TPO 2

READING

Paragraph 1

Q1 In paragraph1, why does the author mention "the pressure of the overlying rock"?

A. To show how water can be forced deep under Earth's surface

B. To show why groundwater is more plentiful than surface freshwater

C. To correct a commonly made error about the location of groundwater

D. To explain why most groundwater lies near Earth's surface

Q2 According to paragraph 1, groundwater differs from the water in rivers and lakes in terms of its

A. potability

B. usefulness

C. abundance

D. cost

Paragraph 2

Q3 The word "extracted" in the passage is closest in meaning to

A. used

B. poured

C. removed

D. kept out

Q4 The word "termed" in the passage is closest in meaning to

A. considered

Groundwater

Most of the world's potable water—freshwater suitable for drinking—is accounted for by groundwater, which is stored in the pores and fractures in rocks. There is more than 50 times as much freshwater stored underground than in all the freshwater rivers and lakes of Earth. At greater depths within Earth, the pressure of the overlying rock causes pores and cracks to close, reducing the space that pore water can occupy, and almost complete closure occurs at a depth of about 10 kilometers. The greatest water storage, therefore, lies near the surface.

Aquifers, Porosity, and Permeability

Groundwater is stored in a variety of rock types. A groundwater reservoir from which water can be extracted is called an aquifer. We can effectively think of an aquifer as a deposit of water. Extraction of water depends on two properties of the aquifer: porosity and permeability. Between sediment grains are spaces that can be filled with water. This pore space is known as porosity and is expressed as a percentage of the total rock volume. Porosity is important for water-storage capacity, but for

B. called
C. limited to
D. caused by

Q5 According to paragraph 2, what does porosity determine?
A. The rate at which the aquifer's water overcomes resistance to flow
B. The amount of water that the aquifer can hold
C. The likelihood that fractures and joints will occur in the aquifer
D. The depth underground at which the aquifer lies

water to flow through rocks, the pore spaces must be connected. The ability of water, or other fluids, to flow through the interconnected pore spaces in rocks is termed permeability. Fractures and joints have very high permeability. In the intergranular spaces of rocks, however, fluid must flow around and between grains in a tortuous path; this winding path causes a resistance to flow. The rate which the flowing water overcomes this resistance is related to the permeability of rock.

Paragraph 3

Q6 The word "compact" in the passage is closest in meaning to?
A. hard
B. compressed
C. heavy
D. deeply buried

Q7 According to paragraph 3, when can igneous rock serve as an aquifer?
A. When it has many connected fractures
B. When it lies next to metamorphic rock
C. When it lies relatively near the surface
D. When it is crystalline

Q8 According to paragraph 3, what is the relationship between permeability and porosity?
A.The more pores a rock has, the higher its porosity but the lower its permeability
B. Rocks with many internal spaces that are not connected with each other will have high

Sediment sorting and compaction influence permeability and porosity. The more poorly sorted or the more tightly compacted a sediment is, the lower its porosity and permeability. Sedimentary rocks—the most common rock type near the surface—are also the most common reservoirs for water because they contain the most space that can be filled with water. Sandstones generally make good aquifers, while finer-grained mudstones are typically impermeable. Impermeable rocks are referred to as aquicludes. Igneous and metamorphic rocks are more compact, commonly crystalline, and rarely contain spaces between grains. However, even igneous and metamorphic rocks may act as groundwater reservoirs if extensive fracturing occurs in such rocks and if the fracture system is interconnected.

porosity but low permeability.
C. If water flows through a rock easily, it has high permeability but low porosity.
D. Rocks that have high permeability have high porosity and vice versa.

Paragraph 4

Q9 The word "coating" in the passage is closest in meaning to?
A. stream
B. barrier
C. amount
D. layer

Q10 Paragraph 4 implies which of the following about the roots of plants?
A. They prevent water from reaching the vadose zone.
B. They mark the boundary between the vadose zone and the water table.
C. They do not typically get their water from the water table.
D. They help keep the water table from dropping farther.

The Water Table

The water table is the underground boundary below which all the cracks and pores are filled with water. In some cases, the water table reaches Earth′ s surface, where it is expressed as rivers, lakes, and marshes. ■ Typically, though, the water table may be tens or hundreds of meters below the surface. ■The water table is not flat but usually follows the contours of the topography. ■Above the water table is the vadose zone, through which rainwater percolates. ■Water in the vadose zone drains down to the water table, leaving behind a thin coating of water on mineral grains. The vadose zone supplies plant roots near the surface with water.

Paragraph 5

Q11 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.Groundwater only flows out of the ground if the water table intersects the land surface.
B.If the land surface and the water table intersect, groundwater can flow underground.

Because the surface of the water table is not flat but instead rises and falls with topography, groundwater is affected by gravity in the same fashion as surface water. Groundwater flows downhill to topographic lows. If the water table intersects the land surface, groundwater will flow out onto the surface at springs, either to be collected there or to subsequently flow father along a drainage. Groundwater commonly collects in stream drainages but may remain

C. Groundwater may be drained if springs occur where the water table intersects the land surface.
D. Where the water table meets the land surface, groundwater flows out through surface springs.

Q12 Paragraph 5 implies which of the following about the level of the water table?
A.It may rise of fall from year to year, depending on annual rainfall.
B. In does not vary in arid regions.
C. It rarely intersects the land surface of most regions.
D.It is unrelated to the rate at which groundwater flows.

Q13 Look at the four squares【■】that indicate where the following sentence could be added to the passage.
This is a consequence of the slow rate of movement of the groundwater, which often prevents the water table from attaining a flat (horizontal) level.
Where would the sentence best fit? Click on a square to add the sentence to the passage.

Q14 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.
Drag your answer choices to the spaces where they belong. To remove an answer choice, click

entirely beneath the surface of dry stream-beds in arid regions. In particularly wet years, short stretches of an otherwise dry stream-bed may have flowing water because the water table rises to intersect the land surface.

[Glossary]

Sediments: materials (such as sand or small rocks) that are deposited by water, wind, or glacial ice

Topography: the shape of a surface such as Earth's, including the rise and fall of such features as mountains and valleys

on it. To review the passage, click VIEW NEXT.

Most of the world's potable water is stored as groundwater in the pores and fractures of underground rock, much of it at depths of less than 1,000 meters.

A. Sedimentary rock may make poor aquifers because of tightly compacted sediment, which reduces porosity and permeability.

B. Groundwater reservoirs are characterized by the porosity and permeability of the rock in which they lie, and these factors vary according to the type of rock.

C. Porosity is a measure of the empty space within rock, while permeability measures the degree to which water can flow freely through rock.

D.The vadose zone is typically dry because water does not stay in it, but instead percolates down to aquifers below or drains out through springs and streams.

E. In arid regions, the water tables remain at a constant level far below the surface, preventing stream-beds from filling up even during wet years.

F. Although the water table usually follows the contours of the land surface, its level may vary from year to year and may intersect the surface in places.

Paragraph 1

Q1 According to paragraph 1, what was true of the Sahara region around 6000 B.C.?

A. Much less of it was desert than is now the case.

B. Most areas that are now grassland were covered by shallow lakes.

Early Saharan pastoralists

The Sahara is a highly diverse, albeit dry, region that has undergone major climatic changes since 10,000 B.C. As recently as 6000 B.C., the southern frontier of the desert was far to the north of where it is now arid plains. This was a landscape where antelope of all kinds

C. It had just undergone a major climatic change.
D. Wild oxen and antelopes lived in separate parts of the region.

Q2 The word "albeit" in the passage is closest in the meaning to
A. usually
B. almost
C. though
D. rather

Q3 According to paragraph 1, which of the following is true of all arid regions?
A. They include at least some freshwater lakes.
B. They have similar distributions of plants and animals.
C. They are greatly affected by changes in the amount of rain they receive.
D. They have frequent droughts that make it difficult to manage the wild resources.

abounded—along with Bos primigenius, a kind of oxen that has become extinct. The areas that are now desert were, like all arid regions, very susceptible to cycles of higher and lower levels of rainfall, resulting in major, sudden changes in distributions of plants and animals. The people who hunted the sparse desert animals responded to drought by managing the wild resources they hunted and gathered, especially wild oxen, which had to have regular water supplies to survive.

Paragraph 2

Q4 Paragraph 2 supports which of the following ideas about wild oxen in the Sahara region after the drought took hold?
A. They traveled in smaller herds.
B. They were harder for hunters to capture.
C. They tended to be significantly smaller in size.
D. They moved along less predictable routes.

Q5 According to paragraph 2, what was it that brought cattle and humans into close association?
A. The development of smaller breeding units within herds
B. Cattle and humans staying close to permanent

Even before the drought, the Sahara was never well watered. Both humans and animals were constantly on the move, in search of food and reliable water supplies. Under these circumstances, archaeologist Andrew Smith believes, the small herds of Bos primigenius in the desert became smaller, more closely knit breeding units as the drought took hold. The beasts were more disciplined, so that it was easier for hunters to predict their habits, and capture animals at will. At the same time, both cattle and humans were more confined in their movements, staying much closer to permanent water supplies for long periods of time. As a result, cattle and humans came into close association.

water supplies for long periods of time
C. The development of greater discipline among cattle
D. Cattle and humans constantly on the move searching for food and reliable water supplies

Paragraph 3

Q6 Why does the author mention the "rock paintings deep in the Sahara"?
A. To help explain why the hunters wanted to control the herds
B. To provide support for the idea that the herders soon gained genetic control of the cattle
C. To show that the herders had artistic as well as practical abilities
D. To argue that the herders soon began to value their cattle for more than food

Q7 According to paragraph 3, all of the following statements were true of newly domesticated animals EXCEPT:
A. They were controlled more easily by the farmers.
B. They produced a larger number of offspring.
C. They produced more milk.
D. They were larger in size.

Smith believes that the hunters were well aware of the more disciplined ways in which their prey behaved. ■ Instead of following the cattle on their annual migrations, the hunters began to prevent the herd from moving from one spot to another. ■ At first, they controlled the movement of the herd while ensuring continuance of their meat diet. ■ But soon they also gained genetic control of the animals, which led to rapid physical changes in the herd. ■South Africa farmers who maintain herds of wild eland (large African antelopes with short, twisted horns) report that the offspring soon diminish in size, unless wild bulls are introduced constantly from outside. The same effects of inbreeding may have occurred in controlled cattle populations, with some additional, and perhaps unrecognized, advantages. The newly domesticated animals behaved better, were easier to control, and may have enjoyed a higher birth rate, which in turn yielded greater milk supplies. We know from rock paintings deep in the Sahara that the herders were soon selecting breeding animals to produce offspring with different horn shapes and hide colors.

Paragraph 4

Q8 Which of the sentences below best expresses the essential information in the highlighted

It is still unclear whether domesticated cattle were tamed independently in northern Africa or introduced to the continent from

sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.

A. Regardless of where the first tamed herds came from, people tried to control them by living in juxtaposition with them.

B. Regardless of where the first tamed herds came from, they resulted from the same process of juxtaposition and control by people who understood the behavior of wild cattle.

C. People who had an intimate knowledge of the behavior of wild cattle moved loser together to cooperate in taming the herd, regardless of where they found them.

D. The process of taming herds was certainly the same in Southwest Asia, northern Africa, and Europe because people knew a lot about the behavior of wild cattle, regardless of where they lived.

Southwest Asia. Whatever the source of the original tamed herds might have been, it seems entirely likely that much the same process of juxtaposition (living side by side) and control occurred in both Southwest Asia and northern Africa, and even in Europe, among peoples who had an intimate knowledge of the behavior of wild cattle. The experiments with domestication probably occurred in many places, as people living in ever-drier environments cast around for more predictable food supplies.

Paragraph 5

Q9 According to paragraph 5, each of the following was true about the early Saharan people EXCEPT:

A. They had few possessions apart from cattle.

B. After about 5000 B.C., they lived primarily in caves that were located deep in the desert.

C. Between the summer and winter seasons, they moved their herds over long distances.

D. They painted animals and scenes of daily life on the walls of caves.

The cattle herders had only a few possessions: unsophisticated pots and polished adzes. They also hunted with bow and arrow. The Saharan people left a remarkable record of their lives painted on the walls of caves deep in the desert. Their artistic endeavors have been preserved in paintings of wild animals, cattle, goats, humans, and scenes of daily life that extend back perhaps to 5000 B.C. The widespread distribution of pastoral sites of this period suggests that the Saharans ranged their herds over widely separated summer and winter grazing grounds.

Q10 The word "endeavors" in the passage is closest in meaning to

A. methods

B. styles

C. scenes

D. efforts

Paragraph 6

Q11 The word "deteriorated" in the passage is closest in meaning to

A. became unstable

B. caused hardship

C. changed completely

D. got worse

Q12 According to paragraph 6, what allowed the herders to shift south into the savanna regions after about 3500 B.C.?

A. They could easily grow Mediterranean crops in those regions.

B. They could more easily domesticate sorghum and millet in those regions.

C. The tsetse fly was no longer a problem in those regions.

D. The river systems in those regions provided reliable sources of water in the summer.

Q13 Look at the four squares【■】that indicate where the following sentence could be added to the passage.

This knowledge enabled the hunters to adopt a different approach to hunting.

Where would the sentence best fit? Click on a square to add the sentence to the passage.

Q14 Directions: an introductory sentence for a brief summary of the passage of the passage is provided below. Complete the summary by selecting the THREE answer choices that express

About 3500 B.C., climatic conditions again deteriorated. The Sahara slowly became drier and lakes vanished. On the other hand, rainfall increased in the interior of western Africa, and the northern limit of the tsetse fly, an insect fatal to cattle, moved south. So the herders shifted south, following the major river systems into savanna regions. By this time, the Saharan people were probably using domestic crops, experimenting with such summer rainfall crops as sorghum and millet as they moved out of areas where they could grow wheat, barley, and other Mediterranean crops.

the most important ideas in the passage. Some answer choices 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.

As recently as 6000 B.C., much of the Sahara region was semiarid grassland where humans hunted wild oxen and antelope.

Answer Choices

A. There was enough fresh water for Saharan peoples to move freely throughout the region without having to manage the resources they hunted and gathered.

B. When the drying climate forced cattle and humans close to each other in areas with water supplies, humans gained control over the cattle and eventually domesticated them.

C. Once Saharans controlled the breeding of their cattle, the characteristics of the cattle changed rapidly, increasing their reproductive rates and milk production.

D. Herders soon began selecting breeding animals to produce offspring with different horn shapes and hide colors, although the advantages of controlled in breeding were not apparent to them at first.

E. Although the Saharan peoples were remarkably sophisticated artists, they had only a few simple possessions, like adzes and the bows and arrows they used for hunting.

As the drought worsened around 3500 B.C. and conditions for herders became more favorable to the south, the Saharan people moved into savanna regions, where they grew different crops.

Buck Rubs and Buck Scrapes

Paragraph 1

Q1 The word ”conspicuous” in the passage is closest in meaning to

A. noticeable

B. common

C. strange

D. particular

Q2 According to paragraph 1, why are small red maple trees ideal for buck rubs?

A. They have smooth bark.

B.They are found in the mid-eastern United States.

C. They grow very slowly

D. They tend to grow in open spaces

A conspicuous sign indicating the presence of white-tailed deer in a woodlot is a buck rub. A male deer makes a buck rub by stripping the bark (outer layer) of a small tree with its antlers. When completed, the buck rub is an obvious visual signal to us and presumably to other deer in the area. A rub is usually located at the shoulder height of a deer (one meter or less above the ground) on a smooth-barked, small-diameter (16-25 millimeters) tree. The smooth bark of small red maples makes this species ideal for buck rubs in the forests of the mid-eastern United States.

Paragraph 2,3

Q3 The studies of forehead rubbing by deer described in paragraph 3 showed that

A. forehead rubbing encourages the growth of antlers

B. mule deer and white-tailed deer behave differently during the rut

C. the rut can occur at different times of the year

D. deer convey important information through scent

Q4 The word "exhibited" in the passage is closest in meaning to

A. relied on

B. increased

C. displayed

D. preferred

Adult male deer usually produce rubs in late summer or early autumn when the outer velvet layer is being shed from their antlers. Rubs are created about one to two months before the breeding season (the rut). Hence for a long time biologists believed that male deer used buck rubs not only to clean and polish antlers but also to provide practice for the ensuing male-to-male combat during the rut. However, biologists also noted that deer sniff and lick an unfamiliar rub, which suggests that this visual mark on a small tree plays an important communication purpose in the social life of deer.

Buck rubs also have a scent produced by glands in the foreheads of deer that is transferred to the tree when the rub is made. These odors make buck rubs an important means of olfactory communication between deer. The importance of olfactory communication (using odors to communicate) in the way of life of deer was documented by a study of a captive adult mule deer a few decades ago, which noted that males

rubbed their foreheads on branches and twigs, especially as autumn approached. A decade later another study reported that adult male white-tailed buck exhibited forehead rubbing just before and during the rut. It was found that when a white-tailed buck makes a rub, it moves both antlers and forehead glands along the small tree in a vertical direction. This forehead rubbing behavior coincides with a high level of glandular activity in the modified scent glands found on the foreheads of male deer; the glandular activity causes the forehead pelage (hairy covering) of adult males to be distinctly darker than in females or younger males

Paragraph 4

Q5 Why does author mention that "dogs recognize each other via smell"?

A. To point out the similarities between dogs and deer

B. To argue that animals communicate through scent rather than through vision

C. To support the claim that the scent of a buck rub serves to identify its maker to other deer

D. To suggest that rubs can be detected by other species

Q6 The word "crude" in the passage is closest in meaning to

A. rough

B. useful

C. necessary

D. obvious

Q7 What can be inferred from paragraph 4 about the trumpeting of bull elk?

A. Trumpeting by higher-status bull elk signals

Forehead rubbing by male deer on buck rubs presumably sends a great deal of information to other members of the same species. First, the chemicals deposited on the rub provide information on the individual identity of an animal; no two mammals produce the same scent. For instance, as we all know, dogs recognize each other via smell. Second, because only male deer rub, the buck rub and its associated chemicals indicate the sex of the deer producing the rub. Third, older more dominant bucks produce more buck rubs and probably deposit more glandular secretions on a given rub. Thus, the presence of many well-marked rubs is indicative of older, higher-status males being in the general vicinity rather than simply being a crude measure of relative deer abundance in a given area. The information conveyed by the olfactory signals on a buck rub make it the social equivalent of some auditory signals in other deer species, such as trumpeting by bull elk.

their presence to other members of their species.
B. Bull elk need to combine trumpeting with olfactory signals to covey information about their identity.
C. Trumpeting alerts white-tailed deer to the presence of bull elk in their vicinity.
D. Trumpeting provides a better measure of deer presence in a given area than buck rubs do.

Q8 According to paragraph 4, the buck rubs occurring in a given area reveal all of the following information about deer EXCEPT
A. The individual identity of the deer
B. The gender of the deer
C. The likely social status of the deer
D. The number of deer in the vicinity

Paragraph 5

Q9 The word "induce" in the passage is closest in meaning to?
A. increase
B. extend
C. delay
D. stimulate

Because both sexes of whitetails respond to buck rubs by smelling and licking them, rubs may serve a very important additional function. Fresher buck rubs (less than two days old), in particular, are visited more frequently by adult females than older rubs. In view of this behavior it has been suggested that chemicals present in fresh bucks may help physiologically induce and synchronize fertility in females that visit these rubs. This would be an obvious advantage to wide-ranging deer, especially to a socially dominant buck when courting several adult females during the autumn rut.

Q10 According to paragraph 5, which of the following is true about chemicals in buck rubs?
A.They have to be at least two days old for females to be able to detect them.
B. They are more effective in older buck rubs than in fresher ones.
C. They may affect fertility in female deer.
D. They can be more easily detected by young males than adult females.

Paragraph 6

Q11 The word "termed" in the passage is closest

Another visual signal produced by white-tailed deer is termed a buck scrape. Scrapes

in meaning to
A. associated with
B. visible as
C. known as
D. provided by

Q12 According to the passage, in what way do buck scrapes differ from buck rubs?
A. Buck scrapes are made by both male and female deer.
B. Buck scrapes are purely visual signals.
C. Buck scrapes are made closer to the breeding season than buck rubs.
D. Buck scrapes can be smelled only by deer.

Q13 Look at the four squares【■】that indicate where the following sentence could be added to the passage.
This process can take a few hours to several days.
Where would the sentence best fit? Click on a square【■】to insert the sentence in the passage.

Q14 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 answer choices 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.
Buck rubs and buck scrapes are two markings made by white-tailed deer.
A. The observation that deer sniff and lick buck first led scientists to connect buck rubs with

consist of clearing (about 0.5 meter in diameter) and shallow depression made by pushing aside the leaves covering the ground; after making the scrape, the deer typically urinates in the depression. Thus, like a buck rub, a scrape is both a visual and an olfactory signal. Buck scrapes are generally created after leaf-fall in autumn, which is just before or during the rut. Scrapes are usually placed in open or conspicuous places, such as along as a deer trail. Most are made older males, although females and younger males (2.5 years old or less) occasionally make scrapes.

combat between adult males during the breeding season.

B. As they rub the bark from trees, male deer leave behind chemicals produced by the glands in their foreheads, creating a scent that other deer can detect

C. Buck rubs and buck scrapes are visual signals and smells that deer use to communicate a variety of information to other deer.

D. The height of a buck rub, the type of tree used, and the direction in which the deer applies the rub can give different kinds of information to other deer.

E. The number of buck and buck scrapes in a given area changes as the density of the population of male deer in the area changes.

F. Buck rubs are created close to the breeding season of deer and may affect the timing of fertility in the female deer that visit the rubs.

Listening

1. What is the conversation mainly about?
A Criticisms of Dewey's political philosophy
B Methods for leading a discussion group
C Recent changes made to a reference document
D Problems with the organization of a paper

2.Why is the student late for his meeting?
A. Seeing the doctor longer than expected
B. No nearby parking spaces where available
C. His soccer practice lasted longer than usual
D. He had problems printing his paper

3.What revision does the student need to make to his paper? (click on 3 answers)
A. Describe the influences on Dewey in more detail
B. Expand the introductory biographical sketch
C. Remove unnecessary content throughout the paper
D. Use consistent references throughout the paper
E. Add an explanation of Dewey's view on individuality

4.Why does the professor mention the political science club?
A. To encourage the student to run for club president
B. To point out that John Dewey was a member of a similar club
C. To suggest an activity that might interest the student
D. To indicate where the student can get help with his paper

5.Why does the professor say this?
A. To find out how many drafts the student wrote
B. To encourage the student to review his own work
C. To emphasize the need for the student to follow the guidelines
D. To propose a different solution to the problem

6.What is the lecture mainly about?

A. The importance of Locke's views to modern philosophical thought
B. How Descartes' view of knowledge influenced trends in Western philosophy
C. How two philosophers viewed foundational knowledge claims
D. The difference between foundationalism and methodological doubt

7.Why does the professor mention a house?
A. To explain an idea about the organization of human knowledge
B. To Illustrate the unreliability of our perception of physical objects
C. To clarify the difference between two points of view about the basis of human knowledge
D. To remind students of a point he made about Descartes in a previous lecture

8.What did Locke believe to be the most basic type of human knowledge?
A. Knowledge of one's own existence
B. Knowledge acquired through the senses
C. Knowledge humans are born with
D. Knowledge passed down from previous generations

9.According to the professor, what was Descartes' purpose for using methodological doubt?
A. To discover what can be considered foundational knowledge claims.
B. To challenge the philosophical concept of foundationalism
C. To show that one's existence cannot be proven
D. To demonstrate that Locke's views were essentially correct

10.For Descartes, what was the significance of dreaming?
A. He believed that his best ideas came to him in dreams
B. He regarded dreaming as the strongest proof that human exists.
C. Dreaming supports his contention that reality has many aspects
D. Dreaming illustrates why human experience of reality cannot always be trusted

11.According to Descartes, what type of belief should serve as a foundation for all other knowledge claims?
A. A belief that is consistent with what one sees and hears
B. A belief that most other people share
C. A belief that one has held since childhood
D. A belief that cannot be false

12.What is the main purpose of the lecture?

A. To show that some birds have cognitive skills similar to those of primates

B. To explain how the brains of certain primates and birds evolved

C. To compare different tests that measure the cognitive abilities of animals

D. To describe a study of the relationship between brain size and cognitive abilities

13.When giving magpies the mirror mark test, why did researchers place the mark on the magpies' throats?

A. Throat markings trigger aggressive behavior in other magpies

B. Throat markings are extremely rare in magpies.

C. Magpies cannot see their own throats without looking in a mirror.

D. Magpies cannot easily remove a mark form their throats.

14.According to the professor, some corvids are known to hide their food. What possible reason does she provide for this behavior? (click on 2 answers)

A. They are ensuring that they will have food to eat at a later point in time

B. They want to keep their food in a single location that they can easily defend

C. They have been conditioned to exhibit this type of behavior

D. They may be projecting their own behavior tendencies onto their corvids

15.What is the professor's attitude toward the study on pigeons and mirror self-recognition?

A. She is surprised that studies have not been replicated

B. She believes the study's findings are not very meaningful

C. She expects that further studies will show similar results

D. She thinks that it confirms what is known about magpies and jays

16.What does the professor imply about animals that exhibit mirror self-recognition?

A. They acquired this ability through recent evolutionary changes

B. They are not necessarily more intelligent than other animals

C. Their brains all have an identical structure that governs this ability

D. They may be able to understand another animal's perspective

17. According to the professor, what conclusion can be drawn from what is now known about corvids' brains?

A. They area in corvids' brains that governs cognitive functions governs other function as well.

B. Corvids' brains have evolved in the same way as other birds' brains, only more rapidly.

C. Corvids' and primates' brains have evolved differently but have some similar cognitive abilities

D. They cognitive abilities of different types of corvids vary greatly.

18.Why does the man go to see the professor?

A. To learn more about his student teaching assignment

B. To discuss the best time to complete his senior thesis

C. To discuss the possibility of changing the topic of his senior thesis

D. To find out whether the professor will be his advisor for his senior thesis

19.What is the man's concern about the second half of the academic year?

A. He will not have time to do the necessary research for his senior thesis

B. He will not be allowed to write his senior thesis on his topic choice

C. His senior thesis adviser will not be on campus

D. His student teaching requirement will not be complete before the thesis is due.

20.What does the man imply Professor Johnson?

A. His sabbatical may last longer than expected

B. His research is highly respected throughout the world.

C. He is the English Department's specialist on Chaucer

D. He is probably familiar with the literature of the Renaissance

21.Why does the man want to write his senior thesis on the Canterbury Tales? (Click on 2 answers)

A He studies it during his favorite course in high school

B He has already received approval for the paper from his professor

C He thinks that the knowledge might help him in graduate school

D He has great admiration for Chaucer

22.Why does the professor say this:

A . She is uncertain whether the man will be able to finish his paper before the end of the summer

B . She thinks the man will need to do a lot of preparation to write on a new topic

C . She wants to encourage the man to choose a new advisor for his paper

D . She wants the man to select a new topic for his paper during the summer.

23.What is the lecture mainly about?
A. The difference in how humans and plants sense light
B. An explanation of an experiment on color and wavelength
C. How plants sense and respond to different wavelengths of light
D. The process by which photoreceptors distinguish wavelengths of light

24.According to the professor, what is one way that a plant reacts to changes in the number of hours of sunlight?
A. The plant absorbs different wavelengths of light.
B. The plant begins to flower or stops flowering
C. The number of photoreceptors in the plant increase
D. The plant's rate of photosynthesis increase

25.Why does the professor think that it is inappropriate for certain wavelengths of light to be named "far-red"?
A. Far-red wavelengths appear identical to read wavelengths to the human eye.
B. Far-red wavelengths have the same effects on plants as red wavelengths do.
C. Far-red wavelengths travel shorter distances than red wavelengths do
D. Far-red wavelengths are not perceived as red by the human eye

26.What point does the professor make when she discusses the red light and far-red light that reaches plants?
A. All of the far-red light that reaches plants is used for photosynthesis
B. Plants flower more rapidly in response to far-red light than to red light.
C. Plants absorb more of the red light that reaches them than of the far-red light.
D. Red light is absorbed more slowly by plants than far-red light is.

27.According to the professor, how does a plant typically react when it senses a high ratio of far-red light to red light?
A. It slows down its growth
B. It begins photosynthesis

C. It produces more photoreceptors
D. It starts to release its seeds

28.In the Pampas experiment, what was the function of the LEDs?
A. To stimulate photosynthesis
B. To stimulate red light
C. To add to the intensity of the sunlight
D. To provide additional far-red light

29.What does the professor mainly discuss?
A. Evidence of an ancient civilization in central Asia
B. Archaeological techniques used to uncover ancient settlements
C. The controversy concerning an archaeological find in central Asia
D. Methods used to preserve archaeological sites in arid areas.

30.What point does the professor make about mound sites?
A. They are easier to excavate than other types of archaeological sites
B. They often provide information about several generations of people
C. They often contain evidence of trade
D. Most have been found in what are now desert areas.

31.What does the professor compare Gonur-depe to ancient Egypt?
A. To point out that Gonur-depe existed earlier than other ancient civilizations
B. To emphasize that the findings at Gonur-depe are evidence of an advanced civilization
C. To demonstrate that the findings at these locations have little in common
D. To suggest that discovery of Gonur-depe will lead to more research in Egypt

32.What does the professor imply about the people of Gonur-depe?
A. They avoided contact with people from other areas
B. They inhabited Gonur-depe before resettling in Egypt
C. They were skilled in jewelry making
D. They modeled their city after cities in China.

33.Settlements existed at the Gonur-depe site for only a few hundred years. What does the professor say might explain this fact? (Click on 2 answers)

A. Wars with neighboring settlements

B. Destruction caused by an earthquake

C. Changes in the course of the Murgab River

D. Frequent flooding of the Murgab River

34.What is the professor's opinion about the future of the Gonur-depe site?

A. She believes it would be a mistake to alter its original form

B. She doubts the ruins will deteriorate further

C. She thinks other sites are more deserving of researchers' attention.

D. She is not convinced it will be restored.

Speaking

Task 1:
Students have to complete various types of academic assignments in school. Choose one of the assignments below and explain why you think it is beneficial for students.
Research paper
Class presentation
group project

Task 2:
Do you agree or disagree with the following statement?
To protect the health of young children, advertisement for candy and junk food should not be shown on television.
Use specific reasons and details in your response.

Task 3:
Read a student letter in the campus newspaper. You will have 50 seconds to read the letter. Begin reading now.

Keep the Music Building Open Later
Currently, the campus music building – which has practice rooms students can reserve for playing instruments – closes nightly at nine p.m. I think the university should keep the building open until midnight. Often, student musicians want to practice their instruments later at night, and right now there's no good place for them to do that. Also, lots of students want to use the practice rooms, so it's often difficult to reserve one. If the building were open more hours, though, it would be easier to accommodate the large number of students who want to reserve rooms.

Now listen to two students discussing the letter.

The woman expresses her opinion of the proposal. Briefly summarize the proposal, then state her opinion about the proposal, and explain the reasons she gives for holding that opinion.

Task 4:
Read a passage from a business textbook. You will have 45 seconds to read the passage. Begin reading now.

Refute-and-Persuade
Sometimes companies realize that consumers may have developed a negative impression of a product. One way in which they can resolve this problem is by using an advertising technique known

as refute-and-persuade. Refute-and-persuade means that in advertising a product, the company first indicates its awareness of the product's disadvantage. But then the company refutes or challenges that disadvantage by demonstrating how the advantage of buying and using the product makes up for any limitation it may have. In this way, companies can persuade consumers to purchase a product despite its drawbacks.

Now listen to part of a lecture in a business class.

Explain how the example of the television advertisement for pots and pans from the lecture illustrates the technique of refute and persuade.

Task 5:
Listen to a conversation between two students.

Briefly summarize the problem the speakers are discussing. Then state which of the two solutions from the conversation that you would recommend. Explain the reasons for your recommendation.

Task 6:
Listen to part of a lecture from a geology class.

Using points and examples from the lecture, describe two ways that lakes can disappear.

Writing

Task 1

Robert E. Peary was a well-known adventurer and arctic explorer who in 1909 set out to reach the North Pole. When he returned from the expedition, he claimed to have reached the pole on April 7, 1909. This report made him into an international celebrity. Though some historians have expressed doubts that Peary did in fact reach the North Pole, three arguments provide strong support for the truth of Peary's claim.

First, the National Geographic Society put together a committee that was instructed to conduct a thorough investigation of Peary′ s records and equipment. At the end of the investigation, the committee concluded that Peary′ s accounts were consistent and persuasive and declared that he had indeed reached the North Pole.

Second, a recent expedition provides support for Peary′ s claim that he reached the North Pole in only 37 days after setting out from Ellesmere Island off the coast of Greenland. Skeptics used to argue that Peary could not have traveled that fast. Since even modern snowmobiles take longer to cover the same distance. However, a British explorer named Tom Avery recently made the same trek in less than 37 days. In fact, Avery used the same kind of dogsled and the same number and breed of dogs as Peary had. Thus, Peary's claims are not impossible, and he very well might have been telling the truth.

Third, there are photographs taken by Peary that support his claim to have reached the North Pole. Measuring the shadows in Peary′ s photographs makes it possible to calculate the Sun′ s position in the sky. The Sun′ s position established from the photographs corresponds exactly to the Surf s position as it should have been at the North Pole on that day. This provides strong evidence that Peary reached the North Pole and took the photographs there.

Summarize the points made in the lecture, being sure to explain how they support/contradict specific points made in the reading passage.

Task 2

Do you agree or disagree with the following statement?
Parents today are more involved in their children's education than parents were in the past.
Use specific reasons and examples to support your answer.