Why does the professor mention Earth's Great Ocean Conveyor Belt?
 - A) To compare the flow of gas on Earth and on the Sun

- B) To point out a common misconception about sunspots
- C) To help students visualize a similar phenomenon on the Sun
- D) To point out difference between the magnetic fields of the Sun and Earth
- 4. How do scientists measure the speed of the Sun's conveyor belt?
 - A) By analyzing the direction of solar wind
 - B) By analyzing the concentration of gases on the Sun
 - C) By measuring the speed of radiation leaving the Sun's surface
 - D) By tracking the changing locations of sunspots
- 5. Why is the ability to predict the strength of solar storms important to scientists? [choose two answers]
 - A) It enables scientists to predict changes in Earth's oceanic currents.
 - B) It helps scientist to determine the best time for space exploration.
 - C) It allows scientists to accurately calculate the strength of the Sun's magnetic field.
 - D) It alerts scientists to potential disruptions of communications systems on Earth.
- 6. What is the professor's attitude about using observations of the Sun's conveyor belt to predict future solar storm activity?
 - A) They are not at all useful for predicting solar activity.
 - B) They are helpful only in making general predictions.
 - C) They are best used to determine the time of solar maximum.
 - D) They should be adapted for the study of Earth's ocean conveyor belt.

Listen to part of a lecture in a Literature class

【公众号"四箭齐发托福"】((*male professor*) OK, today we're gonna talk about an important influence on eighteenth century British poets, the influence of discoveries made in the sciences. Surprising, isn't it? Science and arts may not seem compatible. As one late eighteenth century poet William Blake said, "Art is the tree of life. Science is the tree of death."

(male student) Well, that makes sense. Artists and scientists understand the world differently, don't they?

(*professor*) In some ways, that's true. Poets want to convey the mystery of nature, while scientists seem to want to take the mystery out of nature, to unravel its mysteries through experimentation. Nevertheless, they both try to explain the world and nature. And I think they're also both moved by the sense of wonder that nature inspires. But for much of the eighteenth century, one scientist and his discoveries really got the attention of poets and that was <u>Isaac Newton</u>, one of the foremost thinkers of his time.

Newton, as you know, was a mathematician and physicist, a major figure in the scientific revolution of the seventeenth and eighteenth centuries. Among his accomplishments were his three laws of motion. They resulted in formulation of the universal law of gravitation and he developed calculus. And he was very important to the European intellectual movement of the eighteenth century called the **enlightenment**. The intellectuals of this period promoted the use of reason to further our knowledge of the universe. Um, anyway, in 1704, Newton published a book on the properties of light called **Opticks**.

In this book, he published the findings of his experiments with light and prisms. He had discovered that light could be refracted or broken up into the colors of the spectrum. This knowledge that light is the source of color in the world gave light added significance and it did not go unnoticed by poets. In fact, Newton's discovery about light was so often written about that many of these poets were referred to as Newtonian or scientific poets.

(female student) Hadn't poets written about light before?

(*professor*) Yes, they certainly had. Light has always had an enormous symbolic power. But before Newton, when light was used symbolically in European poetry, it was often part of the duality: light in opposition to darkness. But Newton's discovery that light was the source of color, well, that's a more complex image and it really captured the imaginations of poets of the eighteenth century. Poets described the same phenomenon that Newton described in *Opticks*, but through the imagery of natural world, sunrises and sunsets, for instance, and the colors of gemstones, and, of course, rainbows.

(female student) Well, maybe poets understood Newton's theories, but what about other people? His book was written in Latin, weren't they?

(*professor*) In general, yes. But *Opticks* was written in English and in an accessible manner, a style that was relatively, um, nontechnical. Also a great number of popular science books were being published in England at the time that sought to explain many of Newton's theories. So the general public was better informed than you might think.

(female student) So it seems as if not all poets felt the same way Blake did about science and art.

(*professor*) No, they were caught up in the enlightenment. But at the end of the eighteenth century, there was a backlash against the enlightenment, the Romantic Movement. Like William Blake, many artists and intellectuals emphasized the role of emotions in life and downplayed the importance of reason. They believed science could not explain the mysteries of life and the natural world.

- 1. What is the main purpose of the lecture?
 - A) To examine the literary works of Isaac Newton
 - B) To explain how the Romantic poets used imagery
 - C) To examine the relationship between science and poetry in the eighteenth century
 - D) To explain the influence of the Enlightenment on eighteenth-century science
- 2. What does the professor imply about artists and scientists?
 - A) They have not always been appreciated by the public.
 - B) Despite important differences they share some goals.
 - C) Their methods are constantly changing.
 - D) Their social importance has changed since the eighteenth century.
- 3. What does the professor say about the treatment of light by Newtonian poets?
 - A) They focused on natural phenomena that involved color.
 - B) They wrote about light more than their predecessors did.
 - C) They considered the symbolic value of light more important than its physical properties.
 - D) They considered light mainly in terms of its opposition to darkness.
- 4. According to the professor, in what ways did *Opticks* differ from other scientific works that Newton wrote? [choose two answers]
 - A) It was written in English.
 - B) It was written in a nontechnical style.
 - C) It contained a number of color illustrations.
 - D) It was not published during his lifetime.
- 5. Why does the professor mention the Romantic poets?
 - A) To point out their similarities to Newtonian poets
 - B) To emphasize the accessibility of their poetic imagery
 - C) To show how some poets rejected Enlightenment ideas
 - D) To give an example of poets who wrote extensively about light
- 6. What does the student imply when she says this:
 - A) She does not believe she could read a book in Latin.
 - B) Most authors in eighteenth-century England wrote in Latin.
 - C) Eighteenth-century poets were no better able to grasp complex scientific ideas than the general public.
 - D) Eighteenth-century poets were more likely than the general public to be able to read Latin.

Listen to a conversation between a student and her Ancient History professor

【公众号"四箭齐发托福"】((woman) Hi, Professor Jones, how was the conference in Athens?

(*man*) Remarkable, it's my favorite conference, *The Art of Ancient Greece*. And it's always a thrill to present in front of one's colleagues. In fact, you'll be seeing my presentation during our next class. (*woman*) Sounds great, anyway, our last exam, you said you were planning to grade them on the plane? (*man*) Planning being the operative word, unfortunately, my computer crashed, so I had to redo my entire slide presentation on the plane to Athens using a borrowed laptop. The computer's been fixed, so, hopefully, I'll get the exams graded over the weekend and back to you on Monday. (*woman*) Oh, OK, um, it's just that I've been anxious to find out how I did on the essay section. (*man*) Where you've chosen ancient Greek sculpture and critique it?

(woman) Yeah, um, I picked the caryatid.

(man) Ah, sculpted female figure.

(woman) Yeah, one of the ones holding up the roof of that temple at the Acropolis, but, maybe they're considered architecture not sculpture?

(*man*) Um, I'd call them sculptures with an architectural function, to support a section of a temple's roof instead of the usual types of columns.

(woman) Hoof, that's good, cause writing that critique gave me an idea for a research project, actually. (man) Really? What specifically did you want to research?

(*woman*) Uh, the caryatid hairstyles. How ornate they are with all those curls, braids, and twists? (*man*) They're certainly intricate. And they have a specific function as well. Without those stunning hairstyles distributing the roof's weight, the caryatids might have broken at the neck, which the weakest part of the statues.

(woman) I never thought of that. What interested me was did Greek women really wear the hair like that in the sixth century B.C.E.? Were those hairstyles even possible? And how I want to research this is by trying to recreate one of the hairstyles and write about the experience.

(*man*) Interesting idea! Creative! But do you think it's scholarly enough for a research project? (*woman*) Hmm, OK then, what if I research the hairstyles worn by the Greek women at the time? I could use the experience of recreating a hairstyle to support my conclusions, because I'm sure the statues are based on how women appeared by then. I can't imagine hairstyles like that coming strictly from a sculptor's imagination.

(*man*) You know, similar hairstyles also appeared in paintings and on coins from ancient Greece. And if all these images were indeed modeled after real women, what does that say about ancient Greek society? I mean, who had the time to sit for hours while the hair was braided and curled?

(woman) I guess the poble women, women from the ruling class. And they probably had reasons to dress.

(woman) I guess the noble women, women from the ruling class. And they probably had reasons to dress up like for feasts and stuff.

- 1. What are the speakers mainly discussing?
 - A) Slides of ancient Greek art that the professor will show in class
 - B) A particular type of sculpture from ancient Greece
 - C) Various types of columns used in ancient Greek architecture
 - D) The link between fashion and social class in ancient Greece
- 2. Why does the professor mention that he worked on a slide presentation on his way to Athens?
 - A) To help explain why he was unable to grade students' exams
 - B) To complain about recurring computer problems in his department
 - C) To illustrate an effective time-management strategy
 - D) To create an opportunity to discuss the topic of his presentation
- 3. What does the professor say about the hairstyles of the caryatids?
 - A) They were designed to be both beautiful and practical.
 - B) They were probably carved before other parts of the caryatid.
 - C) They do not appear to have been inspired by actual hairstyles.
 - D) They were carved from the strongest marble available.
- 4. What opinion does the professor express about the student's initial research proposal?
 - A) It will be more difficult than she realizes to carry out.
 - B) It could be the basis of a future conference presentation.
 - C) It has been carefully thought out.
 - D) It is probably not academic enough.
- 5. What does the professor imply when he mentions ancient Greek paintings and coins?
 - A) That the student's research project ought to include a variety of photographs
 - B) That painting and design were less advanced than sculpture in ancient Greece
 - C) That in ancient Greece, only the ruling class had enough money to buy fine art
 - D) That images of complex hairstyles were widespread in ancient Greece

Listen to part of a lecture in an Archeology class. The professor has been discussing the Anasazi, a native people of North America

【公众号"四箭齐发托福"】((female professor) The Anasazi, as we've said, during the twelfth and

thirteenth centuries, lived in a region where the states of Utah, Arizona, Colorado and New Mexico meet today, known as the Four Corners region.

We know a fair amount about how they lived during this time, what corps they farmed and so on. What we don't know is what happened at the end of the thirteenth century that caused them to completely abandon their settlements in the Four Corners region. So, first of all, where did they go? Now, the conventional wisdom, the theory *is* that when the Anasazi left the Four Corners region they moved south to a site called **Pinnacle Ruin** in what is now southern New Mexico.

And there's good evidence to support that theory. To begin with, the Pinnacle Ruin site sits at the top of a cliff which is very similar to the cliff-top locations of Anasazi communities in the Four Corners region. Also, the ruins of buildings at Pinnacle Ruin have thick stone walls which are typical for more northern regions. And we found a large amount of pottery with black-on-write designs, again, very similar to those made by the Anasazi in the Four Corners settlements. And we know it was occupied within a decade or two of the 1300s which corresponds to when the Anasazi disappeared from the north.

But why did the Anasazi leave the Four Corners in the first place? Here we are less certain. The Four Corners is an arid region. So droughts probably depleted their resources. And we see evidence of this in the size of the rings in the wooden logs that were used to make the roof beams in Anasazi houses. The rings in the center of a tree limb allow us to determine its age, right? Well, they also tell us about climate because trees grow at different rates depending upon the amount of water and nutrients they receive each season. And we can see that there was very little rainfall in the late thirteenth century. And that explanation, that what drove the Anasazi southward was drought, that's been the conventional wisdom for quite some time.

Not too long ago, however, an archeologist named <u>Jeffrey Dean</u> found a complication in the tree ring data. What Dean found is that while precipitation in the Four Corners had been consistent for several centuries before 1250 it had fluctuated wildly between 1250 and 1450. So while there may have been drought years during that period, Jeffrey Dean said, "They seemed to have interspersed with years when there *was* rainfall." So that's one possible glitch in the prevailing theory.

But there's another issue: even if there was a long drought, would that have been enough to force the Anasazi to leave? That's the question that a researcher named <u>Carla Van West</u> investigated a few years before Dean did his climate study. Van West created a model in which she first calculated the productivity of the Anasazi's corn fields under normal conditions. She then used climate data to determine the effect that drought would have had on the Anasazi's crop yields. She was able to estimate the maximum annual crop yield for a given area and what proportion of an individual's diet would have come from the crops.

All of this data led to her conclusion that a thirteen-century drought would still have left enough productive land to support thousands of people. So it couldn't have been the only factor involved in why the Anasazi left. What else could have been involved? Well, there's evidence that in addition to difficulties caused by

the climate, other people may have moved into the Four Corners area and forced the Anasazi out. You see, the settlement at Pinnacle Ruin appears to have been built all at once as if an entire large group of people settled there at the same time rather than individual families moving there over a period of time. And since the drought, while significant, probably wasn't enough to cause this massive migration. There must have been some additional factor that's not as easy to read in historical evidence.

- 1. What does the professor mainly discuss?
 - A) How new technologies have helped solve a long-standing mystery about the Anasazi
 - B) Competing theories about when the Anasazi disappeared from Pinnacle Ruin
 - C) Archaeologists' interpretations of recently discovered Anasazi artifacts
 - D) Attempts to explain why the Anasazi moved away from the Four Corners region
- 2. According to the professor, what evidence supports the view that the Anasazi occupied the Pinnacle Ruin site in New Mexico? [choose three answers]
 - A) The site is located at the top of a cliff.
 - B) The site contains pottery with designs like those of Anasazi pottery.
 - C) The roofs at the site were made of logs that date from 1300.
 - D) The walls at the site were constructed with thick layers of stone.
 - E) The buildings at the site were arranged in a pattern typical of Anasazi communities.
- 3. What have researchers tried to determine by analyzing the roof beams of Anasazi dwellings?
 - A) Whether the Anasazi occupied the Four Corners region in the thirteenth century
 - B) Climate conditions in the Four Corners region in the late thirteenth century
 - C) The size of Anasazi houses in the four Corners region prior to the thirteenth century
 - D) The types of trees the Anasazi preferred for building wooden structures
- 4. In what way does Jeffrey Dean's research challenge established theories about the Anasazi's departure from the Four Corners region?
 - A) It suggests that the period of drought in the region occurred much earlier than was previously believed.
 - B) It suggests that the Anasazi would have had few sources of food in drought years.
 - C) It suggests that fewer people lived in the region than was previously believed.
 - D) It suggests that the region received rain in some years during the late thirteenth century.
- 5. What did Carla Van West try to determine in her research?
 - A) When the Anasazi were most likely to have experienced a severe drought
 - B) Whether the Anasazi population in the Four Corners region was constant during the thirteenth century

- C) Whether agriculture in the Four Corners region could have sustained Anasazi communities during drought years
- D) Which crops were most important to the survival of Anasazi communities in the Four Corners region
- 6. What does the professor imply when she discusses the timing of the construction at Pinnacle Ruin?
 - A) Established ideas about the causes of the Anasazi migration do not provide a complete explanation.
 - B) Van West's conclusions about the Anasazi's lifestyle are based on a misinterpretation of data.
 - C) Drought probably had a more serious impact on Anasazi migration patterns than the evidence suggests.
 - D) The Anasazi may have had several stages of migration to Pinnacle Ruin.

Listen to part of a lecture in a Biology class

【公众号"四箭齐发托福】((female professor) Now, it might seem strange, but even though many organisms live in the sea, salt water remains a challenging environment for them. It can be difficult for marine organisms to stay hydrated, that is, keep the water content of their bodily fluids within a healthy range. Every animal loses some water over time and, sooner or later, has to replenish it. Drinking seawater to replenish the water content creates a physiological challenge, because by drinking seawater the animal is taking in a lot of salt. And getting salt out of the body is not easy.

(male student) Isn't that what their, uh, salt gland is for?

(*professor*) That's the main mechanism used by, at least, some marine animals like penguins and marine turtles. The special thing about the salt gland is that it secretes the salt in a very concentrated form so there is very little water loss and the animal stays hydrated. Animals that live in the desert, like lizards, they also have salt glands. It's the opposite of the case for most land animals. Most land animals excrete salt in a very diluted form, which means much greater water loss. But, let's take a look at the sea snake.

Now, there are about sixty species of sea snakes. They live in tropical oceans, mostly along coast lines and around islands in the Indian and western Pacific Oceans. And, as I said, we used to think that sea snakes simply drank seawater and got rid of the excess salt through their salt glands. But, then, one researcher heard about instances of, he became interested in reports of sea snakes being observed on shore drinking freshwater after it rained. So, he started probing deeper. Why would they drink freshwater, he wondered, if they could easily stay hydrated by drinking seawater?

(female student) So, sea snakes don't have salt glands?

(*professor*) Well, they do, under their tongue. But it appears that the glands may not be sufficient, or should I say efficient enough to allow the snakes to drink seawater for hydration. Anyway, the researcher wound up taking a group of dehydrated snakes and submerging them in a tank with saltwater. After several hours, he took them out and weighed them to see if they'd gained weight, if they had drunk any of the water. None of them had. He then took the same snakes and put them in a tank of freshwater. All of the snakes immediately began to drink the water. This suggests that although sea snakes have made many adaptations to life in the ocean, drinking seawater is not one of them. They can't drink saltwater. They actually need freshwater to stay hydrated.

(female student) You said adaptations. Does this mean sea snakes evolve from land snakes?

(*professor*) We think they did as did many other marine animals. They appear to be closely related to cobras and coral snakes. And some species of sea snakes also come ashore to lay their eggs.

(male student) But they are sea snakes.

(*professor*) Well, there are some species that *do* live their entire life at sea, which poses an interesting question: How do they get freshwater? Well, the hypothesis that's been proposed, it involves something called a **freshwater lens**. A freshwater lens forms when it rains over the ocean. You see, when rain falls on the ocean, the rainwater doesn't mix with the saltwater right away. Since freshwater is not as dense as saltwater, it stays on top of the sea, forming a temporary layer of freshwater. These temporary pools of water are called freshwater lenses. After a while, the waves and the currents mix the freshwater pools in with seawater and they disappear. But while they last, the snakes can use the lenses as sources of drinking water.

And if we consider the distribution pattern of sea snake populations, this makes sense. It turns out that sea snakes that live solely in the water *do* tend to concentrate in areas where the sea surface is calm, where freshwater lenses would last the longest. In contrast, very few sea snakes are found in areas where the sea is choppy, where rainwater would get mixed in with seawater more quickly.

- 1. What is the main topic of the lecture?
 - A) Research into the adaptations of sea snakes' salt glands
 - B) Evidence that clarifies how some marine animals stay hydrated
 - C) A study that compares how land and marine animals find water
 - D) The discovery of a process that allows sea snakes to drink saltwater

- 2. What does the professor imply about penguins and marine turtles?
 - A) They cannot stay hydrated by drinking seawater.
 - B) They mostly live along coastlines and near islands.
 - C) They spend a lot of time searching for freshwater on land.
 - D) They can eliminate salt from their bodies without losing much water.
- 3. What does the professor say about the salt glands of sea snakes? [choose two answers]
 - A) They are not very efficient.
 - B) They are located under the snake's tongue.
 - C) They are evidence that sea snakes did not evolve from desert animals.
 - D) They are larger than the salt glands of other marine animals.
- 4. What did the results of an experiment with sea snakes show?
 - A) Sea snakes will not drink seawater, even if they are dehydrated.
 - B) Sea snakes can remain hydrated by drinking both seawater and freshwater.
 - C) Most species of sea snakes drink only seawater.
 - D) Sea snakes prefer to swim in freshwater rather than in seawater.
- 5. What does the professor conclude when she talks about freshwater lenses?
 - A) Their existence has caused researchers to doubt that some sea snakes spend their entire lives at sea.
 - B) Evidence suggests that they provide enough water to support some sea snake populations.
 - C) Most sea snakes use the lenses to supplement the water that they drink on land.
 - D) Research has shown that the lenses occur most frequently in areas that are far from coastlines.
- 6. What can be inferred about the student when he says this:



- A) He is not convinced that all cobras and coral snakes live on land.
- B) He does not understand how sea snakes are able to move on land.
- C) He is surprised that some sea snakes spend time on land.
- D) He was not aware that sea snakes lay eggs.