Reading: Question 1

Questions 1-9 are based on the following passage.

This passage is adapted from Isabel Allende, Portrait in Sepia. ©2001 by HarperCollins Publishers. The setting is Chile during the late nineteenth century.

Line

There was a general consensus in the family that I was "going to come to a bad end." By then the first woman doctor had graduated in Chile, and others had entered the university. That gave Nívea the idea that I could do the same, if only to defy the family and society in general, but it was obvious that I didn't have the least aptitude for studying. Then Severo del Valle appeared with the camera and set it in my lap. It was a beautiful Kodak, precious in the details of every screw, elegant, smooth, perfect, made for the hands of an artist. I still use it, it never fails. No girl my age had a toy like that. I picked it up with reverence and sat looking at it without any idea how to use it. "Let's see if you can photograph the dark shadows in your nightmares," Severo del Valle said as a joke, never suspecting that that would be my one objective for months, and that in the task of deciphering that nightmare I would end up in love with the world. My grandmother took me to the Plaza de Armas, to the studio of Don Juan Ribero, the best photographer in Santiago, a curt man as dry as stale bread on the outside, but generous and sentimental inside.

"I've brought you my granddaughter to be your apprentice," my grandmother said, laying a check on the artist's desk while I clutched her skirttail with one hand and my brand-new camera in the other.

Don Juan Ribero, who was a half head shorter than my grandmother and half her weight, settled his eyeglasses on his nose, carefully read the amount written on the check, and then handed it back to her, looking her up and down with infinite scorn.

"The amount isn't a problem. You set the price," my grandmother wavered.

"It isn't a question of price, but of talent, señora," he replied, guiding Paulina del Valle toward the door.

During that exchange I'd had time to take a quick look around. Ribero's work covered the walls: hundreds of portraits of people of all ages. Ribero was the favorite of the upper class, the photographer of the social pages, but the people gazing at me from the walls of his studio were not bigwig conservatives or beautiful debutantes, but Indians, miners, fishermen, laundresses, poor children, old men, many women like the ones my grandmother helped with her loans from the ladies club. There I saw represented the multifaceted and tormented face of Chile. Those people in the photographs touched something deep inside me; I wanted to know the story of every one of them. I felt a pressure in my chest, like a closed fist, and an uncontainable desire to cry, but I swallowed my emotion and followed my grandmother out with my head high. In the carriage she tried to console me: I shouldn't worry, she said, we would get someone else to teach me to operate the camera, photographers were a dime a dozen; what did that second-rate lowborn think, anyway, talking in that arrogant tone to her. Paulina del Valle! And she grumbled on and on, but I wasn't listening: I had decided that no one but Juan Ribero would be my teacher. The next day I left the house before my grandmother was up. I told the coachman to take me to the studio and planted myself in the street, prepared to wait forever. Don Juan Ribero showed up about eleven, found me at his door, and ordered me to go home. I was shy then—I still am—and very proud; I wasn't used to asking for anything because from the time I was born I was coddled like a queen, but my determination must have been very strong. I didn't move from the door. A couple of hours later, the photographer came

out, threw me a furious glance, and started walking down the street. When he came back from his lunch, he found me still there with my camera clutched to my chest. “All right,” he muttered, defeated, “but I warn you, little girl, that I won’t give you any special consideration. Here you come to obey without talking back and to learn quickly, is that clear?” I nodded silently because my voice was stuck in my throat.

How did Paulina del Valle expect to persuade Don Juan Ribero to take on her granddaughter as an apprentice?

A. By paying him generously
B. By flattering him
C. By appealing to his sympathy
D. By supporting his social ambitions

Choice A is the best answer. It is clear Paulina del Valle intends to use her wealth to persuade Don Juan Ribero to mentor her granddaughter in photography. This can be seen in the second paragraph, when she begins her interactions with him by “laying a check on the artist’s desk.” That idea is further supported in the fourth paragraph when, after Ribero returns the offered check, Paulina del Valle then implies she will pay more by telling Ribero, “You set the price.”

Choices B, C, and D are incorrect because the only interactions that occur between Paulina del Valle and Don Juan Ribero are described in the second through fifth paragraphs and focus on del Valle’s attempt to convince Ribero with her checkbook, but at no point does she flatter him (choice B), appeal to his sympathy (choice C), or offer to advance his social ambitions (choice D).

Question Difficulty: Easy

Reading: Question 2

Questions 1-9 are based on the following passage.

This passage is adapted from Isabel Allende, Portrait in Sepia. ©2001 by HarperCollins Publishers. The setting is Chile during the late nineteenth century.

Line

There was a general consensus in the family that I was "going to come to a bad end." By then the first woman doctor had graduated in Chile, and others had entered the university. That gave Nívea the idea that I could do the same, if only to defy the family and society in general, but it was obvious that I didn't have the least aptitude for studying. Then Severo del Valle appeared with the camera and set it in my lap. It was a beautiful Kodak, precious in the details of every screw, elegant, smooth, perfect, made for the hands of an artist. I still use it, it never fails. No girl my age had a toy like that. I picked it up with reverence and sat looking at it without any idea how to use it. "Let's see if you can photograph the dark shadows in your nightmares," Severo del Valle said as a joke, never suspecting that that would be my one objective for months, and that in the task of deciphering that nightmare I would end up in love with the world. My grandmother took me to the Plaza de Armas, to the studio of Don Juan Ribero, the best photographer in Santiago, a curt man as dry as stale bread on the outside, but generous and sentimental inside.

"I've brought you my granddaughter to be your apprentice," my grandmother said, laying a check on the artist's desk while I clutched her skirttail with one hand and my brand-new camera in the other.

Don Juan Ribero, who was a half head shorter than my grandmother and half her weight, settled his eyeglasses on his nose, carefully read the amount written on the check, and then handed it back to her, looking her up and down with infinite scorn.

"The amount isn't a problem. You set the price," my grandmother wavered.

"It isn't a question of price, but of talent, señora," he replied, guiding Paulina del Valle toward the door.

During that exchange I'd had time to take a quick look around. Ribero's work covered the walls: hundreds of portraits of people of all ages. Ribero was the favorite of the upper class, the photographer of the social pages, but the people gazing at me from the walls of his studio were not bigwig conservatives or beautiful debutantes, but Indians, miners, fishermen, laundresses, poor children, old men, many women like the ones my grandmother helped with her loans from the ladies club. There I saw represented the multifaceted and tormented face of Chile. Those people in the photographs touched something deep inside me; I wanted to know the story of every one of them. I felt a pressure in my chest, like a closed fist, and an uncontainable desire to cry, but I swallowed my emotion and followed my grandmother out with my head high. In the carriage she tried to console me: I shouldn't worry, she said, we would get someone else to teach me to operate the camera, photographers were a dime a dozen; what did that second-rate lowborn think, anyway, talking in that arrogant tone to her. Paulina del Valle! And she grumbled on and on, but I wasn't listening: I had decided that no one but Juan Ribero would be my teacher. The next day I left the house before my grandmother was up. I told the coachman to take me to the studio and planted myself in the street, prepared to wait forever. Don Juan Ribero showed up about eleven, found me at his door, and ordered me to go home. I was shy then—I still am—and very proud; I wasn't used to asking for anything because from the time I was born I was coddled like a queen, but my determination must have been very strong. I didn't move from the door. A couple of hours later, the photographer came

out, threw me a furious glance, and started walking down the street. When he came back from his lunch, he found me still there with my camera clutched to my chest. “All right,” he muttered, defeated, “but I warn you, little girl, that I won’t give you any special consideration. Here you come to obey without talking back and to learn quickly, is that clear?” I nodded silently because my voice was stuck in my throat.

The passage describes an important distinction between

A. Paulina del Valle’s behavior toward her relatives and her behavior toward those who are poor.
B. Paulina del Valle’s benevolence and Severo del Valle’s benevolence.
C. Don Juan Ribero’s polite behavior and his rebellious feelings.
D. Don Juan Ribero’s professional activities and his preferred projects.

Choice D is the best answer. The passage makes clear that although Don Juan Ribero is known for his photographs of the city’s social elite, his preferred subjects are members of other socioeconomic groups. This can be seen in the beginning of the sixth paragraph, which states, “Ribero was the favorite of the upper class, the photographer of the social pages, but the people gazing at me from the walls of his studio were not bigwig conservatives or beautiful debutantes, but Indians, miners, fishermen, laundresses, poor children, old men, many women like the ones my grandmother helped with her loans from the ladies club.”

Choice A is incorrect because the passage shows that Paulina del Valle is helpful not only toward her relatives (by trying to provide photography lessons for her granddaughter) but also toward those who are poor (by providing them with loans through her club). Choice B is incorrect because both Severo del Valle and Paulina del Valle could be described as benevolent, as the former gives the narrator a camera and the latter tries to provide photography lessons for her. Choice C is incorrect because Don Juan Ribero cannot be described as exhibiting polite behavior, since near the end of the first paragraph he is said to be “curt” and in the third paragraph he is said to treat the narrator’s grandmother with “infinite scorn.”

Question Difficulty: Hard

Reading: Question 3

Questions 1-9 are based on the following passage.

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Line

There was a general consensus in the family that I was "going to come to a bad end." By then the first woman doctor had graduated in Chile, and others had entered the university. That gave Nívea the idea that I could do the same, if only to defy the family and society in general, but it was obvious that I didn't have the least aptitude for studying. Then Severo del Valle appeared with the camera and set it in my lap. It was a beautiful Kodak, precious in the details of every screw, elegant, smooth, perfect, made for the hands of an artist. I still use it, it never fails. No girl my age had a toy like that. I picked it up with reverence and sat looking at it without any idea how to use it. "Let's see if you can photograph the dark shadows in your nightmares," Severo del Valle said as a joke, never suspecting that that would be my one objective for months, and that in the task of deciphering that nightmare I would end up in love with the world. My grandmother took me to the Plaza de Armas, to the studio of Don Juan Ribero, the best photographer in Santiago, a curt man as dry as stale bread on the outside, but generous and sentimental inside.

"I've brought you my granddaughter to be your apprentice," my grandmother said, laying a check on the artist's desk while I clutched her skirttail with one hand and my brand-new camera in the other.

Don Juan Ribero, who was a half head shorter than my grandmother and half her weight, settled his eyeglasses on his nose, carefully read the amount written on the check, and then handed it back to her, looking her up and down with infinite scorn.

"The amount isn't a problem. You set the price," my grandmother wavered.

"It isn't a question of price, but of talent, señora," he replied, guiding Paulina del Valle toward the door.

During that exchange I'd had time to take a quick look around. Ribero's work covered the walls: hundreds of portraits of people of all ages. Ribero was the favorite of the upper class, the photographer of the social pages, but the people gazing at me from the walls of his studio were not bigwig conservatives or beautiful debutantes, but Indians, miners, fishermen, laundresses, poor children, old men, many women like the ones my grandmother helped with her loans from the ladies club. There I saw represented the multifaceted and tormented face of Chile. Those people in the photographs touched something deep inside me; I wanted to know the story of every one of them. I felt a pressure in my chest, like a closed fist, and an uncontainable desire to cry, but I swallowed my emotion and followed my grandmother out with my head high. In the carriage she tried to console me: I shouldn't worry, she said, we would get someone else to teach me to operate the camera, photographers were a dime a dozen; what did that second-rate lowborn think, anyway, talking in that arrogant tone to her. Paulina del Valle! And she grumbled on and on, but I wasn't listening: I had decided that no one but Juan Ribero would be my teacher. The next day I left the house before my grandmother was up. I told the coachman to take me to the studio and planted myself in the street, prepared to wait forever. Don Juan Ribero showed up about eleven, found me at his door, and ordered me to go home. I was shy then—I still am—and very proud; I wasn't used to asking for anything because from the time I was born I was coddled like a queen, but my determination must have been very strong. I didn't move from the door. A couple of hours later, the photographer came

out, threw me a furious glance, and started walking down the street. When he came back from his lunch, he found me still there with my camera clutched to my chest. “All right,” he muttered, defeated, “but I warn you, little girl, that I won’t give you any special consideration. Here you come to obey without talking back and to learn quickly, is that clear?” I nodded silently because my voice was stuck in my throat.

Which choice best supports the idea that Paulina del Valle feels that she is entitled to special treatment?

A. line 20 (“I’ve . . . apprentice”)
B. lines 47-50 (“we would . . . del Valle”)
C. lines 50-51 (“And she . . . listening”)
D. lines 52-55 (“The next . . . forever”)

Choice B is the best answer. The fact that Paulina del Valle believes that she deserves special treatment can be seen in the middle of the sixth paragraph, where, after Ribero rejects the apprenticeship proposal, she declares that they would get someone else to teach the narrator to operate the camera: “photographers were a dime a dozen; what did that second-rate lowborn think, anyway, talking in that arrogant tone to her. Paulina del Valle!” Her dismissal of Ribero as a “second-rate lowborn,” her resentment of his “arrogant tone,” and her repetition of her name, as if it were especially significant, all signal her sense of herself as socially superior and deserving of special treatment.

Choice A is incorrect because although the cited lines imply that Paulina del Valle intends to arrange for her granddaughter to work as Ribero’s apprentice, they do not necessarily convey the sense that Paulina believes herself to merit special treatment. Choices C and D are incorrect because the cited lines emphasize what the narrator is thinking and feeling, not what her grandmother might believe.

Question Difficulty: Medium

Reading: Question 4

Questions 1-9 are based on the following passage.

This passage is adapted from Isabel Allende, Portrait in Sepia. ©2001 by HarperCollins Publishers. The setting is Chile during the late nineteenth century.

Line

There was a general consensus in the family that I was "going to come to a bad end." By then the first woman doctor had graduated in Chile, and others had entered the university. That gave Nívea the idea that I could do the same, if only to defy the family and society in general, but it was obvious that I didn't have the least aptitude for studying. Then Severo del Valle appeared with the camera and set it in my lap. It was a beautiful Kodak, precious in the details of every screw, elegant, smooth, perfect, made for the hands of an artist. I still use it, it never fails. No girl my age had a toy like that. I picked it up with reverence and sat looking at it without any idea how to use it. "Let's see if you can photograph the dark shadows in your nightmares," Severo del Valle said as a joke, never suspecting that that would be my one objective for months, and that in the task of deciphering that nightmare I would end up in love with the world. My grandmother took me to the Plaza de Armas, to the studio of Don Juan Ribero, the best photographer in Santiago, a curt man as dry as stale bread on the outside, but generous and sentimental inside.

"I've brought you my granddaughter to be your apprentice," my grandmother said, laying a check on the artist's desk while I clutched her skirttail with one hand and my brand-new camera in the other.

Don Juan Ribero, who was a half head shorter than my grandmother and half her weight, settled his eyeglasses on his nose, carefully read the amount written on the check, and then handed it back to her, looking her up and down with infinite scorn.

"The amount isn't a problem. You set the price," my grandmother wavered.

"It isn't a question of price, but of talent, señora," he replied, guiding Paulina del Valle toward the door.

During that exchange I'd had time to take a quick look around. Ribero's work covered the walls: hundreds of portraits of people of all ages. Ribero was the favorite of the upper class, the photographer of the social pages, but the people gazing at me from the walls of his studio were not bigwig conservatives or beautiful debutantes, but Indians, miners, fishermen, laundresses, poor children, old men, many women like the ones my grandmother helped with her loans from the ladies club. There I saw represented the multifaceted and tormented face of Chile. Those people in the photographs touched something deep inside me; I wanted to know the story of every one of them. I felt a pressure in my chest, like a closed fist, and an uncontainable desire to cry, but I swallowed my emotion and followed my grandmother out with my head high. In the carriage she tried to console me: I shouldn't worry, she said, we would get someone else to teach me to operate the camera, photographers were a dime a dozen; what did that second-rate lowborn think, anyway, talking in that arrogant tone to her. Paulina del Valle! And she grumbled on and on, but I wasn't listening: I had decided that no one but Juan Ribero would be my teacher. The next day I left the house before my grandmother was up. I told the coachman to take me to the studio and planted myself in the street, prepared to wait forever. Don Juan Ribero showed up about eleven, found me at his door, and ordered me to go home. I was shy then—I still am—and very proud; I wasn't used to asking for anything because from the time I was born I was coddled like a queen, but my determination must have been very strong. I didn't move from the door. A couple of hours later, the photographer came

out, threw me a furious glance, and started walking down the street. When he came back from his lunch, he found me still there with my camera clutched to my chest. “All right,” he muttered, defeated, “but I warn you, little girl, that I won’t give you any special consideration. Here you come to obey without talking back and to learn quickly, is that clear?” I nodded silently because my voice was stuck in my throat.

In the first paragraph, the narrator emphasizes the contrast between

A. the benefits of a life of wealth and privilege and the rewards of determination and hard work.
B. her earnest attitude and Severo del Valle’s playful tone.
C. the family’s overwhelming preoccupation with materialism and her focus on art and beauty.
D. her attempts to assert her own independence and the grandmother’s authoritarian control over the family.

Choice B is the best answer. In the middle of the first paragraph, after giving his granddaughter a new camera, Severo del Valle suggests, “as a joke,” that she should “see if you can photograph the dark shadows in your nightmares.” In contrast to his playful tone, the narrator’s reaction is earnest; she handles the camera “with reverence” and takes Severo’s suggestion to heart, so much so that photographing her “nightmares” becomes her “one objective for months.”

Choice A is incorrect because although the first paragraph alludes to family wealth, it discusses neither determination nor hard work. Choice C is incorrect because even if the first paragraph implies that the narrator is interested in art and beauty, it doesn’t suggest that the family has an “overwhelming preoccupation with materialism.” Choice D is incorrect because the only thing the first paragraph says of the grandmother is that she takes her granddaughter to a photography studio, and there is no indication that this act is necessarily “authoritarian” in nature.

Question Difficulty: Hard

Reading: Question 5

Questions 1-9 are based on the following passage.

This passage is adapted from Isabel Allende, Portrait in Sepia. ©2001 by HarperCollins Publishers. The setting is Chile during the late nineteenth century.

Line

There was a general consensus in the family that I was "going to come to a bad end." By then the first woman doctor had graduated in Chile, and others had entered the university. That gave Nívea the idea that I could do the same, if only to defy the family and society in general, but it was obvious that I didn't have the least aptitude for studying. Then Severo del Valle appeared with the camera and set it in my lap. It was a beautiful Kodak, precious in the details of every screw, elegant, smooth, perfect, made for the hands of an artist. I still use it, it never fails. No girl my age had a toy like that. I picked it up with reverence and sat looking at it without any idea how to use it. "Let's see if you can photograph the dark shadows in your nightmares," Severo del Valle said as a joke, never suspecting that that would be my one objective for months, and that in the task of deciphering that nightmare I would end up in love with the world. My grandmother took me to the Plaza de Armas, to the studio of Don Juan Ribero, the best photographer in Santiago, a curt man as dry as stale bread on the outside, but generous and sentimental inside.

"I've brought you my granddaughter to be your apprentice," my grandmother said, laying a check on the artist's desk while I clutched her skirttail with one hand and my brand-new camera in the other.

Don Juan Ribero, who was a half head shorter than my grandmother and half her weight, settled his eyeglasses on his nose, carefully read the amount written on the check, and then handed it back to her, looking her up and down with infinite scorn.

"The amount isn't a problem. You set the price," my grandmother wavered.

"It isn't a question of price, but of talent, señora," he replied, guiding Paulina del Valle toward the door.

During that exchange I'd had time to take a quick look around. Ribero's work covered the walls: hundreds of portraits of people of all ages. Ribero was the favorite of the upper class, the photographer of the social pages, but the people gazing at me from the walls of his studio were not bigwig conservatives or beautiful debutantes, but Indians, miners, fishermen, laundresses, poor children, old men, many women like the ones my grandmother helped with her loans from the ladies club. There I saw represented the multifaceted and tormented face of Chile. Those people in the photographs touched something deep inside me; I wanted to know the story of every one of them. I felt a pressure in my chest, like a closed fist, and an uncontainable desire to cry, but I swallowed my emotion and followed my grandmother out with my head high. In the carriage she tried to console me: I shouldn't worry, she said, we would get someone else to teach me to operate the camera, photographers were a dime a dozen; what did that second-rate lowborn think, anyway, talking in that arrogant tone to her. Paulina del Valle! And she grumbled on and on, but I wasn't listening: I had decided that no one but Juan Ribero would be my teacher. The next day I left the house before my grandmother was up. I told the coachman to take me to the studio and planted myself in the street, prepared to wait forever. Don Juan Ribero showed up about eleven, found me at his door, and ordered me to go home. I was shy then—I still am—and very proud; I wasn't used to asking for anything because from the time I was born I was coddled like a queen, but my determination must have been very strong. I didn't move from the door. A couple of hours later, the photographer came

out, threw me a furious glance, and started walking down the street. When he came back from his lunch, he found me still there with my camera clutched to my chest. “All right,” he muttered, defeated, “but I warn you, little girl, that I won’t give you any special consideration. Here you come to obey without talking back and to learn quickly, is that clear?” I nodded silently because my voice was stuck in my throat.

lines 24-32 (“Don . . . door”) primarily serve to

A. portray the grandmother’s response to a rejection.
B. reveal Don Juan Ribero’s personality through his behavior.
C. point out Don Juan Ribero’s changeable nature.
D. emphasize the serious nature of a setback for Don Juan Ribero.

Choice B is the best answer. The lines cited from the third, fourth, and fifth paragraphs show that when Paulina del Valle tries to hire Don Juan Ribero, he rejects her legitimate offer and treats her with “infinite scorn.” The purpose of these lines can thus be seen as a way to describe Ribero’s personality through his actions.

Choice A is incorrect because even if these lines say Paulina del Valle “wavered” in the face of Ribero’s actions, her actual response to the rejection is explained not in the lines cited but later, in the sixth paragraph. Choice C is incorrect because Don Juan Ribero displays a consistently scornful attitude in these lines, rather than a changeable nature. Choice D is incorrect because no “setback” is shown in these lines for Don Juan Ribero—he simply rejects a legitimate job offer.

Question Difficulty: Easy

Reading: Question 6

Questions 1-9 are based on the following passage.

This passage is adapted from Isabel Allende, Portrait in Sepia. ©2001 by HarperCollins Publishers. The setting is Chile during the late nineteenth century.

Line

There was a general consensus in the family that I was "going to come to a bad end." By then the first woman doctor had graduated in Chile, and others had entered the university. That gave Nívea the idea that I could do the same, if only to defy the family and society in general, but it was obvious that I didn't have the least aptitude for studying. Then Severo del Valle appeared with the camera and set it in my lap. It was a beautiful Kodak, precious in the details of every screw, elegant, smooth, perfect, made for the hands of an artist. I still use it, it never fails. No girl my age had a toy like that. I picked it up with reverence and sat looking at it without any idea how to use it. "Let's see if you can photograph the dark shadows in your nightmares," Severo del Valle said as a joke, never suspecting that that would be my one objective for months, and that in the task of deciphering that nightmare I would end up in love with the world. My grandmother took me to the Plaza de Armas, to the studio of Don Juan Ribero, the best photographer in Santiago, a curt man as dry as stale bread on the outside, but generous and sentimental inside.

"I've brought you my granddaughter to be your apprentice," my grandmother said, laying a check on the artist's desk while I clutched her skirttail with one hand and my brand-new camera in the other.

Don Juan Ribero, who was a half head shorter than my grandmother and half her weight, settled his eyeglasses on his nose, carefully read the amount written on the check, and then handed it back to her, looking her up and down with infinite scorn.

"The amount isn't a problem. You set the price," my grandmother wavered.

"It isn't a question of price, but of talent, señora," he replied, guiding Paulina del Valle toward the door.

During that exchange I'd had time to take a quick look around. Ribero's work covered the walls: hundreds of portraits of people of all ages. Ribero was the favorite of the upper class, the photographer of the social pages, but the people gazing at me from the walls of his studio were not bigwig conservatives or beautiful debutantes, but Indians, miners, fishermen, laundresses, poor children, old men, many women like the ones my grandmother helped with her loans from the ladies club. There I saw represented the multifaceted and tormented face of Chile. Those people in the photographs touched something deep inside me; I wanted to know the story of every one of them. I felt a pressure in my chest, like a closed fist, and an uncontainable desire to cry, but I swallowed my emotion and followed my grandmother out with my head high. In the carriage she tried to console me: I shouldn't worry, she said, we would get someone else to teach me to operate the camera, photographers were a dime a dozen; what did that second-rate lowborn think, anyway, talking in that arrogant tone to her. Paulina del Valle! And she grumbled on and on, but I wasn't listening: I had decided that no one but Juan Ribero would be my teacher. The next day I left the house before my grandmother was up. I told the coachman to take me to the studio and planted myself in the street, prepared to wait forever. Don Juan Ribero showed up about eleven, found me at his door, and ordered me to go home. I was shy then—I still am—and very proud; I wasn't used to asking for anything because from the time I was born I was coddled like a queen, but my determination must have been very strong. I didn't move from the door. A couple of hours later, the photographer came

60 out, threw me a furious glance, and started walking down the street. When he came back from his lunch, he found me still there with my camera clutched to my chest. “All right,” he muttered, defeated, “but I warn you, little girl, that I won’t give you any special consideration. Here you come to obey without
65 talking back and to learn quickly, is that clear?” I nodded silently because my voice was stuck in my throat.

As used in line 29, “set” most nearly means

A. post.
B. apply.
C. determine.
D. waive.

Choice C is the best answer. In the fourth paragraph, after Don Juan Ribero looks at Paulina del Valle’s check and rejects her offer, she says, “The amount isn’t a problem. You set the price.” In this context, for Ribero to be able to “set” the price most nearly means he can establish or determine it.

Choices A, B, and D are incorrect because in the context of Paulina del Valle telling Don Juan Ribero he can “set” a price, “set” means to establish or determine, not post (choice A), apply (choice B), or waive (choice D).

Question Difficulty: Easy

Reading: Question 7

Questions 1-9 are based on the following passage.

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Line

There was a general consensus in the family that I was "going to come to a bad end." By then the first woman doctor had graduated in Chile, and others had entered the university. That gave Nívea the idea that I could do the same, if only to defy the family and society in general, but it was obvious that I didn't have the least aptitude for studying. Then Severo del Valle appeared with the camera and set it in my lap. It was a beautiful Kodak, precious in the details of every screw, elegant, smooth, perfect, made for the hands of an artist. I still use it, it never fails. No girl my age had a toy like that. I picked it up with reverence and sat looking at it without any idea how to use it. "Let's see if you can photograph the dark shadows in your nightmares," Severo del Valle said as a joke, never suspecting that that would be my one objective for months, and that in the task of deciphering that nightmare I would end up in love with the world. My grandmother took me to the Plaza de Armas, to the studio of Don Juan Ribero, the best photographer in Santiago, a curt man as dry as stale bread on the outside, but generous and sentimental inside.

"I've brought you my granddaughter to be your apprentice," my grandmother said, laying a check on the artist's desk while I clutched her skirttail with one hand and my brand-new camera in the other.

Don Juan Ribero, who was a half head shorter than my grandmother and half her weight, settled his eyeglasses on his nose, carefully read the amount written on the check, and then handed it back to her, looking her up and down with infinite scorn.

"The amount isn't a problem. You set the price," my grandmother wavered.

"It isn't a question of price, but of talent, señora," he replied, guiding Paulina del Valle toward the door.

During that exchange I'd had time to take a quick look around. Ribero's work covered the walls: hundreds of portraits of people of all ages. Ribero was the favorite of the upper class, the photographer of the social pages, but the people gazing at me from the walls of his studio were not bigwig conservatives or beautiful debutantes, but Indians, miners, fishermen, laundresses, poor children, old men, many women like the ones my grandmother helped with her loans from the ladies club. There I saw represented the multifaceted and tormented face of Chile. Those people in the photographs touched something deep inside me; I wanted to know the story of every one of them. I felt a pressure in my chest, like a closed fist, and an uncontainable desire to cry, but I swallowed my emotion and followed my grandmother out with my head high. In the carriage she tried to console me: I shouldn't worry, she said, we would get someone else to teach me to operate the camera, photographers were a dime a dozen; what did that second-rate lowborn think, anyway, talking in that arrogant tone to her. Paulina del Valle! And she grumbled on and on, but I wasn't listening: I had decided that no one but Juan Ribero would be my teacher. The next day I left the house before my grandmother was up. I told the coachman to take me to the studio and planted myself in the street, prepared to wait forever. Don Juan Ribero showed up about eleven, found me at his door, and ordered me to go home. I was shy then—I still am—and very proud; I wasn't used to asking for anything because from the time I was born I was coddled like a queen, but my determination must have been very strong. I didn't move from the door. A couple of hours later, the photographer came

out, threw me a furious glance, and started walking down the street. When he came back from his lunch, he found me still there with my camera clutched to my chest. “All right,” he muttered, defeated, “but I warn you, little girl, that I won’t give you any special consideration. Here you come to obey without talking back and to learn quickly, is that clear?” I nodded silently because my voice was stuck in my throat.

As used in line 33, “exchange” most nearly means

A. trade.
B. difference.
C. conversation.
D. barter.

Choice C is the best answer. The sixth paragraph begins by describing the narrator’s behavior while her grandmother speaks to the photographer: “During that exchange I’d had time to take a quick look around.” In this context, the word “exchange” most nearly means a conversation.

Choices A, B, and D are incorrect because in the context of two people having a discussion, the word “exchange” most nearly means a conversation, not trade (choice A), a difference (choice B), or barter or the exchange of goods (choice D).

Question Difficulty: Easy

Reading: Question 8

Questions 1-9 are based on the following passage.

This passage is adapted from Isabel Allende, Portrait in Sepia. ©2001 by HarperCollins Publishers. The setting is Chile during the late nineteenth century.

Line

There was a general consensus in the family that I was "going to come to a bad end." By then the first woman doctor had graduated in Chile, and others had entered the university. That gave Nívea the idea that I could do the same, if only to defy the family and society in general, but it was obvious that I didn't have the least aptitude for studying. Then Severo del Valle appeared with the camera and set it in my lap. It was a beautiful Kodak, precious in the details of every screw, elegant, smooth, perfect, made for the hands of an artist. I still use it, it never fails. No girl my age had a toy like that. I picked it up with reverence and sat looking at it without any idea how to use it. "Let's see if you can photograph the dark shadows in your nightmares," Severo del Valle said as a joke, never suspecting that that would be my one objective for months, and that in the task of deciphering that nightmare I would end up in love with the world. My grandmother took me to the Plaza de Armas, to the studio of Don Juan Ribero, the best photographer in Santiago, a curt man as dry as stale bread on the outside, but generous and sentimental inside.

"I've brought you my granddaughter to be your apprentice," my grandmother said, laying a check on the artist's desk while I clutched her skirttail with one hand and my brand-new camera in the other.

Don Juan Ribero, who was a half head shorter than my grandmother and half her weight, settled his eyeglasses on his nose, carefully read the amount written on the check, and then handed it back to her, looking her up and down with infinite scorn.

"The amount isn't a problem. You set the price," my grandmother wavered.

"It isn't a question of price, but of talent, señora," he replied, guiding Paulina del Valle toward the door.

During that exchange I'd had time to take a quick look around. Ribero's work covered the walls: hundreds of portraits of people of all ages. Ribero was the favorite of the upper class, the photographer of the social pages, but the people gazing at me from the walls of his studio were not bigwig conservatives or beautiful debutantes, but Indians, miners, fishermen, laundresses, poor children, old men, many women like the ones my grandmother helped with her loans from the ladies club. There I saw represented the multifaceted and tormented face of Chile. Those people in the photographs touched something deep inside me; I wanted to know the story of every one of them. I felt a pressure in my chest, like a closed fist, and an uncontainable desire to cry, but I swallowed my emotion and followed my grandmother out with my head high. In the carriage she tried to console me: I shouldn't worry, she said, we would get someone else to teach me to operate the camera, photographers were a dime a dozen; what did that second-rate lowborn think, anyway, talking in that arrogant tone to her. Paulina del Valle! And she grumbled on and on, but I wasn't listening: I had decided that no one but Juan Ribero would be my teacher. The next day I left the house before my grandmother was up. I told the coachman to take me to the studio and planted myself in the street, prepared to wait forever. Don Juan Ribero showed up about eleven, found me at his door, and ordered me to go home. I was shy then—I still am—and very proud; I wasn't used to asking for anything because from the time I was born I was coddled like a queen, but my determination must have been very strong. I didn't move from the door. A couple of hours later, the photographer came

out, threw me a furious glance, and started walking down the street. When he came back from his lunch, he found me still there with my camera clutched to my chest. “All right,” he muttered, defeated, “but I warn you, little girl, that I won’t give you any special consideration. Here you come to obey without talking back and to learn quickly, is that clear?” I nodded silently because my voice was stuck in my throat.

Which statement about Don Juan Ribero helps explain why he changes his mind about teaching the girl?

A. He is desperate to continue working.
B. He is not as unkind as he appears.
C. He realizes he has much to lose otherwise.
D. He recognizes the girl’s talent.

Choice B is the best answer. In the passage, Don Juan Ribero refuses to take the narrator on as his photography apprentice before eventually agreeing to the idea. He relents because he is kinder than he appears to be, as is first suggested in the concluding sentence of the first paragraph, which states that he was “a curt man as dry as stale bread on the outside, but generous and sentimental inside.”

Choice A is incorrect because Don Juan Ribero’s initial rejection of Paulina del Valle’s legitimate offer suggests that he is not “desperate” to keep working. Choice C is incorrect because the passage never states or implies anything about what Ribero might have to lose. Choice D is incorrect because the narrator does not display her talent for photography, only her enthusiasm, so Don Juan Ribero cannot recognize her ability yet.

Question Difficulty: Medium

Reading: Question 9

Questions 1-9 are based on the following passage.

This passage is adapted from Isabel Allende, Portrait in Sepia. ©2001 by HarperCollins Publishers. The setting is Chile during the late nineteenth century.

Line

There was a general consensus in the family that I was "going to come to a bad end." By then the first woman doctor had graduated in Chile, and others had entered the university. That gave Nívea the idea that I could do the same, if only to defy the family and society in general, but it was obvious that I didn't have the least aptitude for studying. Then Severo del Valle appeared with the camera and set it in my lap. It was a beautiful Kodak, precious in the details of every screw, elegant, smooth, perfect, made for the hands of an artist. I still use it, it never fails. No girl my age had a toy like that. I picked it up with reverence and sat looking at it without any idea how to use it. "Let's see if you can photograph the dark shadows in your nightmares," Severo del Valle said as a joke, never suspecting that that would be my one objective for months, and that in the task of deciphering that nightmare I would end up in love with the world. My grandmother took me to the Plaza de Armas, to the studio of Don Juan Ribero, the best photographer in Santiago, a curt man as dry as stale bread on the outside, but generous and sentimental inside.

"I've brought you my granddaughter to be your apprentice," my grandmother said, laying a check on the artist's desk while I clutched her skirttail with one hand and my brand-new camera in the other.

Don Juan Ribero, who was a half head shorter than my grandmother and half her weight, settled his eyeglasses on his nose, carefully read the amount written on the check, and then handed it back to her, looking her up and down with infinite scorn.

"The amount isn't a problem. You set the price," my grandmother wavered.

"It isn't a question of price, but of talent, señora," he replied, guiding Paulina del Valle toward the door.

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out, threw me a furious glance, and started walking down the street. When he came back from his lunch, he found me still there with my camera clutched to my chest. “All right,” he muttered, defeated, “but I warn you, little girl, that I won’t give you any special consideration. Here you come to obey without talking back and to learn quickly, is that clear?” I nodded silently because my voice was stuck in my throat.

Which choice provides the best evidence for the answer to the previous question?

A. lines 16-19 (“My . . . inside”)
B. lines 35-40 (“Ribero . . . club”)
C. lines 60-62 (“A couple . . . street”)
D. lines 65-66 (“Here . . . clear”)

Choice A is the best answer. The previous question asks for an explanation of why Don Juan Ribero changes his mind about taking the narrator on as a photography apprentice, with the answer (that he is not as unkind as he initially seems) being supported in the last lines of the first paragraph: “My grandmother took me to the Plaza de Armas, to the studio of Don Juan Ribero, the best photographer in Santiago, a curt man as dry as stale bread on the outside, but generous and sentimental inside.”

Choices B, C, and D are incorrect because the lines cited do not support the answer to the previous question about why Don Juan Ribero changes his mind about taking the narrator on as a photography apprentice. Instead, the lines describe Ribero’s career (choice B), depict his angry demeanor before he relents (choice C), and explain how the photographer wants his new apprentice to act (choice D).

Question Difficulty: Hard

Reading: Question 10

Questions 10-18 are based on the following passage and supplementary material.

This passage is adapted from Peter W. Huber and Mark P. Mills, The Bottomless Well. ©2005 by Peter W. Huber and Mark P. Mills.

Line

Though he was prepared to go quite a bit deeper when he turned on his steam-powered drill in Crawford County, Pennsylvania, in 1859, Colonel Edwin Drake struck oil at 69 feet. The first “deep water” oil wells stood in 100 feet of water in 1954. Today, they reach through 10,000 feet of water, 20,000 feet of vertical rock, and another 30,000 feet of horizontal rock.

Yet over the long term, the price of oil has held remarkably steady. Ten-mile oil costs less than 69-feet oil did, and about the same as one-mile oil did two decades ago. Production costs in the hostile waters of the Statfjord oil field of the North Sea are not very different from costs at the historic Spindletop fields of southeast Texas a century ago. There have been price spikes and sags, but they have been tied to political and regulatory instabilities, not discovery and extraction costs. This record is all the more remarkable when one considers that the amount of oil extracted has risen year after year. Cumulative production from U.S. wells alone has surpassed a hundred billion barrels. The historical trends defy all intuition.

It is easy enough to thank human ingenuity for the relatively steady price of a finite and dwindling resource and leave it at that. But there is a second part to this story: it is energy itself that begets more energy. Electrically powered robots pursue new supplies of oil at the bottom of the ocean. Electricity purifies and dopes the silicon that becomes the photovoltaic cell that generates more electricity. Lasers enrich uranium that generates more electricity that powers more lasers. Power pursues the energy that produces the power.

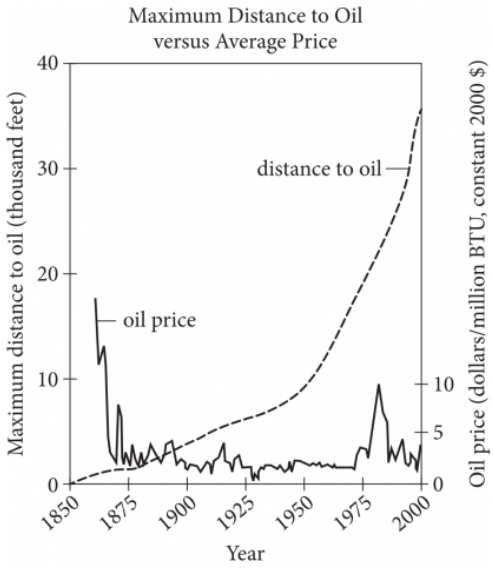
"Energy supply" is determined not by "what's out there" but by how good we are at finding and extracting it. What is scarce is not raw energy but the drive and the logic that is able to locate, purify, and channel it to our own ends—the creation of still more logic paramount among them. For the first two centuries of industrial history, the powered technologies used to find and extract fuels improved faster than the horizon of supply receded. Hence our blue-whale[1] energy economy. End users consume increasingly compact and intense forms of high-grade power, relying on suppliers to pursue and capture increasingly distant, dispersed, and dilute sources of raw fuel. The gap is forever widening, as the history of oil extraction reveals, but that doesn't stop us—the more energy we consume, the more we capture. It's a chain reaction, and it spirals up, not down. It is, if you will, a perpetual motion machine.

The machine is running faster today than ever before, but it has been running for quite some time. Four billion years ago, life on Earth captured no solar energy at all, because there was no life. Life then got a foothold, and the capture and consumption of energy in the biosphere has been rising ever since. The thicker life grew on the surface of the planet, the more energy the biosphere managed to capture. And it used all that energy to create more life.

Living green plants still capture today's solar energy about six times faster than we humans are able to dig up yesterday's solar energy preserved in fossil fuels, but we'll overtake the rest of nature in due course. Perhaps someday we'll get to the point where we, too, can capture our energy directly from the sun. There's plenty of sunlight to spare—green plants currently capture only about one three-thousandth of the golden cascade of solar power that reaches the Earth's surface.

But whether we catch our solar energy live, dig it up in

fossilized form, or mine uranium instead is really just a detail. The one certainty is that we will extract more energy from our environment, not less. Everything we think we know about "running out of energy" isn't just muddled and wrong; it's the exact opposite of the truth. The more energy we capture and put to use, the more readily we will capture still more.



Adapted from WTRG Economics; EIA, Annual Energy Review.

- [1] A reference to the suggestion that a modern American uses about as much energy as a blue whale does

In the passage, the authors claim that the amount of energy available for human use is chiefly dependent on the

A. desire of end users to conserve power wherever possible.
B. ability to discover and draw from more sources of supply.
C. success of new uranium enrichment technologies.
D. future collection of solar energy directly from the sun.

Choice B is the best answer. In the first sentence of the fourth paragraph, the authors indicate that the amount of energy available to humans depends most on our ability to find and capture that energy: "'Energy supply' is determined not by 'what's out there' but by how good we are at finding and extracting it."

Choices A, C, and D are incorrect because the first sentence of the fourth paragraph explicitly states that the energy supply depends mostly on humans' general ability to find and capture that energy, rather than on humans' ability to conserve energy (choice A), on specific technological improvements, such as uranium enrichment technology (choice C), or on solar energy collection (choice D).

Question Difficulty: Easy

Reading: Question 11

Questions 10-18 are based on the following passage and supplementary material.

This passage is adapted from Peter W. Huber and Mark P. Mills, The Bottomless Well. ©2005 by Peter W. Huber and Mark P. Mills.

Line

Though he was prepared to go quite a bit deeper when he turned on his steam-powered drill in Crawford County, Pennsylvania, in 1859, Colonel Edwin Drake struck oil at 69 feet. The first “deep water” oil wells stood in 100 feet of water in 1954. Today, they reach through 10,000 feet of water, 20,000 feet of vertical rock, and another 30,000 feet of horizontal rock.

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It is easy enough to thank human ingenuity for the relatively steady price of a finite and dwindling resource and leave it at that. But there is a second part to this story: it is energy itself that begets more energy. Electrically powered robots pursue new supplies of oil at the bottom of the ocean. Electricity purifies and dopes the silicon that becomes the photovoltaic cell that generates more electricity. Lasers enrich uranium that generates more electricity that powers more lasers. Power pursues the energy that produces the power.

"Energy supply" is determined not by "what's out there" but by how good we are at finding and extracting it. What is scarce is not raw energy but the drive and the logic that is able to locate, purify, and channel it to our own ends—the creation of still more logic paramount among them. For the first two centuries of industrial history, the powered technologies used to find and extract fuels improved faster than the horizon of supply receded. Hence our blue-whale[1] energy economy. End users consume increasingly compact and intense forms of high-grade power, relying on suppliers to pursue and capture increasingly distant, dispersed, and dilute sources of raw fuel. The gap is forever widening, as the history of oil extraction reveals, but that doesn't stop us—the more energy we consume, the more we capture. It's a chain reaction, and it spirals up, not down. It is, if you will, a perpetual motion machine.

The machine is running faster today than ever before, but it has been running for quite some time. Four billion years ago, life on Earth captured no solar energy at all, because there was no life. Life then got a foothold, and the capture and consumption of energy in the biosphere has been rising ever since. The thicker life grew on the surface of the planet, the more energy the biosphere managed to capture. And it used all that energy to create more life.

Living green plants still capture today's solar energy about six times faster than we humans are able to dig up yesterday's solar energy preserved in fossil fuels, but we'll overtake the rest of nature in due course. Perhaps someday we'll get to the point where we, too, can capture our energy directly from the sun. There's plenty of sunlight to spare—green plants currently capture only about one three-thousandth of the golden cascade of solar power that reaches the Earth's surface.

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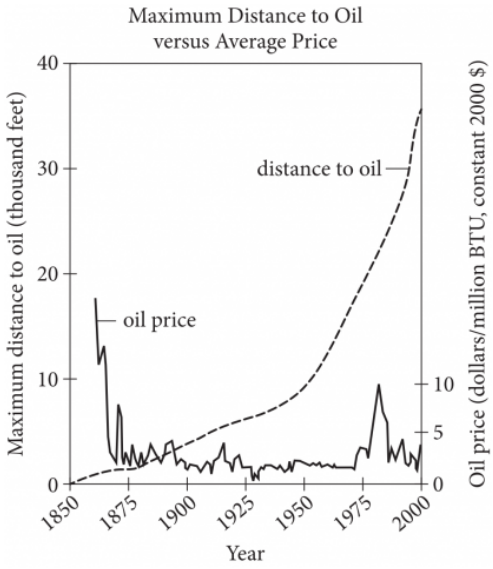
65 to use, the more readily we will capture still more.



Adapted from WTRG Economics; EIA, Annual Energy Review.

- [1] A reference to the suggestion that a modern American uses about as much energy as a blue whale does

Which choice provides the best evidence for the answer to the previous question?

A. lines 25-26 ("Lasers . . . more lasers")
B. lines 28-29 ("Energy . . . it")
C. lines 44-46 ("Four . . . no life")
D. lines 54-56 ("Perhaps . . . sun")

Choice B is the best answer. The previous question asks about which factor humans' energy supply depends on, with the answer (our ability to find and capture that energy) being supported in the first sentence of the fourth paragraph: "'Energy supply' is determined not by 'what's out there' but by how good we are at finding and extracting it."

Choices A, C, and D are incorrect because the lines cited do not support the answer to the previous question about which factor humans' energy supply depends on. Instead, the lines highlight how energy use leads ultimately to greater energy use (choice A), how no solar energy was captured on Earth before the emergence of life (choice C), and how solar energy might be captured in the distant future (choice D).

Question Difficulty: Easy

Reading: Question 12

Questions 10-18 are based on the following passage and supplementary material.

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Line

Though he was prepared to go quite a bit deeper when he turned on his steam-powered drill in Crawford County, Pennsylvania, in 1859, Colonel Edwin Drake struck oil at 69 feet. The first “deep water” oil wells stood in 100 feet of water in 1954. Today, they reach through 10,000 feet of water, 20,000 feet of vertical rock, and another 30,000 feet of horizontal rock.

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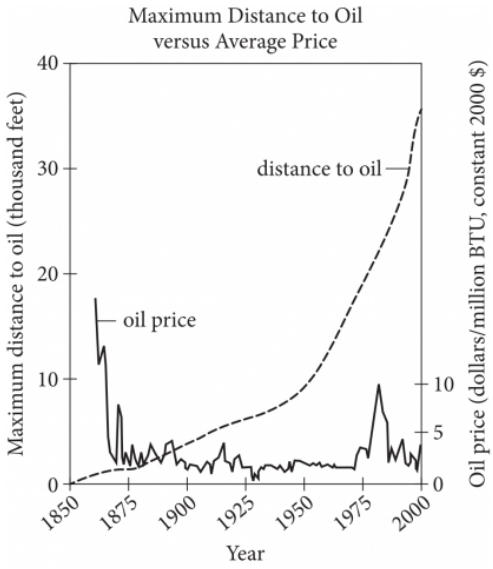

Adapted from WTRG Economics; EIA, Annual Energy Review.

- [1] A reference to the suggestion that a modern American uses about as much energy as a blue whale does

According to the passage, the relationship between energy extraction and use by humans is best characterized as

A. taxed by excessive demand.
B. self-propagating and propulsive.
C. driven by political dissension.
D. existing in competition with natural processes.

Choice B is the best answer. The passage indicates that the relationship between energy extraction and energy use by humans is best characterized as self-propagating and ever increasing. That idea is supported in the last two sentences of the fourth paragraph: "It's a chain reaction, and it spirals up, not down. It is, if you will, a perpetual motion machine."

Choice A is incorrect because the passage neither states nor implies any concern that the demand for energy is excessive. Choice C is incorrect because politics are discussed in this passage only in terms of oil prices, not energy consumption or capture. Choice D is incorrect because the passage doesn't suggest that natural processes are at odds with energy extraction and use by humans; in fact, the sixth paragraph stresses that solar energy would be sufficient

for both the natural processes engaged in by plants and collection by humans.

Question Difficulty: Hard

Reading: Question 13

Questions 10-18 are based on the following passage and supplementary material.

This passage is adapted from Peter W. Huber and Mark P. Mills, The Bottomless Well. ©2005 by Peter W. Huber and Mark P. Mills.

Line

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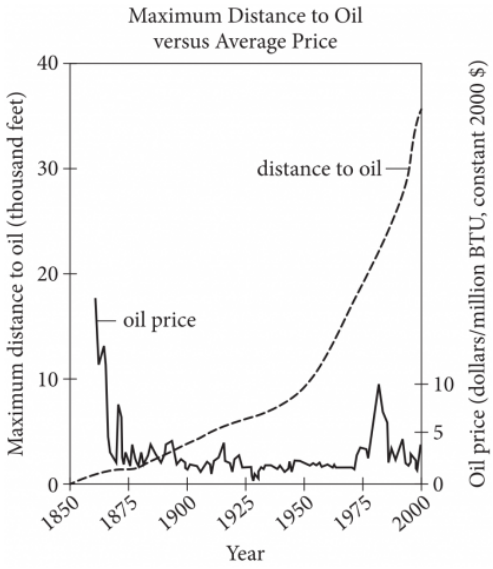

Adapted from WTRG Economics; EIA, Annual Energy Review.

- [1] A reference to the suggestion that a modern American uses about as much energy as a blue whale does

Which choice provides the best evidence for the answer to the previous question?

A. lines 19-21 ("It is . . . that")
B. lines 29-31 ("What . . . ends")
C. lines 41-42 ("It's a . . . machine")
D. lines 51-53 ("Living . . . fuels")

Choice C is the best answer. The previous question asks how the relationship between energy extraction and energy use by humans is best characterized, with the answer (that it is a self-propagating and ever-increasing cycle) being supported in the last two sentences of the fourth paragraph: "It's a chain reaction, and it spirals up, not down. It is, if you will, a perpetual motion machine."

Choices A, B, and D are incorrect because the cited lines do not support the answer to the previous question asking how to characterize the relationship between energy extraction and energy use by humans. Instead, the lines highlight the relationship between energy extraction and energy costs (choice A), identify an obstacle faced in energy extraction (choice B), and compare plants' capture of energy with the extraction of energy by humans (choice D).

Question Difficulty: Hard

Reading: Question 14

Questions 10-18 are based on the following passage and supplementary material.

This passage is adapted from Peter W. Huber and Mark P. Mills, The Bottomless Well. ©2005 by Peter W. Huber and Mark P. Mills.

Line

Though he was prepared to go quite a bit deeper when he turned on his steam-powered drill in Crawford County, Pennsylvania, in 1859, Colonel Edwin Drake struck oil at 69 feet. The first “deep water” oil wells stood in 100 feet of water in 1954. Today, they reach through 10,000 feet of water, 20,000 feet of vertical rock, and another 30,000 feet of horizontal rock.

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It is easy enough to thank human ingenuity for the relatively steady price of a finite and dwindling resource and leave it at that. But there is a second part to this story: it is energy itself that begets more energy. Electrically powered robots pursue new supplies of oil at the bottom of the ocean. Electricity purifies and dopes the silicon that becomes the photovoltaic cell that generates more electricity. Lasers enrich uranium that generates more electricity that powers more lasers. Power pursues the energy that produces the power.

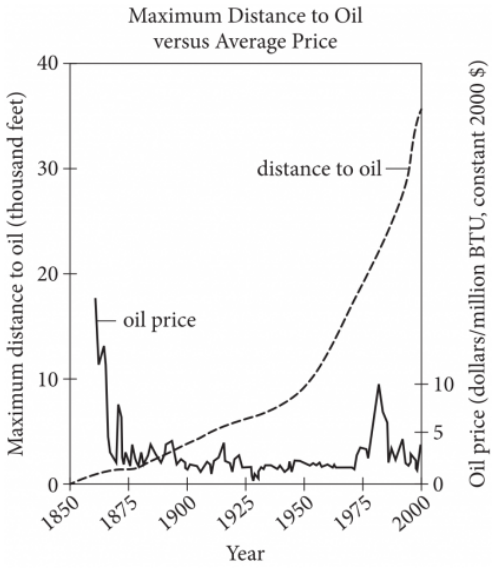
"Energy supply" is determined not by "what's out there" but by how good we are at finding and extracting it. What is scarce is not raw energy but the drive and the logic that is able to locate, purify, and channel it to our own ends—the creation of still more logic paramount among them. For the first two centuries of industrial history, the powered technologies used to find and extract fuels improved faster than the horizon of supply receded. Hence our blue-whale[1] energy economy. End users consume increasingly compact and intense forms of high-grade power, relying on suppliers to pursue and capture increasingly distant, dispersed, and dilute sources of raw fuel. The gap is forever widening, as the history of oil extraction reveals, but that doesn't stop us—the more energy we consume, the more we capture. It's a chain reaction, and it spirals up, not down. It is, if you will, a perpetual motion machine.

The machine is running faster today than ever before, but it has been running for quite some time. Four billion years ago, life on Earth captured no solar energy at all, because there was no life. Life then got a foothold, and the capture and consumption of energy in the biosphere has been rising ever since. The thicker life grew on the surface of the planet, the more energy the biosphere managed to capture. And it used all that energy to create more life.

Living green plants still capture today's solar energy about six times faster than we humans are able to dig up yesterday's solar energy preserved in fossil fuels, but we'll overtake the rest of nature in due course. Perhaps someday we'll get to the point where we, too, can capture our energy directly from the sun. There's plenty of sunlight to spare—green plants currently capture only about one three-thousandth of the golden cascade of solar power that reaches the Earth's surface.

But whether we catch our solar energy live, dig it up in

fossilized form, or mine uranium instead is really just a detail. The one certainty is that we will extract more energy from our environment, not less. Everything we think we know about "running out of energy" isn't just muddled and wrong; it's the exact opposite of the truth. The more energy we capture and put to use, the more readily we will capture still more.



Adapted from WTRG Economics; EIA, Annual Energy Review.

- [1] A reference to the suggestion that a modern American uses about as much energy as a blue whale does

As used in line 13, "tied to" most nearly means

A. united with.
B. connected to.
C. bound by.
D. equivalent to.

Choice B is the best answer. The second paragraph of the passage states that oil prices have historically been "tied to political and regulatory instabilities." In this context, for oil prices to be "tied to" such variables most nearly means they are connected to those variables.

Choices A, C, and D are incorrect because in the context of oil prices being related to political or regulatory instabilities, saying that such prices are "tied to" such instabilities most nearly means that the prices are connected to the instabilities, not that they have been united with them after previously being separate (choice A), are bound by or somehow restricted by them (choice C), or are equivalent to them (choice D).

Question Difficulty: Easy

Reading: Question 15

Questions 10-18 are based on the following passage and supplementary material.

This passage is adapted from Peter W. Huber and Mark P. Mills, The Bottomless Well. ©2005 by Peter W. Huber and Mark P. Mills.

Line

Though he was prepared to go quite a bit deeper when he turned on his steam-powered drill in Crawford County, Pennsylvania, in 1859, Colonel Edwin Drake struck oil at 69 feet. The first “deep water” oil wells stood in 100 feet of water in 1954. Today, they reach through 10,000 feet of water, 20,000 feet of vertical rock, and another 30,000 feet of horizontal rock.

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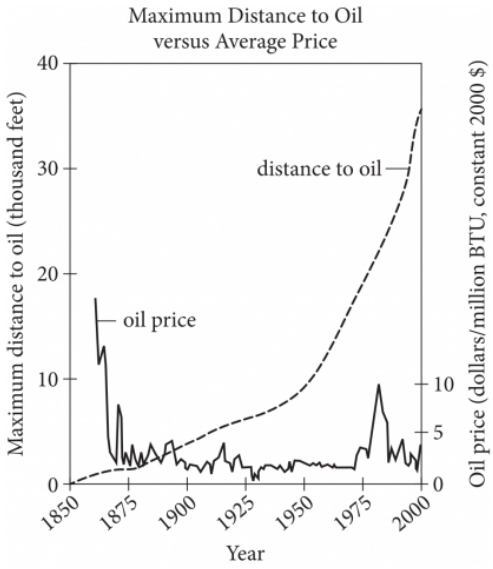

Adapted from WTRG Economics; EIA, Annual Energy Review.

- [1] A reference to the suggestion that a modern American uses about as much energy as a blue whale does

The details in lines 22-26 ("Electrically . . . lasers") serve mainly to

A. support a claim.
B. complete a comparison.
C. sketch a narrative.
D. suggest a paradox.

Choice A is the best answer. The last lines of the third paragraph are as follows: "Electrically powered robots pursue new supplies of oil at the bottom of the ocean. Electricity purifies and dopes the silicon that becomes the photovoltaic cell that generates more electricity. Lasers enrich uranium that generates more electricity that powers more lasers. Power pursues the energy that produces the power." Each of these sentences provides a detailed example that directly supports the claim made in the third paragraph that "energy itself . . . begets more energy."

Choices B, C, and D are incorrect because the examples given in the third paragraph are clearly provided to support the earlier statement that "energy itself . . . begets more energy," rather than to complete a comparison (choice B), sketch a narrative (choice C), or suggest a

paradox (choice D).

Question Difficulty: Medium

Reading: Question 16

Questions 10-18 are based on the following passage and supplementary material.

This passage is adapted from Peter W. Huber and Mark P. Mills, The Bottomless Well. ©2005 by Peter W. Huber and Mark P. Mills.

Line

Though he was prepared to go quite a bit deeper when he turned on his steam-powered drill in Crawford County, Pennsylvania, in 1859, Colonel Edwin Drake struck oil at 69 feet. The first “deep water” oil wells stood in 100 feet of water in 1954. Today, they reach through 10,000 feet of water, 20,000 feet of vertical rock, and another 30,000 feet of horizontal rock.

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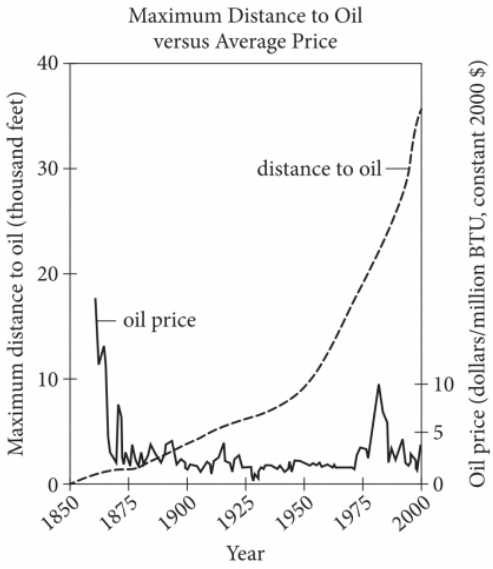

Adapted from WTRG Economics; EIA, Annual Energy Review.

- [1] A reference to the suggestion that a modern American uses about as much energy as a blue whale does

As used in line 37, "pursue" most nearly means

A. seek.
B. chase.
C. engage in.
D. proceed with.

Choice A is the best answer. The fourth paragraph states that "end users consume increasingly compact and intense forms of high-grade power, relying on suppliers to pursue and capture increasingly distant, dispersed, and dilute sources of raw fuel." In this context, to "pursue" sources of raw fuel most nearly means to seek them.

Choices B, C, and D are incorrect because in the context of extracting raw fuel, the word "pursue" means to seek, not to chase (choice B), engage in (choice C), or proceed with (choice D).

Question Difficulty: Medium

Reading: Question 17

Questions 10-18 are based on the following passage and supplementary material.

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Line

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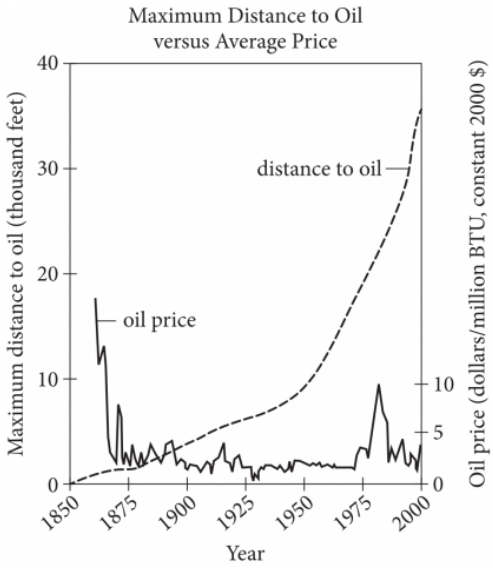

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In the passage, the "gap" (line 38) refers to the disparity between the increasing

A. distance of energy sources from Earth's surface and the decreasing quality of high-grade power obtainable from them.

B. concern over the environmental risks of extraction and the decreasing attention to the actual impact of current extraction methods.

C. awareness of the history of extraction and the decreasing concern about likely future developments.

D. concentration of energy as it is used and the decreasing concentration of supplies of unextracted energy.

Choice D is the best answer. Near the end of the fourth paragraph, the passage states that the "gap is forever widening." This statement immediately follows the sentence "End users consume increasingly compact and intense forms of high-grade power, relying on suppliers to

pursue and capture increasingly distant, dispersed, and dilute sources of raw fuel." In this context, the aforementioned "gap" implies the difference between the amount of energy that humans use ("end users consume increasingly compact and intense forms of high-grade power") and the decreasing amount of energy supplies that still exist ("increasingly distant, dispersed, and dilute sources of raw fuel").

Choice A is incorrect because the passage never asserts that power supplies found farther from Earth's surface are of lesser quality. Choice B is incorrect because the passage does not address concerns about the environmental ramifications of energy extraction. Choice C is incorrect because the passage raises concerns about future developments in fuel extraction and implies that such concerns will increase in the future.

Question Difficulty: Hard

Reading: Question 18

Questions 10-18 are based on the following passage and supplementary material.

This passage is adapted from Peter W. Huber and Mark P. Mills, The Bottomless Well. ©2005 by Peter W. Huber and Mark P. Mills.

Line

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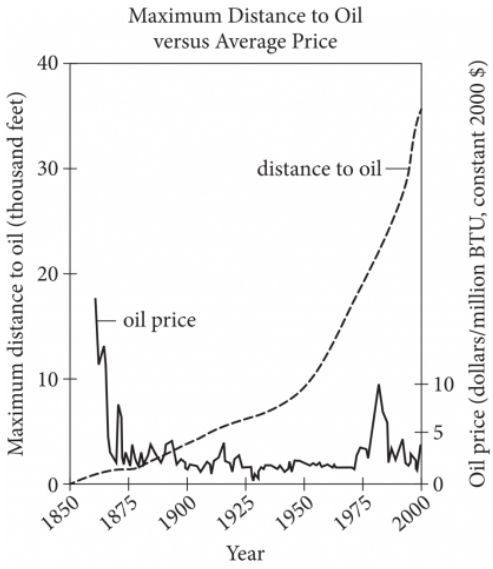


Adapted from WTRG Economics; EIA, Annual Energy Review.

- [1] A reference to the suggestion that a modern American uses about as much energy as a blue whale does

According to the graph, the maximum distance to oil first reached 25,000 feet during which span of years?

A. 1875–1900
B. 1925–1950
C. 1950–1975
D. 1975–2000

Choice D is the best answer. The graph shows that the maximum distance to oil has been on an upward trajectory since the year 1850, including a steep incline since 1950. It specifically shows that the maximum distance to oil reached approximately 20,000 feet around 1975 and increased with each subsequent year, meaning that the maximum distance would have first reached 25,000 feet in the final period listed on the graph, 1975–2000.

Choice A is incorrect because the graph shows the maximum distance to oil up to the year 1900 had not yet surpassed 5,000 feet. Choice B is incorrect because the graph shows the maximum distance to oil up to the year 1950 had not yet surpassed 10,000 feet. Choice C is incorrect because the graph shows the maximum distance to oil up to the year 1975 had only

reached approximately 20,000 feet.

Question Difficulty: Easy

Reading: Question 19

Questions 19-28 are based on the following passage and supplementary material.

This passage is adapted from Lee Alan Dugatkin, Principles of Animal Behavior. ©2009 by W. W. Norton & Company, Inc.

Line

In systems in which predators hone in on sounds made by their prey, one of the simplest things that an animal can do to avoid such predators is to be quiet. With this in mind, Luke Remage-Healey and his colleagues examined the role of sound suppression in the antipredator repertoire of the Gulf toadfish.

Gulf toadfish are a major food staple of adult bottlenose dolphins, making up 13 percent of the dolphin's diet. Prior work had shown that dolphins orient toward the "boatwhistle" sound produced by male toadfish during breeding season. That is, dolphins are eavesdropping on the sounds produced by toadfish to better orient toward their prey. Once a toadfish is located by eavesdropping, the dolphin locks onto this prey and tracks it. Given this, the question Remage-Healey and his colleagues addressed was whether the toadfish respond in kind, listening for sounds associated with bottlenose foraging behavior, and then reducing the boatwhistle sounds they produce.

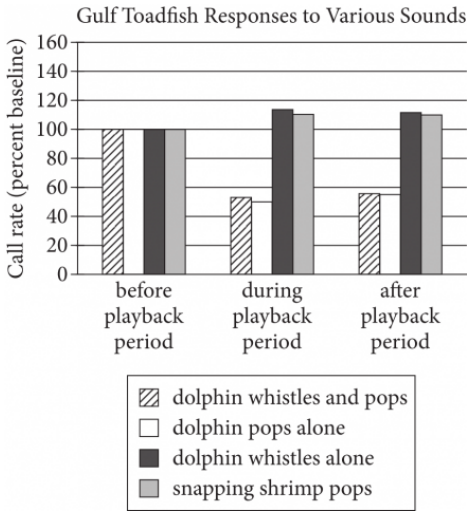
Bottlenose dolphins produce a variety of different sounds, ranging from high-frequency whistles used in dolphin-to-dolphin social communication (not foraging), as well as two sounds that are particularly associated with foraging—"clicks" and low-frequency "pops." The pops are easiest for toadfish to hear, since this species hears most accurately in the low-frequency range, and so Remage-Healey and his team focused on these dolphin sounds.

The researchers captured toadfish during the breeding season, and they kept individual males in tanks until the breeding season ended. The males soon began to emit boatwhistle

sounds, presumably to attract females. At that point, toadfish males were exposed to one of three sounds—the pops associated with dolphin foraging, the high-frequency whistles produced during dolphin social communication, and, as a control, the "snapping" sounds made by snapping shrimp. All sounds were broadcast using underwater speakers, and the activity of toadfish was recorded for the five minutes before sounds were emitted, the five minutes during which the experimental sounds were broadcast, and the five minutes after the sounds were played.

Remage-Healey found clear evidence of antipredator responses when the toadfish heard pop sounds. No differences were found in call rate between males before exposure to the experimental sounds. (See graph.) Males exposed to pop sounds, however, reduced their call rates by 50 percent. In addition, males exposed to the pop sounds maintained their reduced calling rate for the five minutes following exposure to pops—that is, they eavesdropped on their predators and reduced their activity in a way that made capture by a dolphin less likely. Males in the other treatments showed no changes in boatwhistle call rate when they heard the recorded sounds.

Remage-Healey and his team followed up their behavioral work on call rates and exposure to predators with a hormonal analysis that examined whether dolphin pops produce a stress response in the toadfish. After experimentally exposing the male toadfish to pops or snapping shrimp sounds, the researchers drew blood from the males, and they measured their cortisol[1] levels. Males exposed to pops not only responded to the pops by reducing their own boatwhistle call, but they also showed higher levels of cortisol than males exposed to the sound of snapping shrimp.



- [1] A hormone produced in response to stress
-

The author mentions that toadfish are “13 percent of the dolphin’s diet” (line 7) most likely to

A. eliminate an irrelevant factor from consideration.
B. suggest that an ambitious project is unlikely to succeed.
C. explain a problem by way of analogy.
D. clarify the reasoning behind a choice.

Choice D is the best answer. The first paragraph of the passage states that scientists believe one way animals can avoid being captured by predators is simply by being quiet and that an experiment was undertaken featuring the Gulf toadfish to test this concept. The observation in the second paragraph that the toadfish are “13 percent of the dolphin’s diet” serves to clarify why the experiment tested how the toadfish reacted to dolphin sounds, with the reason being that Gulf toadfish are preyed on by dolphins.

Choices A, B, and C are incorrect because the “13 percent” quotation shows that dolphins prey on toadfish and thus explains why they are included in an experiment about how prey respond to the sounds that predators make. That statistic, therefore, cannot be said to eliminate an irrelevant factor (choice A), make a prediction about the ultimate success of a project (choice B), or offer an explanatory analogy or comparison (choice C).

Question Difficulty: Medium

Reading: Question 20

Questions 19-28 are based on the following passage and supplementary material.

This passage is adapted from Lee Alan Dugatkin, Principles of Animal Behavior. ©2009 by W. W. Norton & Company, Inc.

Line

In systems in which predators hone in on sounds made by their prey, one of the simplest things that an animal can do to avoid such predators is to be quiet. With this in mind, Luke Remage-Healey and his colleagues examined the role of sound suppression in the antipredator repertoire of the Gulf toadfish.

Gulf toadfish are a major food staple of adult bottlenose dolphins, making up 13 percent of the dolphin's diet. Prior work had shown that dolphins orient toward the "boatwhistle" sound produced by male toadfish during breeding season. That is, dolphins are eavesdropping on the sounds produced by toadfish to better orient toward their prey. Once a toadfish is located by eavesdropping, the dolphin locks onto this prey and tracks it. Given this, the question Remage-Healey and his colleagues addressed was whether the toadfish respond in kind, listening for sounds associated with bottlenose foraging behavior, and then reducing the boatwhistle sounds they produce.

Bottlenose dolphins produce a variety of different sounds, ranging from high-frequency whistles used in dolphin-to-dolphin social communication (not foraging), as well as two sounds that are particularly associated with foraging—"clicks" and low-frequency "pops." The pops are easiest for toadfish to hear, since this species hears most accurately in the low-frequency range, and so Remage-Healey and his team focused on these dolphin sounds.

The researchers captured toadfish during the breeding season, and they kept individual males in tanks until the breeding season ended. The males soon began to emit boatwhistle

sounds, presumably to attract females. At that point, toadfish males were exposed to one of three sounds—the pops associated with dolphin foraging, the high-frequency whistles produced during dolphin social communication, and, as a control, the "snapping" sounds made by snapping shrimp. All sounds were broadcast using underwater speakers, and the activity of toadfish was recorded for the five minutes before sounds were emitted, the five minutes during which the experimental sounds were broadcast, and the five minutes after the sounds were played.

Remage-Healey found clear evidence of antipredator responses when the toadfish heard pop sounds. No differences were found in call rate between males before exposure to the experimental sounds. (See graph.) Males exposed to pop sounds, however, reduced their call rates by 50 percent. In addition, males exposed to the pop sounds maintained their reduced calling rate for the five minutes following exposure to pops—that is, they eavesdropped on their predators and reduced their activity in a way that made capture by a dolphin less likely. Males in the other treatments showed no changes in boatwhistle call rate when they heard the recorded sounds.

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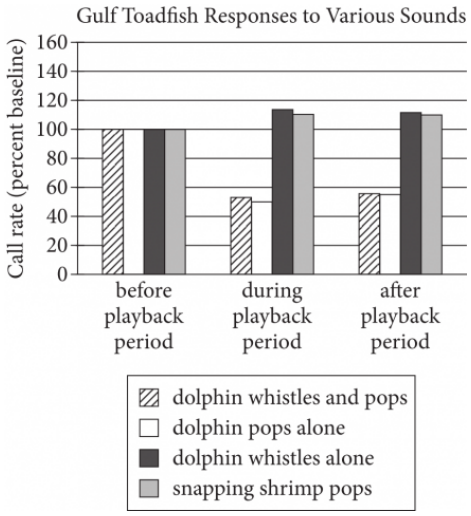

- [1] A hormone produced in response to stress
-

As used in line 12, “tracks” most nearly means

A. marks.
B. follows.
C. observes.
D. carries.

Choice B is the best answer. In the middle of the second paragraph, the author states that “once a toadfish is located by eavesdropping, the dolphin locks onto this prey and tracks it.” In the context of the dolphin’s pursuit of the fish, the word “tracks” most nearly means follows.

Choices A, C, and D are incorrect because, in the context of a dolphin pursuing a fish to prey on, “tracks” most nearly means follows, not marks or identifies (choice A), observes (choice C), or carries (choice D).

Question Difficulty: Easy

Reading: Question 21

Questions 19-28 are based on the following passage and supplementary material.

This passage is adapted from Lee Alan Dugatkin, Principles of Animal Behavior. ©2009 by W. W. Norton & Company, Inc.

Line

In systems in which predators hone in on sounds made by their prey, one of the simplest things that an animal can do to avoid such predators is to be quiet. With this in mind, Luke Remage-Healey and his colleagues examined the role of sound suppression in the antipredator repertoire of the Gulf toadfish.

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The researchers captured toadfish during the breeding season, and they kept individual males in tanks until the breeding season ended. The males soon began to emit boatwhistle

sounds, presumably to attract females. At that point, toadfish males were exposed to one of three sounds—the pops associated with dolphin foraging, the high-frequency whistles produced during dolphin social communication, and, as a control, the "snapping" sounds made by snapping shrimp. All sounds were broadcast using underwater speakers, and the activity of toadfish was recorded for the five minutes before sounds were emitted, the five minutes during which the experimental sounds were broadcast, and the five minutes after the sounds were played.

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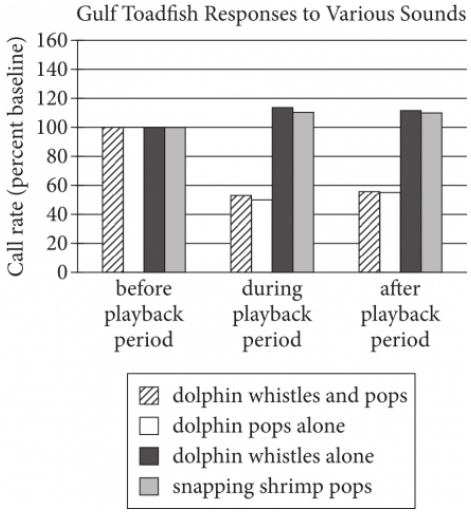

- [1] A hormone produced in response to stress
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The passage indicates that the researchers chose dolphin pops to broadcast primarily because

A. other dolphin foraging sounds are more difficult for male toadfish to hear.
B. dolphin pops would be audible over the toadfish boatwhistles.
C. dolphin pops bear a close resemblance to sounds made by snapping shrimp.
D. toadfish call rates would remain relatively consistent in response to dolphin pops.

Choice A is the best answer. The third paragraph indicates that dolphins make three primary sounds (whistles, clicks, and pops) but that Remage-Healey's experiment focused mostly on pops because those sounds were the easiest for the toadfish to hear. This fact is clearly stated in the last sentence of the third paragraph: "The pops are easiest for toadfish to hear, since this species hears most accurately in the low-frequency range."

Choices B, C, and D are incorrect because the last sentence of the third paragraph clearly states that the team broadcast dolphin pops in the experiment because the toadfish could hear them more easily than other sounds that dolphins produce, not because the pops were louder than the toadfish's own boatwhistles (choice B), because the pops were similar to sounds produced by snapping shrimp (choice C), or because the rate of toadfish calls in response to dolphin pops would remain unchanged (choice D).

Question Difficulty: Medium

Reading: Question 22

Questions 19-28 are based on the following passage and supplementary material.

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Line

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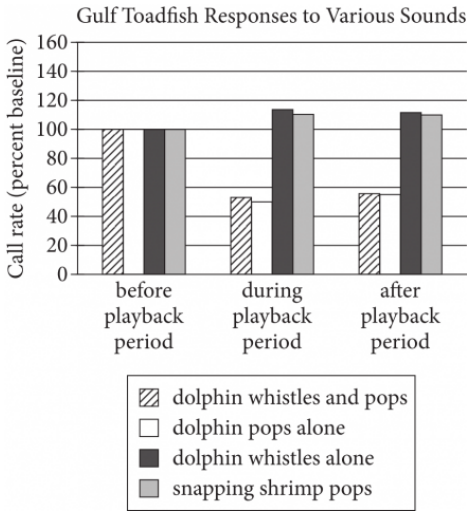

- [1] A hormone produced in response to stress
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Which choice provides the best evidence for the answer to the previous question?

A. lines 21-23 (“The pops . . . range”)
B. line 29 (“toadfish . . . three sounds”)
C. lines 43-45 (“males exposed . . . pops”)
D. lines 47-48 (“Males in . . . recorded sounds”)

Choice A is the best answer. The previous question asks why the researchers chose to focus on toadfish vocalization in response to dolphin pops in the experiment, with the answer (that the fish can hear pops more easily than other dolphin sounds) being clearly supported in the last sentence of the third paragraph: “The pops are easiest for toadfish to hear, since the species hears more accurately in the low-frequency range.”

Choices B, C, and D are incorrect because the cited lines do not support the answer to the previous question about why the researchers opted in their experiment to broadcast mostly dolphin pops. Instead, the lines outline all three treatments in the experiment (choice B) and describe how the toadfish reacted to the stimuli of the experiment (choices C and D).

Question Difficulty: Easy

Reading: Question 23

Questions 19-28 are based on the following passage and supplementary material.

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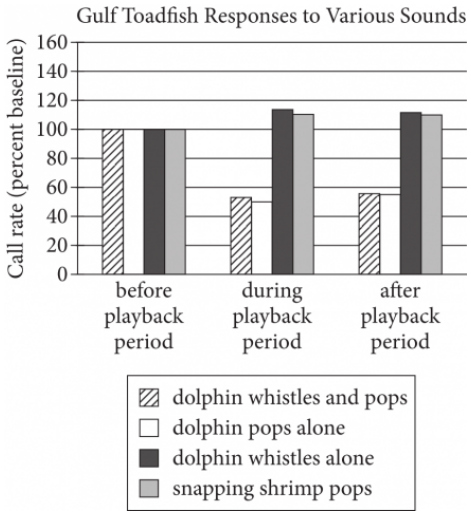

- [1] A hormone produced in response to stress
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The main purpose of the fifth paragraph (lines 38-48) is to

A. summarize findings.
B. evaluate a claim.
C. revise an initial hypothesis.
D. explain unanticipated consequences.

Choice A is the best answer. The first four paragraphs of the passage introduce a concept (that prey can escape predators by being quiet) and describe an experiment done to test that concept (by seeing how Gulf toadfish respond to the various sounds made by their predator, the bottlenose dolphin). The main purpose of the fifth paragraph, on the other hand, is to summarize the findings of that experiment. This can be seen from this paragraph's first sentence ("Remage-Healey found clear evidence of antipredator responses when the toadfish heard [dolphin] pop sounds") all the way to its last ("Males in the other treatments showed no changes in boatwhistle call rate when they heard the recorded sounds").

Choices B, C, and D are incorrect because the fifth paragraph clearly reveals what was discovered during Remage-Healey's experiment, meaning that the main purpose of the paragraph is to summarize findings, not to evaluate the validity of a claim (choice B), revise or reconsider an initial hypothesis (choice C), or explain any unanticipated consequences in the experiment (choice D).

Question Difficulty: Easy

Reading: Question 24

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Line

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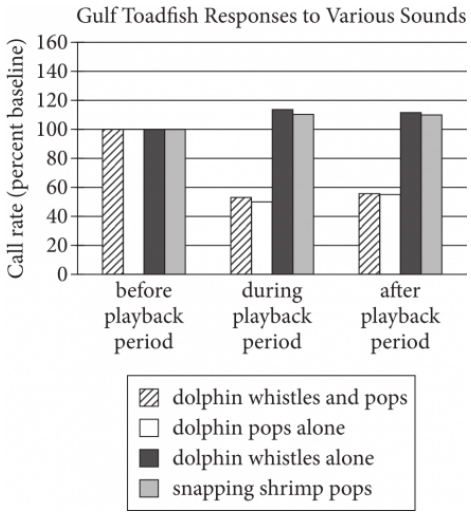

- [1] A hormone produced in response to stress
-

As used in line 51, “produce” most nearly means

A. spread.
B. compose.
C. cause.
D. offer.

Choice C is the best answer. The sixth paragraph of the passage explains that after the initial experiment, Remage-Healey and his team also checked “whether dolphin pops produce a stress response in the toadfish.” In this context, to “produce” a response most nearly means to cause one.

Choices A, B, and D are incorrect because in the context of a predator’s behavior leading to a physiological response in its prey, “produce” most nearly means to cause, not spread (choice A), compose (choice B), or offer (choice D).

Question Difficulty: Medium

Reading: Question 25

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Line

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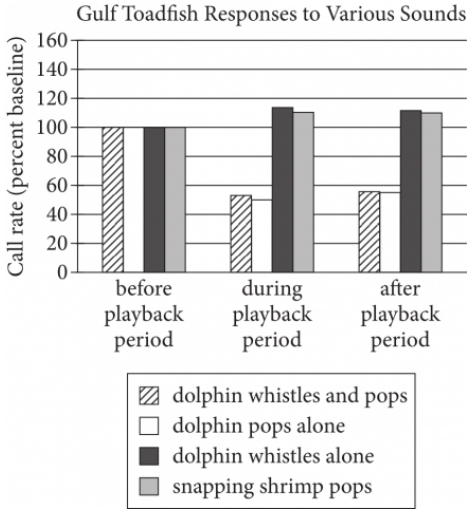

- [1] A hormone produced in response to stress
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The passage most strongly suggests that exposure to dolphin pops causes male toadfish to

A. reduce their foraging behavior.
B. emit only high-frequency sounds.
C. shift their direction away from the pop sounds.
D. undergo a hormonal stress response.

Choice D is the best answer. While the passage explains that Remage-Healey's experiments showed that dolphin pop sounds led to fewer Gulf toadfish boatwhistles, it also strongly suggests that those dolphin pops led to a hormonal stress response in those fish as well. This idea is most clearly supported in the last sentence of the sixth paragraph: "Males exposed to pops not only responded to the pops by reducing their own boatwhistle call, but they also showed higher levels of cortisol than males exposed to the sound of snapping shrimp."

Choices A, B, and C are incorrect because the passage examines the effect of dolphin pops on the behavior of toadfish in terms of the fish's hormonal stress response, rather than in terms of their foraging behavior (choice A), the pitch of the sounds they emit (choice B), or their efforts, if any, to move to a safer location (choice C).

Question Difficulty: Medium

Reading: Question 26

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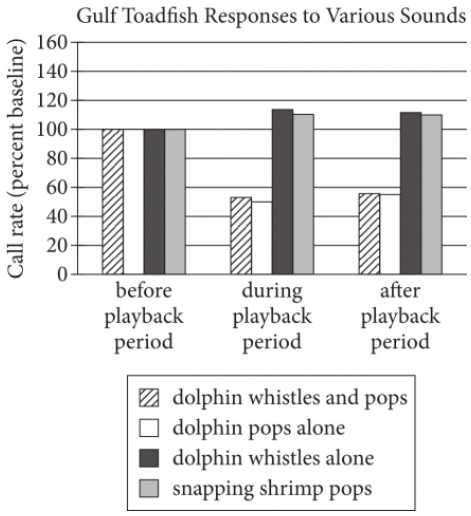


- [1] A hormone produced in response to stress
-

Which choice provides the best evidence for the answer to the previous question?

A. lines 38-39 (“Remage-Healey . . . sounds”)
B. lines 41-42 (“Males . . . percent”)
C. lines 49-52 (“Remage-Healey . . . toadfish”)
D. lines 55-58 (“Males exposed . . . shrimp”)

Choice D is the best answer. The previous question asks about what effect exposure to dolphin pops had on the behavior of toadfish, with the answer (that the experience resulted in elevated stress hormone levels) being supported in the last sentence of the sixth paragraph: “Males exposed to pops not only responded to the pops by reducing their own boatwhistle call, but they also showed higher levels of cortisol than males exposed to the sound of snapping shrimp.”

Choices A, B, and C are incorrect because the cited lines do not support the answer to the previous question about the toadfish’s stress response to dolphin pops. Instead, the lines discuss the toadfish’s antipredator responses generally rather than reference their specific stress response (choice A), highlight an antipredator response other than a stress response (choice B), and note that Remage-Healey did check stress hormone levels but stop short of providing the results (choice C).

Question Difficulty: Medium

Reading: Question 27

Questions 19-28 are based on the following passage and supplementary material.

This passage is adapted from Lee Alan Dugatkin, Principles of Animal Behavior. ©2009 by W. W. Norton & Company, Inc.

Line

In systems in which predators hone in on sounds made by their prey, one of the simplest things that an animal can do to avoid such predators is to be quiet. With this in mind, Luke Remage-Healey and his colleagues examined the role of sound suppression in the antipredator repertoire of the Gulf toadfish.

Gulf toadfish are a major food staple of adult bottlenose dolphins, making up 13 percent of the dolphin's diet. Prior work had shown that dolphins orient toward the "boatwhistle" sound produced by male toadfish during breeding season. That is, dolphins are eavesdropping on the sounds produced by toadfish to better orient toward their prey. Once a toadfish is located by eavesdropping, the dolphin locks onto this prey and tracks it. Given this, the question Remage-Healey and his colleagues addressed was whether the toadfish respond in kind, listening for sounds associated with bottlenose foraging behavior, and then reducing the boatwhistle sounds they produce.

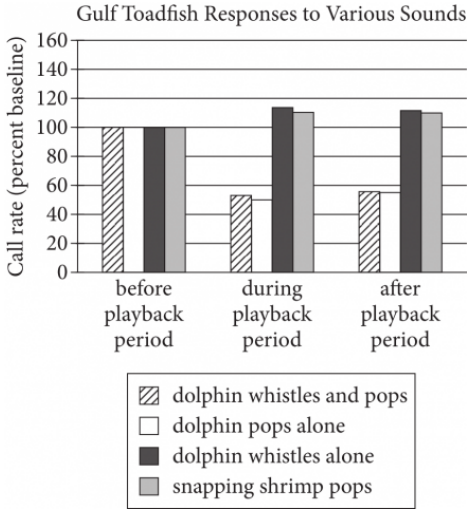
Bottlenose dolphins produce a variety of different sounds, ranging from high-frequency whistles used in dolphin-to-dolphin social communication (not foraging), as well as two sounds that are particularly associated with foraging—"clicks" and low-frequency "pops." The pops are easiest for toadfish to hear, since this species hears most accurately in the low-frequency range, and so Remage-Healey and his team focused on these dolphin sounds.

The researchers captured toadfish during the breeding season, and they kept individual males in tanks until the breeding season ended. The males soon began to emit boatwhistle

sounds, presumably to attract females. At that point, toadfish males were exposed to one of three sounds—the pops associated with dolphin foraging, the high-frequency whistles produced during dolphin social communication, and, as a control, the "snapping" sounds made by snapping shrimp. All sounds were broadcast using underwater speakers, and the activity of toadfish was recorded for the five minutes before sounds were emitted, the five minutes during which the experimental sounds were broadcast, and the five minutes after the sounds were played.

Remage-Healey found clear evidence of antipredator responses when the toadfish heard pop sounds. No differences were found in call rate between males before exposure to the experimental sounds. (See graph.) Males exposed to pop sounds, however, reduced their call rates by 50 percent. In addition, males exposed to the pop sounds maintained their reduced calling rate for the five minutes following exposure to pops—that is, they eavesdropped on their predators and reduced their activity in a way that made capture by a dolphin less likely. Males in the other treatments showed no changes in boatwhistle call rate when they heard the recorded sounds.

Remage-Healey and his team followed up their behavioral work on call rates and exposure to predators with a hormonal analysis that examined whether dolphin pops produce a stress response in the toadfish. After experimentally exposing the male toadfish to pops or snapping shrimp sounds, the researchers drew blood from the males, and they measured their cortisol[1] levels. Males exposed to pops not only responded to the pops by reducing their own boatwhistle call, but they also showed higher levels of cortisol than males exposed to the sound of snapping shrimp.



- [1] A hormone produced in response to stress
-

According to the graph, which of the following had the greatest effect on the call rates of Gulf toadfish?

A. The length of the playback period
B. Snapping shrimp pop sounds
C. Dolphin pop sounds alone
D. Dolphin whistle sounds alone

Choice C is the best answer. The graph shows that compared to a baseline of 100% Gulf toadfish response before the playback period, the fish responded at approximately 50% during the playback of dolphin pops alone and at approximately 55% after the playback of the pops. In terms of the percentage of call rate, other sounds produced a less dramatic effect on the toadfish responses, both during and after playback.

Choice A is incorrect because the length of the playback period is not addressed on the graph. Choices B and D are incorrect because the graph shows that during and after the playback of snapping shrimp pops (choice B) and dolphin whistle sounds alone (choice D), the toadfish call rate increased, while in response to dolphin pops alone, the rate decreased.

Question Difficulty: Medium

Reading: Question 28

Questions 19-28 are based on the following passage and supplementary material.

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Line

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sounds, presumably to attract females. At that point, toadfish males were exposed to one of three sounds—the pops associated with dolphin foraging, the high-frequency whistles produced during dolphin social communication, and, as a control, the "snapping" sounds made by snapping shrimp. All sounds were broadcast using underwater speakers, and the activity of toadfish was recorded for the five minutes before sounds were emitted, the five minutes during which the experimental sounds were broadcast, and the five minutes after the sounds were played.

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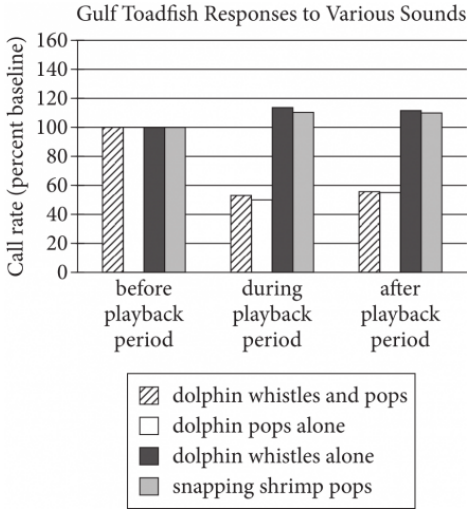

- [1] A hormone produced in response to stress
-

In the graph, the four bars showing the lowest call rates primarily support Remage-Healey's conclusion that

A. bottlenose dolphins mimic boatwhistle sounds to improve foraging.
B. male toadfish inhibit their boatwhistle sounds for self-protection.
C. dolphin foraging behavior has a direct effect on toadfish reproduction.
D. male toadfish vocalize less after playback than they do during playback.

Choice B is the best answer. The passage states that pops enable dolphins to locate their prey, and the graph shows that when toadfish hear dolphin pops, they reduce the amount of noises they make themselves by nearly 50%. That supports Remage-Healey's conclusion that when exposed to dolphin pops, toadfish reduce the number of boatwhistles they make so as to protect themselves from predatory dolphins.

Choice A is incorrect because the graph does not indicate that dolphins mimic toadfish sounds, and the passage never suggests that Remage-Healey concluded that dolphins engage in such mimicry. Choice C is incorrect because the graph addresses neither dolphin foraging nor toadfish reproduction, and the passage never suggests that Remage-Healey asserted a link between the two phenomena. Choice D is incorrect because the graph shows that rather than vocalizing less after playback, male toadfish vocalize either the same amount or slightly more, and the passage never suggests that Remage-Healey concluded that the toadfish vocalized less after playback than during.

Question Difficulty: Hard

Reading: Question 29

Questions 29-38 are based on the following passage.

This passage is adapted from Gifford Pinchot, The Fight for Conservation. Originally published in 1910. Pinchot was a US politician and forest conservationist.

Line

No man may rightly fail to take a great pride in what has been accomplished by means of the destruction of our natural resources so far as it has gone. It is a paradoxical statement, perhaps, but nevertheless true, because out of this attack on what nature has given we have won a kind of prosperity and a kind of civilization and a kind of man that are new in the world. For example, nothing like the rapidity of the destruction of American forests has ever been known in forest history, and nothing like the efficiency and vigor and inventiveness of the American lumberman has ever been developed by any attack on any forests elsewhere. Probably the most effective tool that the human mind and hand have ever made is the American axe. So the American business man has grasped his opportunities and used them and developed them and invented about them, thought them into lines of success, and thus has developed into a new business man, with a vigor and effectiveness and a cutting-edge that has never been equaled anywhere else. We have gained out of the vast destruction of our natural resources a degree of vigor and power and efficiency of which every man of us ought to be proud.

Now that is done. We have accomplished these big things. What is the next step? Shall we go on in the same lines to the certain destruction of the prosperity which we have created, or shall we take the obvious lesson of all human history, turn our backs on the uncivilized point of view, and adopt toward our natural resources the average prudence and average foresight and average care that we long ago adopted as a rule of our daily

life?

The conservation movement is calling the attention of the American people to the fact that they are trustees. The fact seems to me so plain as to require only a statement of it, to carry conviction. Can we reasonably fail to recognize the obligation which rests upon us in this matter? And, if we do fail to recognize it, can we reasonably expect even a fairly good reputation at the hands of our descendants?

Business prudence and business common-sense indicate as strongly as anything can the absolute necessity of a change in point of view on the part of the people of the United States regarding their natural resources. The way we have been handling them is not good business. Purely on the side of dollars and cents, it is not good business to kill the goose that lays the golden egg, to burn up half our forests, to waste our coal, and to remove from under the feet of those who are coming after us the opportunity for equal happiness with ourselves. The thing we ought to leave to them is not merely an opportunity for equal happiness and equal prosperity, but for a vastly increased fund of both.

Conservation is not merely a question of business, but a question of a vastly higher duty. In dealing with our natural resources we have come to a place at last where every consideration of patriotism, every consideration of love of country, of gratitude for things that the land and the institutions of this Nation have given us, call upon us for a return. If we owe anything to the United States, if this country has been good to us, if it has given us our prosperity, our education, and our chance of happiness, then there is a duty resting upon us. That duty is to see, so far as in us lies, that those who are coming after us shall have the same opportunity for happiness we have had ourselves. Apart from any business consideration, apart

60 from the question of the immediate dollar, this problem of the future wealth and happiness and prosperity of the people of the United States has a right to our attention.

The author's central claim in the passage is that

A. future generations' success matters more than the continued prosperity of today's generation.
B. businesses are learning to regulate their environmental impact.
C. conservation is necessary to ensure a prosperous future.
D. America had to use natural resources at an elevated rate to gain its current wealth.

Choice C is the best answer. Although the author begins by asserting that American prosperity has hinged on the destruction of nature through the use of natural resources, he goes on to conclude that conserving those resources is necessary to ensure continued prosperity. This is clear from the second paragraph, where the author suggests that failing to conserve resources will result in "the certain destruction of the prosperity which we have created," and from the fourth paragraph, where the author warns that "it is not good business to kill the goose that lays the golden egg" (meaning that if industry and commerce require resources to thrive, the United States should make an effort not to exhaust those resources).

Choice A is incorrect because even if the author implies that the prosperity of future generations matters as much or more than that of the present generation, this point is made to further a larger argument about the importance of conservation and is not the central claim. Choice B is incorrect because the author does not claim that businesses are learning to lessen their environmental impact and even implies the opposite. Choice D is incorrect because the author's central claim in the passage concerns how the United States should use its resources in the future, rather than how it has used them in the past.

Question Difficulty: Medium

Reading: Question 30

Questions 29-38 are based on the following passage.

This passage is adapted from Gifford Pinchot, The Fight for Conservation. Originally published in 1910. Pinchot was a US politician and forest conservationist.

Line

No man may rightly fail to take a great pride in what has been accomplished by means of the destruction of our natural resources so far as it has gone. It is a paradoxical statement, perhaps, but nevertheless true, because out of this attack on what nature has given we have won a kind of prosperity and a kind of civilization and a kind of man that are new in the world. For example, nothing like the rapidity of the destruction of American forests has ever been known in forest history, and nothing like the efficiency and vigor and inventiveness of the American lumberman has ever been developed by any attack on any forests elsewhere. Probably the most effective tool that the human mind and hand have ever made is the American axe. So the American business man has grasped his opportunities and used them and developed them and invented about them, thought them into lines of success, and thus has developed into a new business man, with a vigor and effectiveness and a cutting-edge that has never been equaled anywhere else. We have gained out of the vast destruction of our natural resources a degree of vigor and power and efficiency of which every man of us ought to be proud.

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life?

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Business prudence and business common-sense indicate as strongly as anything can the absolute necessity of a change in point of view on the part of the people of the United States regarding their natural resources. The way we have been handling them is not good business. Purely on the side of dollars and cents, it is not good business to kill the goose that lays the golden egg, to burn up half our forests, to waste our coal, and to remove from under the feet of those who are coming after us the opportunity for equal happiness with ourselves. The thing we ought to leave to them is not merely an opportunity for equal happiness and equal prosperity, but for a vastly increased fund of both.

Conservation is not merely a question of business, but a question of a vastly higher duty. In dealing with our natural resources we have come to a place at last where every consideration of patriotism, every consideration of love of country, of gratitude for things that the land and the institutions of this Nation have given us, call upon us for a return. If we owe anything to the United States, if this country has been good to us, if it has given us our prosperity, our education, and our chance of happiness, then there is a duty resting upon us. That duty is to see, so far as in us lies, that those who are coming after us shall have the same opportunity for happiness we have had ourselves. Apart from any business consideration, apart

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Over the course of the passage, the main focus shifts from

A. condemnation of the destruction that has taken place in the name of progress to discussion of the role of business in that destruction.

B. acknowledgment of the benefits America has enjoyed by depleting natural resources to a call to use those resources more wisely.

C. analysis of the damage done to America's forests to proposal of a practice to reverse that damage.

D. appealing to people's sense of duty to conserve resources to examining the dangers of failing to conserve.

Choice B is the best answer. The first paragraph considers how the United States has prospered from the "destruction of our natural resources." The remainder of the passage, however, develops the argument that going forward, the country should "adopt toward our natural resources the average prudence and average foresight and average care that we long ago adopted as a rule of our daily life." In sum, the passage can thus be seen as shifting from recognizing the economic benefits of environmental destruction in the past to advocating the conservation of those resources for the future.

Choice A is incorrect because the passage begins by praising, not condemning, the economic benefits resulting from the destruction of natural resources, and then it shifts to a discussion of the necessity of future conservation, rather than of business's role in past environmental destruction. Choice C is incorrect because at no point does the passage offer specific analysis of the damage done to America's forests or propose specific conservation practices. Choice D is incorrect because the passage does not examine the specific dangers of failing to conserve resources, and also because its appeal to people's sense of duty to conserve comes not in its opening paragraph but instead in its latter half.

Question Difficulty: Medium

Reading: Question 31

Questions 29-38 are based on the following passage.

This passage is adapted from Gifford Pinchot, The Fight for Conservation. Originally published in 1910. Pinchot was a US politician and forest conservationist.

Line

No man may rightly fail to take a great pride in what has been accomplished by means of the destruction of our natural resources so far as it has gone. It is a paradoxical statement, perhaps, but nevertheless true, because out of this attack on what nature has given we have won a kind of prosperity and a kind of civilization and a kind of man that are new in the world. For example, nothing like the rapidity of the destruction of American forests has ever been known in forest history, and nothing like the efficiency and vigor and inventiveness of the American lumberman has ever been developed by any attack on any forests elsewhere. Probably the most effective tool that the human mind and hand have ever made is the American axe. So the American business man has grasped his opportunities and used them and developed them and invented about them, thought them into lines of success, and thus has developed into a new business man, with a vigor and effectiveness and a cutting-edge that has never been equaled anywhere else. We have gained out of the vast destruction of our natural resources a degree of vigor and power and efficiency of which every man of us ought to be proud.

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The author characterizes environmental conservation primarily as a

A. responsible form of civic engagement.
B. practical means of increasing economic productivity.
C. belated attempt to address an ongoing crisis.
D. controversial approach to a sensitive issue.

Choice A is the best answer. The author's characterization of environmental conservation as a form of civic engagement is first evident in the opening sentence of the third paragraph: "The conservation movement is calling the attention of the American people to the fact that they are trustees." Labeling someone a "trustee" implies that they have been entrusted with a duty, and the remainder of the third paragraph develops the implicit theme that people have an obligation as citizens or members of society to conserve the nation's resources.

Choice B is incorrect because the passage is concerned with how to extend current economic prosperity into the future, rather than with how to increase economic productivity beyond current levels. Choice C is incorrect because even if the passage implies that conservation is an urgent issue, it does not suggest that environmental circumstances have reached a crisis or that the public's response is belated. Choice D is incorrect because the passage implies that conservation is a matter of common sense, rather than a controversial subject that must be handled carefully.

Question Difficulty: Hard

Reading: Question 32

Questions 29-38 are based on the following passage.

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The questions in lines 22-35 (“What . . . descendants”) mainly serve to

A. illustrate the author’s feelings of uncertainty.
B. suggest the complexity of the choices to be made.
C. underscore the necessity of the approach the author advocates.
D. encourage the reader to weigh different options.

Choice C is the best answer. The second paragraph lays out alternate approaches in the form of rhetorical questions: shall Americans continue to exhaust natural resources regardless of the consequences, or shall we “turn our backs on the uncivilized point of view” and instead conserve resources? The clear implication is that the author recommends the second approach, since this is the one the passage goes on to advocate. Similarly, the third paragraph asks rhetorical questions about the consequences of failing to “recognize the obligation which rests upon us” to conserve resources, with the clear implication that the author urges Americans to honor this obligation. Thus, in both paragraphs, the questions serve to emphasize an approach advocated by the author.

Choices A and B are incorrect because the questions in the second and third paragraphs do not emphasize the author’s uncertainty or suggest the complexity of the issue so much as they emphasize the fact that he is convinced of a clear answer (namely, that Americans should conserve the country’s natural resources). Choice D is incorrect because the questions in these paragraphs identify different approaches to using natural resources, not so that each approach may be weighed as potentially valid, but instead so that one approach may be recognized as infinitely preferable.

Question Difficulty: Hard

Reading: Question 33

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Repetition of the word “average” in line 26 emphasizes the author’s point by suggesting that

A. the efforts needed to bring about desired changes would not be extraordinary.
B. all eras have similar experiences of initially controversial reforms.
C. new strategies would rapidly become standard practice.
D. unpopular policies should be clarified for the general public.

Choice A is the best answer. In the second paragraph, the author draws a parallel between conserving natural resources and conserving personal resources in daily life: “Shall we go on in the same lines to the certain destruction of the prosperity which we have created, or shall we take the obvious lesson of all human history, turn our backs on the uncivilized point of view, and adopt toward our natural resources the average prudence and average foresight and average care that we long ago adopted as a rule of our daily life?” In these lines, the repetition of “average” underscores conservation in daily life as the norm, with the suggestion that an equivalent effort in the use of natural resources would be far from extraordinary.

Choices B, C, and D are incorrect because the repetition of the word “average” serves to suggest that the methods the author believes are necessary to conserve resources are far from extraordinary, rather than to suggest that all eras are equivalent (choice B), that new strategies would quickly become the norm (choice C), or that unpopular policies need to be better explained (choice D).

Question Difficulty: Medium

Reading: Question 34

Questions 29-38 are based on the following passage.

This passage is adapted from Gifford Pinchot, The Fight for Conservation. Originally published in 1910. Pinchot was a US politician and forest conservationist.

Line

No man may rightly fail to take a great pride in what has been accomplished by means of the destruction of our natural resources so far as it has gone. It is a paradoxical statement, perhaps, but nevertheless true, because out of this attack on what nature has given we have won a kind of prosperity and a kind of civilization and a kind of man that are new in the world. For example, nothing like the rapidity of the destruction of American forests has ever been known in forest history, and nothing like the efficiency and vigor and inventiveness of the American lumberman has ever been developed by any attack on any forests elsewhere. Probably the most effective tool that the human mind and hand have ever made is the American axe. So the American business man has grasped his opportunities and used them and developed them and invented about them, thought them into lines of success, and thus has developed into a new business man, with a vigor and effectiveness and a cutting-edge that has never been equaled anywhere else. We have gained out of the vast destruction of our natural resources a degree of vigor and power and efficiency of which every man of us ought to be proud.

Now that is done. We have accomplished these big things. What is the next step? Shall we go on in the same lines to the certain destruction of the prosperity which we have created, or shall we take the obvious lesson of all human history, turn our backs on the uncivilized point of view, and adopt toward our natural resources the average prudence and average foresight and average care that we long ago adopted as a rule of our daily

life?

The conservation movement is calling the attention of the American people to the fact that they are trustees. The fact seems to me so plain as to require only a statement of it, to carry conviction. Can we reasonably fail to recognize the obligation which rests upon us in this matter? And, if we do fail to recognize it, can we reasonably expect even a fairly good reputation at the hands of our descendants?

Business prudence and business common-sense indicate as strongly as anything can the absolute necessity of a change in point of view on the part of the people of the United States regarding their natural resources. The way we have been handling them is not good business. Purely on the side of dollars and cents, it is not good business to kill the goose that lays the golden egg, to burn up half our forests, to waste our coal, and to remove from under the feet of those who are coming after us the opportunity for equal happiness with ourselves. The thing we ought to leave to them is not merely an opportunity for equal happiness and equal prosperity, but for a vastly increased fund of both.

Conservation is not merely a question of business, but a question of a vastly higher duty. In dealing with our natural resources we have come to a place at last where every consideration of patriotism, every consideration of love of country, of gratitude for things that the land and the institutions of this Nation have given us, call upon us for a return. If we owe anything to the United States, if this country has been good to us, if it has given us our prosperity, our education, and our chance of happiness, then there is a duty resting upon us. That duty is to see, so far as in us lies, that those who are coming after us shall have the same opportunity for happiness we have had ourselves. Apart from any business consideration, apart

60 from the question of the immediate dollar, this problem of the future wealth and happiness and prosperity of the people of the United States has a right to our attention.

One financial justification that the author offers for greater conservation is that businesses will

A. be able to operate more cost-effectively.
B. become more adept at problem solving.
C. avoid costly environmental regulations.
D. have continued availability of natural resources.

Choice D is the best answer. While the author of the passage clearly believes in the importance of conserving the country's natural resources, his belief is grounded as much in economics as in ecology. This economic concern is most clearly articulated in the middle of the fourth paragraph, which argues that if the United States exhausts its natural resources, its economic prosperity will come to an end: "Purely on the side of dollars and cents, it is not good business to kill the goose that lays the golden egg, to burn up half our forests, to waste our coal, and to remove from under the feet of those who are coming after us the opportunity for equal happiness with ourselves."

Choices A, B, and C are incorrect because the passage does not focus on conservation in terms of either increasing the current cost-effectiveness of businesses (choice A), improving businesses' general ability to solve problems (choice B), or enabling businesses to avoid expenses related to environmental regulations (choice C).

Question Difficulty: Hard

Reading: Question 35

Questions 29-38 are based on the following passage.

This passage is adapted from Gifford Pinchot, The Fight for Conservation. Originally published in 1910. Pinchot was a US politician and forest conservationist.

Line

No man may rightly fail to take a great pride in what has been accomplished by means of the destruction of our natural resources so far as it has gone. It is a paradoxical statement, perhaps, but nevertheless true, because out of this attack on what nature has given we have won a kind of prosperity and a kind of civilization and a kind of man that are new in the world. For example, nothing like the rapidity of the destruction of American forests has ever been known in forest history, and nothing like the efficiency and vigor and inventiveness of the American lumberman has ever been developed by any attack on any forests elsewhere. Probably the most effective tool that the human mind and hand have ever made is the American axe. So the American business man has grasped his opportunities and used them and developed them and invented about them, thought them into lines of success, and thus has developed into a new business man, with a vigor and effectiveness and a cutting-edge that has never been equaled anywhere else. We have gained out of the vast destruction of our natural resources a degree of vigor and power and efficiency of which every man of us ought to be proud.

Now that is done. We have accomplished these big things. What is the next step? Shall we go on in the same lines to the certain destruction of the prosperity which we have created, or shall we take the obvious lesson of all human history, turn our backs on the uncivilized point of view, and adopt toward our natural resources the average prudence and average foresight and average care that we long ago adopted as a rule of our daily

life?

The conservation movement is calling the attention of the American people to the fact that they are trustees. The fact seems to me so plain as to require only a statement of it, to carry conviction. Can we reasonably fail to recognize the obligation which rests upon us in this matter? And, if we do fail to recognize it, can we reasonably expect even a fairly good reputation at the hands of our descendants?

Business prudence and business common-sense indicate as strongly as anything can the absolute necessity of a change in point of view on the part of the people of the United States regarding their natural resources. The way we have been handling them is not good business. Purely on the side of dollars and cents, it is not good business to kill the goose that lays the golden egg, to burn up half our forests, to waste our coal, and to remove from under the feet of those who are coming after us the opportunity for equal happiness with ourselves. The thing we ought to leave to them is not merely an opportunity for equal happiness and equal prosperity, but for a vastly increased fund of both.

Conservation is not merely a question of business, but a question of a vastly higher duty. In dealing with our natural resources we have come to a place at last where every consideration of patriotism, every consideration of love of country, of gratitude for things that the land and the institutions of this Nation have given us, call upon us for a return. If we owe anything to the United States, if this country has been good to us, if it has given us our prosperity, our education, and our chance of happiness, then there is a duty resting upon us. That duty is to see, so far as in us lies, that those who are coming after us shall have the same opportunity for happiness we have had ourselves. Apart from any business consideration, apart

60 from the question of the immediate dollar, this problem of the future wealth and happiness and prosperity of the people of the United States has a right to our attention.

Which choice provides the best evidence for the answer to the previous question?

A. lines 12-17 (“So the . . . else”)
B. lines 39-40 (“The way . . . business”)
C. lines 40-44 (“Purely . . . ourselves”)
D. lines 44-47 (“The thing . . . both”)

Choice C is the best answer. The previous question asks for a financial justification that the author offers for conserving the country’s natural resources, with the answer (that it will lead to continued availability of those resources) being supported in the middle of the fourth paragraph: “Purely on the side of dollars and cents, it is not good business to kill the goose that lays the golden egg, to burn up half our forests, to waste our coal, and to remove from under the feet of those who are coming after us the opportunity for equal happiness with ourselves.”

Choices A, B, and D are incorrect because the cited lines do not support the answer to the previous question about a financial justification offered by the author for the conservation of natural resources. Instead, the lines highlight the financial benefits of consuming resources (choice A), criticize the current use of resources but without specific reference to how such use affects their continued availability for business interests (choice B), and emphasize the current generation’s obligation to future generations (choice D).

Question Difficulty: Medium

Reading: Question 36

Questions 29-38 are based on the following passage.

This passage is adapted from Gifford Pinchot, The Fight for Conservation. Originally published in 1910. Pinchot was a US politician and forest conservationist.

Line

No man may rightly fail to take a great pride in what has been accomplished by means of the destruction of our natural resources so far as it has gone. It is a paradoxical statement, perhaps, but nevertheless true, because out of this attack on what nature has given we have won a kind of prosperity and a kind of civilization and a kind of man that are new in the world. For example, nothing like the rapidity of the destruction of American forests has ever been known in forest history, and nothing like the efficiency and vigor and inventiveness of the American lumberman has ever been developed by any attack on any forests elsewhere. Probably the most effective tool that the human mind and hand have ever made is the American axe. So the American business man has grasped his opportunities and used them and developed them and invented about them, thought them into lines of success, and thus has developed into a new business man, with a vigor and effectiveness and a cutting-edge that has never been equaled anywhere else. We have gained out of the vast destruction of our natural resources a degree of vigor and power and efficiency of which every man of us ought to be proud.

Now that is done. We have accomplished these big things. What is the next step? Shall we go on in the same lines to the certain destruction of the prosperity which we have created, or shall we take the obvious lesson of all human history, turn our backs on the uncivilized point of view, and adopt toward our natural resources the average prudence and average foresight and average care that we long ago adopted as a rule of our daily

life?

The conservation movement is calling the attention of the American people to the fact that they are trustees. The fact seems to me so plain as to require only a statement of it, to carry conviction. Can we reasonably fail to recognize the obligation which rests upon us in this matter? And, if we do fail to recognize it, can we reasonably expect even a fairly good reputation at the hands of our descendants?

Business prudence and business common-sense indicate as strongly as anything can the absolute necessity of a change in point of view on the part of the people of the United States regarding their natural resources. The way we have been handling them is not good business. Purely on the side of dollars and cents, it is not good business to kill the goose that lays the golden egg, to burn up half our forests, to waste our coal, and to remove from under the feet of those who are coming after us the opportunity for equal happiness with ourselves. The thing we ought to leave to them is not merely an opportunity for equal happiness and equal prosperity, but for a vastly increased fund of both.

Conservation is not merely a question of business, but a question of a vastly higher duty. In dealing with our natural resources we have come to a place at last where every consideration of patriotism, every consideration of love of country, of gratitude for things that the land and the institutions of this Nation have given us, call upon us for a return. If we owe anything to the United States, if this country has been good to us, if it has given us our prosperity, our education, and our chance of happiness, then there is a duty resting upon us. That duty is to see, so far as in us lies, that those who are coming after us shall have the same opportunity for happiness we have had ourselves. Apart from any business consideration, apart

60 from the question of the immediate dollar, this problem of the future wealth and happiness and prosperity of the people of the United States has a right to our attention.

As used in line 49, “duty” most nearly means

A. responsibility.
B. assignment.
C. tax.
D. promise.

Choice A is the best answer. The first sentence of the fifth paragraph states, “Conservation is not merely a question of business, but a question of a vastly higher duty.” In this context, “duty” means a responsibility or obligation.

Choices B, C, and D are incorrect because in the context of discussion of conservation as an obligation of the American public, “duty” means a responsibility, not an assignment (choice B), a tax (choice C), or a promise (choice D).

Question Difficulty: Easy

Reading: Question 37

Questions 29-38 are based on the following passage.

This passage is adapted from Gifford Pinchot, The Fight for Conservation. Originally published in 1910. Pinchot was a US politician and forest conservationist.

Line

No man may rightly fail to take a great pride in what has been accomplished by means of the destruction of our natural resources so far as it has gone. It is a paradoxical statement, perhaps, but nevertheless true, because out of this attack on what nature has given we have won a kind of prosperity and a kind of civilization and a kind of man that are new in the world. For example, nothing like the rapidity of the destruction of American forests has ever been known in forest history, and nothing like the efficiency and vigor and inventiveness of the American lumberman has ever been developed by any attack on any forests elsewhere. Probably the most effective tool that the human mind and hand have ever made is the American axe. So the American business man has grasped his opportunities and used them and developed them and invented about them, thought them into lines of success, and thus has developed into a new business man, with a vigor and effectiveness and a cutting-edge that has never been equaled anywhere else. We have gained out of the vast destruction of our natural resources a degree of vigor and power and efficiency of which every man of us ought to be proud.

Now that is done. We have accomplished these big things. What is the next step? Shall we go on in the same lines to the certain destruction of the prosperity which we have created, or shall we take the obvious lesson of all human history, turn our backs on the uncivilized point of view, and adopt toward our natural resources the average prudence and average foresight and average care that we long ago adopted as a rule of our daily

life?

The conservation movement is calling the attention of the American people to the fact that they are trustees. The fact seems to me so plain as to require only a statement of it, to carry conviction. Can we reasonably fail to recognize the obligation which rests upon us in this matter? And, if we do fail to recognize it, can we reasonably expect even a fairly good reputation at the hands of our descendants?

Business prudence and business common-sense indicate as strongly as anything can the absolute necessity of a change in point of view on the part of the people of the United States regarding their natural resources. The way we have been handling them is not good business. Purely on the side of dollars and cents, it is not good business to kill the goose that lays the golden egg, to burn up half our forests, to waste our coal, and to remove from under the feet of those who are coming after us the opportunity for equal happiness with ourselves. The thing we ought to leave to them is not merely an opportunity for equal happiness and equal prosperity, but for a vastly increased fund of both.

Conservation is not merely a question of business, but a question of a vastly higher duty. In dealing with our natural resources we have come to a place at last where every consideration of patriotism, every consideration of love of country, of gratitude for things that the land and the institutions of this Nation have given us, call upon us for a return. If we owe anything to the United States, if this country has been good to us, if it has given us our prosperity, our education, and our chance of happiness, then there is a duty resting upon us. That duty is to see, so far as in us lies, that those who are coming after us shall have the same opportunity for happiness we have had ourselves. Apart from any business consideration, apart

60 from the question of the immediate dollar, this problem of the future wealth and happiness and prosperity of the people of the United States has a right to our attention.

Based on the passage, the author would most likely agree with which of the following statements?

A. Government policies can be more effectively framed and implemented if public opinion is consulted only sparingly.

B. Future generations have a right to enjoy the same advantages that previous generations have enjoyed.

C. Political leaders should prioritize citizens' happiness over the enduring health of the economy.

D. Voluntary actions on the part of businesses achieve conservation more effectively than government regulation does.

Choice B is the best answer. In the last paragraph of the passage, the author shifts from advocating conservation as an economic necessity to arguing for it as a moral responsibility. This emphasis is especially clear in the last two sentences, where the author argues that such a responsibility arises from future generations' right to enjoy the same opportunities for prosperity as the present generation has enjoyed: "That duty is to see, so far as in us lies, that those who are coming after us shall have the same opportunity for happiness we have had ourselves. Apart from any business consideration, apart from the question of the immediate dollar, this problem of the future wealth and happiness and prosperity of the people of the United States has a right to our attention."

Choice A is incorrect because the passage does not concern itself with whether public opinion should be consulted when setting government policies. Choice C is incorrect because rather than prioritizing happiness over economic health, the passage argues that economic health is vital to continued happiness. Choice D is incorrect because the passage does not consider the question of whether government regulation or business self-regulation would conserve resources more effectively.

Question Difficulty: Medium

Reading: Question 38

Questions 29-38 are based on the following passage.

This passage is adapted from Gifford Pinchot, The Fight for Conservation. Originally published in 1910. Pinchot was a US politician and forest conservationist.

Line

No man may rightly fail to take a great pride in what has been accomplished by means of the destruction of our natural resources so far as it has gone. It is a paradoxical statement, perhaps, but nevertheless true, because out of this attack on what nature has given we have won a kind of prosperity and a kind of civilization and a kind of man that are new in the world. For example, nothing like the rapidity of the destruction of American forests has ever been known in forest history, and nothing like the efficiency and vigor and inventiveness of the American lumberman has ever been developed by any attack on any forests elsewhere. Probably the most effective tool that the human mind and hand have ever made is the American axe. So the American business man has grasped his opportunities and used them and developed them and invented about them, thought them into lines of success, and thus has developed into a new business man, with a vigor and effectiveness and a cutting-edge that has never been equaled anywhere else. We have gained out of the vast destruction of our natural resources a degree of vigor and power and efficiency of which every man of us ought to be proud.

Now that is done. We have accomplished these big things. What is the next step? Shall we go on in the same lines to the certain destruction of the prosperity which we have created, or shall we take the obvious lesson of all human history, turn our backs on the uncivilized point of view, and adopt toward our natural resources the average prudence and average foresight and average care that we long ago adopted as a rule of our daily

life?

The conservation movement is calling the attention of the American people to the fact that they are trustees. The fact seems to me so plain as to require only a statement of it, to carry conviction. Can we reasonably fail to recognize the obligation which rests upon us in this matter? And, if we do fail to recognize it, can we reasonably expect even a fairly good reputation at the hands of our descendants?

Business prudence and business common-sense indicate as strongly as anything can the absolute necessity of a change in point of view on the part of the people of the United States regarding their natural resources. The way we have been handling them is not good business. Purely on the side of dollars and cents, it is not good business to kill the goose that lays the golden egg, to burn up half our forests, to waste our coal, and to remove from under the feet of those who are coming after us the opportunity for equal happiness with ourselves. The thing we ought to leave to them is not merely an opportunity for equal happiness and equal prosperity, but for a vastly increased fund of both.

Conservation is not merely a question of business, but a question of a vastly higher duty. In dealing with our natural resources we have come to a place at last where every consideration of patriotism, every consideration of love of country, of gratitude for things that the land and the institutions of this Nation have given us, call upon us for a return. If we owe anything to the United States, if this country has been good to us, if it has given us our prosperity, our education, and our chance of happiness, then there is a duty resting upon us. That duty is to see, so far as in us lies, that those who are coming after us shall have the same opportunity for happiness we have had ourselves. Apart from any business consideration, apart

60 from the question of the immediate dollar, this problem of the future wealth and happiness and prosperity of the people of the United States has a right to our attention.

Which choice provides the best evidence for the answer to the previous question?

A. lines 22-28 (“Shall . . . life”)
B. lines 48-49 (“Conservation . . . duty”)
C. lines 49-53 (“In dealing . . . return”)
D. lines 56-62 (“That . . . attention”)

Choice D is the best answer. The previous question asks what statement the author of the passage would agree to, with the answer (that future Americans deserve the same chance for happiness and prosperity as did present and past generations) being supported in the last two sentences of the fifth paragraph: “That duty is to see, so far as in us lies, that those who are coming after us shall have the same opportunity for happiness we have had ourselves. Apart from any business consideration, apart from the question of the immediate dollar, this problem of the future wealth and happiness and prosperity of the people of the United States has a right to our attention.”

Choices A, B, and C are incorrect because the cited lines do not support the answer to the previous question about the author’s insistence on future generations’ right to the advantages enjoyed by the present generation. Instead, the lines highlight the starkness of the choice between conserving or exhausting resources (choice A), assert an unspecified moral aspect to conservation (choice B), and assert a similarly unspecified patriotic aspect to conservation (choice C).

Question Difficulty: Medium

Reading: Question 39

Questions 39-47 are based on the following passages.

Passage 1 is adapted from Edwin Hubble, The Realm of the Nebulae. ©1982 by Yale University Press. Originally published in 1936. Passage 2 is adapted from Gary Taubes, "Beyond the Soapsuds Universe." ©1997 by Kalmbach Publishing Co. Throughout Passage 1, Hubble refers to galaxies as "stellar systems" and our galaxy, the Milky Way, as "the stellar system."

Line

Passage 1

The sun is a star among the many millions which form the stellar system. The stellar system is a swarm of stars isolated in space. It drifts through the universe as a swarm of bees drifts through the summer air. From our position somewhere within the system, we look out through the swarm of stars, past the borders, into the universe beyond.

The universe is empty, for the most part, but here and there, separated by immense intervals, we find other stellar systems, comparable with our own. They are so remote that, except in the nearest systems, we do not see the individual stars of which they are composed. These huge stellar systems appear as dim patches of light. Long ago they were named "nebulae" or "clouds"—mysterious bodies whose nature was a favorite subject for speculation.

But now, thanks to great telescopes, we know something of their nature, something of their real size and brightness, and their mere appearance indicates the general order of their distances. They are scattered through space as far as telescopes can penetrate. We see a few that appear large and bright. These are the nearer nebulae. Then we find them smaller and fainter, in constantly increasing numbers, and we know that we are reaching out into space, farther and ever farther, until, with the faintest nebulae that can be detected with the greatest telescope, we arrive at the frontiers of the known universe.

This last horizon defines the observable region of space. It is

a vast sphere, perhaps a thousand million light-years in diameter. Throughout the sphere are scattered a hundred million nebulae—stellar systems—in various stages of their evolutionary history. The nebulae are distributed singly, in groups, and occasionally in great clusters, but when large volumes of space are compared, the tendency to cluster averages out. To the very limits of the telescope, the large-scale distribution of nebulae is approximately uniform.

Passage 2

Margaret Geller first met the stickman in the fall of 1986. While the exact date has faded from her recollection, she remembers the time as midafternoon and her reaction as a kind of euphoria. No one had ever seen the stickman before—at least, not really. Valérie de Lapparent noticed it but says she was too inexperienced to understand its implication. John Huchra says he took one look at the stickman and assumed he had botched his observations. It took Geller's eye to recognize the stickman as something real and important.

Geller, Huchra, and de Lapparent had mapped the nearby universe, taking several months to carefully measure the distance to 1,000 galaxies, some as near as 30 million light-years away, others as far as 650 million. De Lapparent had fed the distance and positions of those galaxies into a computer program that printed out a two-dimensional representation of their three-dimensional distribution in the universe. On the printout was this slice of the northern sky, sprinkled with 1,000 distant galaxies, and smack in the middle, says Geller, was this remarkable stickman figure. The distribution of galaxies looked like a child's drawing of a somewhat bowlegged person. It's a whimsical name for a grand figure: the stickman extended 500 million light-years across the universe. Its torso was composed of hundreds of galaxies, a massive congregation known to

astronomers as the Coma cluster. Its arms were two more sheets of galaxies streaming across the night sky.

The stickman was grand not just in dimension but in destiny. You might even say it changed our understanding of the universe. Until the stickman, the universe appeared to be a smooth and homogeneous place. Astronomers believed that galaxies were distributed at random, although they might occasionally form clusters like Coma containing as many as a thousand or so galaxies like the Milky Way. There was even some evidence that the universe contained at least one enormous void, in the constellation Boötes, which seemed to extend for some 200 million light-years—and other suggestions that galaxies could be found strung out on long filaments. But in 1985 most astronomers assumed these structures were products not of the universe itself but of the methods used to survey it.

Then Geller saw the stickman, which constituted compelling evidence that galaxies were congregating on two-dimensional structures, as though they had condensed out of the cosmic nothingness on the surfaces of invisible bubbles.

Passage 1 indicates that Earth's sky is filled with stars because the Sun is located

A. within a system containing millions of stars.
B. in the space between stellar systems.
C. on the edge of a vast system of nebulae.
D. at the frontiers of the observable universe.

Choice A is the best answer. Passage 1 clearly indicates that Earth's sky is full of stars because our Sun exists within a system containing millions of stars, as is stated in the first sentence of the first paragraph: "The sun is a star among the many millions which form the stellar system."

Choice B is incorrect because when the second paragraph of Passage 1 discusses the "immense intervals" between stellar systems, it is doing so to describe the emptiness and immensity of space, not as an explanation for why Earth's sky is filled with stars. Choices C and D are incorrect because Passage 1 discusses the Sun only in the first sentence of the first paragraph, in the context of it being part of a stellar system filled with stars, but it never

discusses the Sun as itself being on the edge of a vast system of nebulae or at the far frontier of the universe that can be seen.

Question Difficulty: Medium

Reading: Question 40

Questions 39-47 are based on the following passages.

Passage 1 is adapted from Edwin Hubble, The Realm of the Nebulae. ©1982 by Yale University Press. Originally published in 1936. Passage 2 is adapted from Gary Taubes, "Beyond the Soapsuds Universe." ©1997 by Kalmbach Publishing Co. Throughout Passage 1, Hubble refers to galaxies as "stellar systems" and our galaxy, the Milky Way, as "the stellar system."

Line

Passage 1

The sun is a star among the many millions which form the stellar system. The stellar system is a swarm of stars isolated in space. It drifts through the universe as a swarm of bees drifts through the summer air. From our position somewhere within the system, we look out through the swarm of stars, past the borders, into the universe beyond.

The universe is empty, for the most part, but here and there, separated by immense intervals, we find other stellar systems, comparable with our own. They are so remote that, except in the nearest systems, we do not see the individual stars of which they are composed. These huge stellar systems appear as dim patches of light. Long ago they were named "nebulae" or "clouds"—mysterious bodies whose nature was a favorite subject for speculation.

But now, thanks to great telescopes, we know something of their nature, something of their real size and brightness, and their mere appearance indicates the general order of their distances. They are scattered through space as far as telescopes can penetrate. We see a few that appear large and bright. These are the nearer nebulae. Then we find them smaller and fainter, in constantly increasing numbers, and we know that we are reaching out into space, farther and ever farther, until, with the faintest nebulae that can be detected with the greatest telescope, we arrive at the frontiers of the known universe.

This last horizon defines the observable region of space. It is

a vast sphere, perhaps a thousand million light-years in diameter. Throughout the sphere are scattered a hundred million nebulae—stellar systems—in various stages of their evolutionary history. The nebulae are distributed singly, in groups, and occasionally in great clusters, but when large volumes of space are compared, the tendency to cluster averages out. To the very limits of the telescope, the large-scale distribution of nebulae is approximately uniform.

Passage 2

Margaret Geller first met the stickman in the fall of 1986. While the exact date has faded from her recollection, she remembers the time as midafternoon and her reaction as a kind of euphoria. No one had ever seen the stickman before—at least, not really. Valérie de Lapparent noticed it but says she was too inexperienced to understand its implication. John Huchra says he took one look at the stickman and assumed he had botched his observations. It took Geller's eye to recognize the stickman as something real and important.

Geller, Huchra, and de Lapparent had mapped the nearby universe, taking several months to carefully measure the distance to 1,000 galaxies, some as near as 30 million light-years away, others as far as 650 million. De Lapparent had fed the distance and positions of those galaxies into a computer program that printed out a two-dimensional representation of their three-dimensional distribution in the universe. On the printout was this slice of the northern sky, sprinkled with 1,000 distant galaxies, and smack in the middle, says Geller, was this remarkable stickman figure. The distribution of galaxies looked like a child's drawing of a somewhat bowlegged person. It's a whimsical name for a grand figure: the stickman extended 500 million light-years across the universe. Its torso was composed of hundreds of galaxies, a massive congregation known to

astronomers as the Coma cluster. Its arms were two more sheets of galaxies streaming across the night sky.

The stickman was grand not just in dimension but in destiny. You might even say it changed our understanding of the universe. Until the stickman, the universe appeared to be a smooth and homogeneous place. Astronomers believed that galaxies were distributed at random, although they might occasionally form clusters like Coma containing as many as a thousand or so galaxies like the Milky Way. There was even some evidence that the universe contained at least one enormous void, in the constellation Boötes, which seemed to extend for some 200 million light-years—and other suggestions that galaxies could be found strung out on long filaments. But in 1985 most astronomers assumed these structures were products not of the universe itself but of the methods used to survey it.

Then Geller saw the stickman, which constituted compelling evidence that galaxies were congregating on two-dimensional structures, as though they had condensed out of the cosmic nothingness on the surfaces of invisible bubbles.

As used in line 33, “distribution” most nearly means

A. movement.
B. probability.
C. spread.
D. extension.

Choice C is the best answer. The last sentence of the fourth paragraph of Passage 1 states, “To the very limits of the telescope, the large-scale distribution of nebulae is approximately uniform.” In this context, the word “distribution” most nearly means the spread across a given space.

Choices A, B, and D are incorrect because in the context of the nebulae being scattered across the universe, the word “distribution” means spread, not movement (choice A), probability (choice B), or extension (choice D).

Question Difficulty: Easy

Reading: Question 41

Questions 39-47 are based on the following passages.

Passage 1 is adapted from Edwin Hubble, The Realm of the Nebulae. ©1982 by Yale University Press. Originally published in 1936. Passage 2 is adapted from Gary Taubes, "Beyond the Soapsuds Universe." ©1997 by Kalmbach Publishing Co. Throughout Passage 1, Hubble refers to galaxies as "stellar systems" and our galaxy, the Milky Way, as "the stellar system."

Line

Passage 1

The sun is a star among the many millions which form the stellar system. The stellar system is a swarm of stars isolated in space. It drifts through the universe as a swarm of bees drifts through the summer air. From our position somewhere within the system, we look out through the swarm of stars, past the borders, into the universe beyond.

The universe is empty, for the most part, but here and there, separated by immense intervals, we find other stellar systems, comparable with our own. They are so remote that, except in the nearest systems, we do not see the individual stars of which they are composed. These huge stellar systems appear as dim patches of light. Long ago they were named "nebulae" or "clouds"—mysterious bodies whose nature was a favorite subject for speculation.

But now, thanks to great telescopes, we know something of their nature, something of their real size and brightness, and their mere appearance indicates the general order of their distances. They are scattered through space as far as telescopes can penetrate. We see a few that appear large and bright. These are the nearer nebulae. Then we find them smaller and fainter, in constantly increasing numbers, and we know that we are reaching out into space, farther and ever farther, until, with the faintest nebulae that can be detected with the greatest telescope, we arrive at the frontiers of the known universe.

This last horizon defines the observable region of space. It is

a vast sphere, perhaps a thousand million light-years in diameter. Throughout the sphere are scattered a hundred million nebulae—stellar systems—in various stages of their evolutionary history. The nebulae are distributed singly, in groups, and occasionally in great clusters, but when large volumes of space are compared, the tendency to cluster averages out. To the very limits of the telescope, the large-scale distribution of nebulae is approximately uniform.

Passage 2

Margaret Geller first met the stickman in the fall of 1986. While the exact date has faded from her recollection, she remembers the time as midafternoon and her reaction as a kind of euphoria. No one had ever seen the stickman before—at least, not really. Valérie de Lapparent noticed it but says she was too inexperienced to understand its implication. John Huchra says he took one look at the stickman and assumed he had botched his observations. It took Geller's eye to recognize the stickman as something real and important.

Geller, Huchra, and de Lapparent had mapped the nearby universe, taking several months to carefully measure the distance to 1,000 galaxies, some as near as 30 million light-years away, others as far as 650 million. De Lapparent had fed the distance and positions of those galaxies into a computer program that printed out a two-dimensional representation of their three-dimensional distribution in the universe. On the printout was this slice of the northern sky, sprinkled with 1,000 distant galaxies, and smack in the middle, says Geller, was this remarkable stickman figure. The distribution of galaxies looked like a child's drawing of a somewhat bowlegged person. It's a whimsical name for a grand figure: the stickman extended 500 million light-years across the universe. Its torso was composed of hundreds of galaxies, a massive congregation known to

astronomers as the Coma cluster. Its arms were two more sheets of galaxies streaming across the night sky.

The stickman was grand not just in dimension but in destiny. You might even say it changed our understanding of the universe. Until the stickman, the universe appeared to be a smooth and homogeneous place. Astronomers believed that galaxies were distributed at random, although they might occasionally form clusters like Coma containing as many as a thousand or so galaxies like the Milky Way. There was even some evidence that the universe contained at least one enormous void, in the constellation Boötes, which seemed to extend for some 200 million light-years—and other suggestions that galaxies could be found strung out on long filaments. But in 1985 most astronomers assumed these structures were products not of the universe itself but of the methods used to survey it.

Then Geller saw the stickman, which constituted compelling evidence that galaxies were congregating on two-dimensional structures, as though they had condensed out of the cosmic nothingness on the surfaces of invisible bubbles.

In Passage 2, the author characterizes Geller as someone who

A. questioned her own ability to make accurate observations.
B. knew her research had uncovered something of significance.
C. had long believed an existing scientific model was flawed.
D. lacked the experience needed to recognize a pattern in her data.

Choice B is the best answer. The author of Passage 2 characterizes Geller as someone who knew she'd made a significant discovery. That is obvious from the first paragraph of Passage 2, when Geller said her reaction to her discovery was "a kind of euphoria" and that her finding of the stickman was "something real and important."

Choice A is incorrect because even if the first paragraph of Passage 2 indicates that Geller could be forgetful about minor details ("the exact date has faded from her recollection"), nowhere in the passage is Geller shown to doubt her own abilities as a scientific observer. It is John Huchra, not Geller, who is shown to doubt his abilities. Choice C is incorrect because although the third paragraph of Passage 2 explains that Geller's discovery challenged an

existing model, there is no indication that she had suspected this model was flawed beforehand. Choice D is incorrect because the first paragraph of Passage 2 characterizes Valérie de Lapparent, not Geller, as having felt herself to be overly inexperienced.

Question Difficulty: Medium

Reading: Question 42

Questions 39-47 are based on the following passages.

Passage 1 is adapted from Edwin Hubble, The Realm of the Nebulae. ©1982 by Yale University Press. Originally published in 1936. Passage 2 is adapted from Gary Taubes, "Beyond the Soapsuds Universe." ©1997 by Kalmbach Publishing Co. Throughout Passage 1, Hubble refers to galaxies as "stellar systems" and our galaxy, the Milky Way, as "the stellar system."

Line

Passage 1

The sun is a star among the many millions which form the stellar system. The stellar system is a swarm of stars isolated in space. It drifts through the universe as a swarm of bees drifts through the summer air. From our position somewhere within the system, we look out through the swarm of stars, past the borders, into the universe beyond.

The universe is empty, for the most part, but here and there, separated by immense intervals, we find other stellar systems, comparable with our own. They are so remote that, except in the nearest systems, we do not see the individual stars of which they are composed. These huge stellar systems appear as dim patches of light. Long ago they were named "nebulae" or "clouds"—mysterious bodies whose nature was a favorite subject for speculation.

But now, thanks to great telescopes, we know something of their nature, something of their real size and brightness, and their mere appearance indicates the general order of their distances. They are scattered through space as far as telescopes can penetrate. We see a few that appear large and bright. These are the nearer nebulae. Then we find them smaller and fainter, in constantly increasing numbers, and we know that we are reaching out into space, farther and ever farther, until, with the faintest nebulae that can be detected with the greatest telescope, we arrive at the frontiers of the known universe.

This last horizon defines the observable region of space. It is

a vast sphere, perhaps a thousand million light-years in diameter. Throughout the sphere are scattered a hundred million nebulae—stellar systems—in various stages of their evolutionary history. The nebulae are distributed singly, in groups, and occasionally in great clusters, but when large volumes of space are compared, the tendency to cluster averages out. To the very limits of the telescope, the large-scale distribution of nebulae is approximately uniform.

Passage 2

Margaret Geller first met the stickman in the fall of 1986. While the exact date has faded from her recollection, she remembers the time as midafternoon and her reaction as a kind of euphoria. No one had ever seen the stickman before—at least, not really. Valérie de Lapparent noticed it but says she was too inexperienced to understand its implication. John Huchra says he took one look at the stickman and assumed he had botched his observations. It took Geller's eye to recognize the stickman as something real and important.

Geller, Huchra, and de Lapparent had mapped the nearby universe, taking several months to carefully measure the distance to 1,000 galaxies, some as near as 30 million light-years away, others as far as 650 million. De Lapparent had fed the distance and positions of those galaxies into a computer program that printed out a two-dimensional representation of their three-dimensional distribution in the universe. On the printout was this slice of the northern sky, sprinkled with 1,000 distant galaxies, and smack in the middle, says Geller, was this remarkable stickman figure. The distribution of galaxies looked like a child's drawing of a somewhat bowlegged person. It's a whimsical name for a grand figure: the stickman extended 500 million light-years across the universe. Its torso was composed of hundreds of galaxies, a massive congregation known to

astronomers as the Coma cluster. Its arms were two more sheets of galaxies streaming across the night sky.

The stickman was grand not just in dimension but in destiny. You might even say it changed our understanding of the universe. Until the stickman, the universe appeared to be a smooth and homogeneous place. Astronomers believed that galaxies were distributed at random, although they might occasionally form clusters like Coma containing as many as a thousand or so galaxies like the Milky Way. There was even some evidence that the universe contained at least one enormous void, in the constellation Boötes, which seemed to extend for some 200 million light-years—and other suggestions that galaxies could be found strung out on long filaments. But in 1985 most astronomers assumed these structures were products not of the universe itself but of the methods used to survey it.

Then Geller saw the stickman, which constituted compelling evidence that galaxies were congregating on two-dimensional structures, as though they had condensed out of the cosmic nothingness on the surfaces of invisible bubbles.

As used in line 56, “grand” most nearly means

A. luxurious.
B. tasteful.
C. gallant.
D. imposing.

Choice D is the best answer. In the second paragraph of Passage 2 “the stickman” is described as “a whimsical name for a grand figure.” In the context of a figure said to comprise millions of light-years and hundreds or thousands of galaxies, “grand” most nearly means imposing, or impressive.

Choices A, B, and C are incorrect because in the context of a figure said to stretch some “500 million light-years across the universe,” the word “grand” most nearly means imposing, not luxurious (choice A), tasteful (choice B), or gallant or chivalrous (choice C).

Question Difficulty: Hard

Reading: Question 43

Questions 39-47 are based on the following passages.

Passage 1 is adapted from Edwin Hubble, The Realm of the Nebulae. ©1982 by Yale University Press. Originally published in 1936. Passage 2 is adapted from Gary Taubes, "Beyond the Soapsuds Universe." ©1997 by Kalmbach Publishing Co. Throughout Passage 1, Hubble refers to galaxies as "stellar systems" and our galaxy, the Milky Way, as "the stellar system."

Line

Passage 1

The sun is a star among the many millions which form the stellar system. The stellar system is a swarm of stars isolated in space. It drifts through the universe as a swarm of bees drifts through the summer air. From our position somewhere within the system, we look out through the swarm of stars, past the borders, into the universe beyond.

The universe is empty, for the most part, but here and there, separated by immense intervals, we find other stellar systems, comparable with our own. They are so remote that, except in the nearest systems, we do not see the individual stars of which they are composed. These huge stellar systems appear as dim patches of light. Long ago they were named "nebulae" or "clouds"—mysterious bodies whose nature was a favorite subject for speculation.

But now, thanks to great telescopes, we know something of their nature, something of their real size and brightness, and their mere appearance indicates the general order of their distances. They are scattered through space as far as telescopes can penetrate. We see a few that appear large and bright. These are the nearer nebulae. Then we find them smaller and fainter, in constantly increasing numbers, and we know that we are reaching out into space, farther and ever farther, until, with the faintest nebulae that can be detected with the greatest telescope, we arrive at the frontiers of the known universe.

This last horizon defines the observable region of space. It is

a vast sphere, perhaps a thousand million light-years in diameter. Throughout the sphere are scattered a hundred million nebulae—stellar systems—in various stages of their evolutionary history. The nebulae are distributed singly, in groups, and occasionally in great clusters, but when large volumes of space are compared, the tendency to cluster averages out. To the very limits of the telescope, the large-scale distribution of nebulae is approximately uniform.

Passage 2

Margaret Geller first met the stickman in the fall of 1986. While the exact date has faded from her recollection, she remembers the time as midafternoon and her reaction as a kind of euphoria. No one had ever seen the stickman before—at least, not really. Valérie de Lapparent noticed it but says she was too inexperienced to understand its implication. John Huchra says he took one look at the stickman and assumed he had botched his observations. It took Geller's eye to recognize the stickman as something real and important.

Geller, Huchra, and de Lapparent had mapped the nearby universe, taking several months to carefully measure the distance to 1,000 galaxies, some as near as 30 million light-years away, others as far as 650 million. De Lapparent had fed the distance and positions of those galaxies into a computer program that printed out a two-dimensional representation of their three-dimensional distribution in the universe. On the printout was this slice of the northern sky, sprinkled with 1,000 distant galaxies, and smack in the middle, says Geller, was this remarkable stickman figure. The distribution of galaxies looked like a child's drawing of a somewhat bowlegged person. It's a whimsical name for a grand figure: the stickman extended 500 million light-years across the universe. Its torso was composed of hundreds of galaxies, a massive congregation known to

astronomers as the Coma cluster. Its arms were two more sheets of galaxies streaming across the night sky.

The stickman was grand not just in dimension but in destiny. You might even say it changed our understanding of the universe. Until the stickman, the universe appeared to be a smooth and homogeneous place. Astronomers believed that galaxies were distributed at random, although they might occasionally form clusters like Coma containing as many as a thousand or so galaxies like the Milky Way. There was even some evidence that the universe contained at least one enormous void, in the constellation Boötes, which seemed to extend for some 200 million light-years—and other suggestions that galaxies could be found strung out on long filaments. But in 1985 most astronomers assumed these structures were products not of the universe itself but of the methods used to survey it.

Then Geller saw the stickman, which constituted compelling evidence that galaxies were congregating on two-dimensional structures, as though they had condensed out of the cosmic nothingness on the surfaces of invisible bubbles.

Passage 2 most strongly suggests that prior to the discovery of the stickman, most astronomers believed that galaxies

A. were scattered haphazardly throughout space.
B. existed mostly along two-dimensional structures.
C. were usually found in enormous clusters.
D. were separated by numerous, vast regions of empty space.

Choice A is the best answer. Passage 2 suggests that before the discovery of the stickman, most astronomers conceived of the universe as being so haphazardly distributed that the patterns of galaxies, like that of the stickman, would have been unthinkable. This idea is expressed in the middle of the third paragraph of Passage 2: “Astronomers believed that galaxies were distributed at random, although they might occasionally form clusters like Coma containing as many as a thousand or so galaxies like the Milky Way.”

Choice B is incorrect because the second paragraph of Passage 2 indicates that de Lapparent was able to print out a two-dimensional computer representation of space, not that any

scientists believed space existed only two-dimensionally. Choice C is incorrect because the third paragraph of Passage 2 indicates scientists believed that galaxies “occasionally” formed clusters, not that they usually did. Choice D is incorrect because the third paragraph of Passage 2 indicates there might have been “at least one enormous void” in space but not that there were numerous such voids.

Question Difficulty: Medium

Reading: Question 44

Questions 39-47 are based on the following passages.

Passage 1 is adapted from Edwin Hubble, The Realm of the Nebulae. ©1982 by Yale University Press. Originally published in 1936. Passage 2 is adapted from Gary Taubes, "Beyond the Soapsuds Universe." ©1997 by Kalmbach Publishing Co. Throughout Passage 1, Hubble refers to galaxies as "stellar systems" and our galaxy, the Milky Way, as "the stellar system."

Line

Passage 1

The sun is a star among the many millions which form the stellar system. The stellar system is a swarm of stars isolated in space. It drifts through the universe as a swarm of bees drifts through the summer air. From our position somewhere within the system, we look out through the swarm of stars, past the borders, into the universe beyond.

The universe is empty, for the most part, but here and there, separated by immense intervals, we find other stellar systems, comparable with our own. They are so remote that, except in the nearest systems, we do not see the individual stars of which they are composed. These huge stellar systems appear as dim patches of light. Long ago they were named "nebulae" or "clouds"—mysterious bodies whose nature was a favorite subject for speculation.

But now, thanks to great telescopes, we know something of their nature, something of their real size and brightness, and their mere appearance indicates the general order of their distances. They are scattered through space as far as telescopes can penetrate. We see a few that appear large and bright. These are the nearer nebulae. Then we find them smaller and fainter, in constantly increasing numbers, and we know that we are reaching out into space, farther and ever farther, until, with the faintest nebulae that can be detected with the greatest telescope, we arrive at the frontiers of the known universe.

This last horizon defines the observable region of space. It is

a vast sphere, perhaps a thousand million light-years in diameter. Throughout the sphere are scattered a hundred million nebulae—stellar systems—in various stages of their evolutionary history. The nebulae are distributed singly, in groups, and occasionally in great clusters, but when large volumes of space are compared, the tendency to cluster averages out. To the very limits of the telescope, the large-scale distribution of nebulae is approximately uniform.

Passage 2

Margaret Geller first met the stickman in the fall of 1986. While the exact date has faded from her recollection, she remembers the time as midafternoon and her reaction as a kind of euphoria. No one had ever seen the stickman before—at least, not really. Valérie de Lapparent noticed it but says she was too inexperienced to understand its implication. John Huchra says he took one look at the stickman and assumed he had botched his observations. It took Geller's eye to recognize the stickman as something real and important.

Geller, Huchra, and de Lapparent had mapped the nearby universe, taking several months to carefully measure the distance to 1,000 galaxies, some as near as 30 million light-years away, others as far as 650 million. De Lapparent had fed the distance and positions of those galaxies into a computer program that printed out a two-dimensional representation of their three-dimensional distribution in the universe. On the printout was this slice of the northern sky, sprinkled with 1,000 distant galaxies, and smack in the middle, says Geller, was this remarkable stickman figure. The distribution of galaxies looked like a child's drawing of a somewhat bowlegged person. It's a whimsical name for a grand figure: the stickman extended 500 million light-years across the universe. Its torso was composed of hundreds of galaxies, a massive congregation known to

astronomers as the Coma cluster. Its arms were two more sheets of galaxies streaming across the night sky.

The stickman was grand not just in dimension but in destiny. You might even say it changed our understanding of the universe. Until the stickman, the universe appeared to be a smooth and homogeneous place. Astronomers believed that galaxies were distributed at random, although they might occasionally form clusters like Coma containing as many as a thousand or so galaxies like the Milky Way. There was even some evidence that the universe contained at least one enormous void, in the constellation Boötes, which seemed to extend for some 200 million light-years—and other suggestions that galaxies could be found strung out on long filaments. But in 1985 most astronomers assumed these structures were products not of the universe itself but of the methods used to survey it.

Then Geller saw the stickman, which constituted compelling evidence that galaxies were congregating on two-dimensional structures, as though they had condensed out of the cosmic nothingness on the surfaces of invisible bubbles.

Which choice provides the best evidence for the answer to the previous question?

A. lines 45-46 (“Geller . . . universe”)
B. lines 51-54 (“On the . . . figure”)
C. lines 64-67 (“Astronomers . . . Milky Way”)
D. lines 75-78 (“Then . . . bubbles”)

Choice C is the best answer. The previous question asks what Passage 2 most strongly suggests about astronomers’ conception of the universe before the discovery of the stickman, with the answer (that galaxies were scattered randomly throughout space) being supported in the middle of the third paragraph of that passage: “Astronomers believed that galaxies were distributed at random, although they might occasionally form clusters like Coma containing as many as a thousand or so galaxies like the Milky Way.”

Choices A, B, and D are incorrect because the cited lines do not support the answer to the previous question about what most astronomers believed about the distribution of galaxies before the discovery of the stickman. Instead, the lines describe the work of only one small group of astronomers (choices A and B) and the conclusions that Geller reached (choice D).

Question Difficulty: Medium

Reading: Question 45

Questions 39-47 are based on the following passages.

Passage 1 is adapted from Edwin Hubble, The Realm of the Nebulae. ©1982 by Yale University Press. Originally published in 1936. Passage 2 is adapted from Gary Taubes, "Beyond the Soapsuds Universe." ©1997 by Kalmbach Publishing Co. Throughout Passage 1, Hubble refers to galaxies as "stellar systems" and our galaxy, the Milky Way, as "the stellar system."

Line

Passage 1

The sun is a star among the many millions which form the stellar system. The stellar system is a swarm of stars isolated in space. It drifts through the universe as a swarm of bees drifts through the summer air. From our position somewhere within the system, we look out through the swarm of stars, past the borders, into the universe beyond.

The universe is empty, for the most part, but here and there, separated by immense intervals, we find other stellar systems, comparable with our own. They are so remote that, except in the nearest systems, we do not see the individual stars of which they are composed. These huge stellar systems appear as dim patches of light. Long ago they were named "nebulae" or "clouds"—mysterious bodies whose nature was a favorite subject for speculation.

But now, thanks to great telescopes, we know something of their nature, something of their real size and brightness, and their mere appearance indicates the general order of their distances. They are scattered through space as far as telescopes can penetrate. We see a few that appear large and bright. These are the nearer nebulae. Then we find them smaller and fainter, in constantly increasing numbers, and we know that we are reaching out into space, farther and ever farther, until, with the faintest nebulae that can be detected with the greatest telescope, we arrive at the frontiers of the known universe.

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Passage 2

Margaret Geller first met the stickman in the fall of 1986. While the exact date has faded from her recollection, she remembers the time as midafternoon and her reaction as a kind of euphoria. No one had ever seen the stickman before—at least, not really. Valérie de Lapparent noticed it but says she was too inexperienced to understand its implication. John Huchra says he took one look at the stickman and assumed he had botched his observations. It took Geller's eye to recognize the stickman as something real and important.

Geller, Huchra, and de Lapparent had mapped the nearby universe, taking several months to carefully measure the distance to 1,000 galaxies, some as near as 30 million light-years away, others as far as 650 million. De Lapparent had fed the distance and positions of those galaxies into a computer program that printed out a two-dimensional representation of their three-dimensional distribution in the universe. On the printout was this slice of the northern sky, sprinkled with 1,000 distant galaxies, and smack in the middle, says Geller, was this remarkable stickman figure. The distribution of galaxies looked like a child's drawing of a somewhat bowlegged person. It's a whimsical name for a grand figure: the stickman extended 500 million light-years across the universe. Its torso was composed of hundreds of galaxies, a massive congregation known to

astronomers as the Coma cluster. Its arms were two more sheets of galaxies streaming across the night sky.

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Then Geller saw the stickman, which constituted compelling evidence that galaxies were congregating on two-dimensional structures, as though they had condensed out of the cosmic nothingness on the surfaces of invisible bubbles.

Which choice best states the relationship between the two passages?

A. Passage 2 supports a controversial point of view stated in Passage 1.
B. Passage 2 suggests practical benefits of a breakthrough described in Passage 1.
C. Passage 2 describes a discovery that was not anticipated in Passage 1.
D. Passage 2 proposes an experiment that could confirm a hypothesis offered in Passage 1.

Choice C is the best answer. Passage 2 describes Margaret Geller's discovery of "the stickman," a concentration of galaxies that confirms that the distribution of such bodies in space is not uniform. The third paragraph of this passage states that this discovery "changed our understanding of the universe." Passage 1 predates Geller's discovery and represents the earlier conception of space discussed in Passage 2 (that the distribution of galaxies is uniform). Therefore, the relationship between the two passages is that of a description of a discovery, in Passage 2, that was not anticipated in Passage 1.

Choice A is incorrect because although Passage 2 describes the point of view supported by Passage 1 (that galaxies are uniformly distributed in space), it represents that point of view as having been widely accepted, and there is no indication in either passage that it was controversial. Choice B is incorrect because the only “breakthrough” found in the passages is the discovery of the stickman described in Passage 2, and no such breakthrough is mentioned in Passage 1. Choice D is incorrect because Passage 2 proposes no experiment.

Question Difficulty: Medium

Reading: Question 46

Questions 39-47 are based on the following passages.

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Line

Passage 1

The sun is a star among the many millions which form the stellar system. The stellar system is a swarm of stars isolated in space. It drifts through the universe as a swarm of bees drifts through the summer air. From our position somewhere within the system, we look out through the swarm of stars, past the borders, into the universe beyond.

The universe is empty, for the most part, but here and there, separated by immense intervals, we find other stellar systems, comparable with our own. They are so remote that, except in the nearest systems, we do not see the individual stars of which they are composed. These huge stellar systems appear as dim patches of light. Long ago they were named "nebulae" or "clouds"—mysterious bodies whose nature was a favorite subject for speculation.

But now, thanks to great telescopes, we know something of their nature, something of their real size and brightness, and their mere appearance indicates the general order of their distances. They are scattered through space as far as telescopes can penetrate. We see a few that appear large and bright. These are the nearer nebulae. Then we find them smaller and fainter, in constantly increasing numbers, and we know that we are reaching out into space, farther and ever farther, until, with the faintest nebulae that can be detected with the greatest telescope, we arrive at the frontiers of the known universe.

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a vast sphere, perhaps a thousand million light-years in diameter. Throughout the sphere are scattered a hundred million nebulae—stellar systems—in various stages of their evolutionary history. The nebulae are distributed singly, in groups, and occasionally in great clusters, but when large volumes of space are compared, the tendency to cluster averages out. To the very limits of the telescope, the large-scale distribution of nebulae is approximately uniform.

Passage 2

Margaret Geller first met the stickman in the fall of 1986. While the exact date has faded from her recollection, she remembers the time as midafternoon and her reaction as a kind of euphoria. No one had ever seen the stickman before—at least, not really. Valérie de Lapparent noticed it but says she was too inexperienced to understand its implication. John Huchra says he took one look at the stickman and assumed he had botched his observations. It took Geller's eye to recognize the stickman as something real and important.

Geller, Huchra, and de Lapparent had mapped the nearby universe, taking several months to carefully measure the distance to 1,000 galaxies, some as near as 30 million light-years away, others as far as 650 million. De Lapparent had fed the distance and positions of those galaxies into a computer program that printed out a two-dimensional representation of their three-dimensional distribution in the universe. On the printout was this slice of the northern sky, sprinkled with 1,000 distant galaxies, and smack in the middle, says Geller, was this remarkable stickman figure. The distribution of galaxies looked like a child's drawing of a somewhat bowlegged person. It's a whimsical name for a grand figure: the stickman extended 500 million light-years across the universe. Its torso was composed of hundreds of galaxies, a massive congregation known to

astronomers as the Coma cluster. Its arms were two more sheets of galaxies streaming across the night sky.

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Then Geller saw the stickman, which constituted compelling evidence that galaxies were congregating on two-dimensional structures, as though they had condensed out of the cosmic nothingness on the surfaces of invisible bubbles.

In which lines does the author of Passage 2 most directly acknowledge the view of nebula arrangement asserted by the author of Passage 1?

A. lines 45-48 (“Geller . . . 650 million”)
B. lines 54-55 (“The distribution . . . person”)
C. lines 63-64 (“Until . . . place”)
D. lines 71-74 (“But in . . . it”)

Choice C is the best answer. The third sentence of the third paragraph of Passage 2 states that “until the stickman, the universe appeared to be a smooth and homogeneous place.” These lines acknowledge the view of nebula arrangement that is outlined in Passage 1 and is asserted most strongly in the middle of the fourth paragraph: “The nebulae are distributed singly, in groups, and occasionally in great clusters, but when large volumes of space are compared, the tendency to cluster averages out.”

Choices A and B are incorrect because the cited lines explain the work of Geller, Huchra, and de Lapparent but nothing about what the author of Passage 1 believed about nebula arrangement. Choice D is incorrect because the cited lines address how data that contradicted

the older point of view on nebula arrangement were misinterpreted but do not directly acknowledge and explain that point of view.

Question Difficulty: Hard

Reading: Question 47

Questions 39-47 are based on the following passages.

Passage 1 is adapted from Edwin Hubble, The Realm of the Nebulae. ©1982 by Yale University Press. Originally published in 1936. Passage 2 is adapted from Gary Taubes, "Beyond the Soapsuds Universe." ©1997 by Kalmbach Publishing Co. Throughout Passage 1, Hubble refers to galaxies as "stellar systems" and our galaxy, the Milky Way, as "the stellar system."

Line

Passage 1

The sun is a star among the many millions which form the stellar system. The stellar system is a swarm of stars isolated in space. It drifts through the universe as a swarm of bees drifts through the summer air. From our position somewhere within the system, we look out through the swarm of stars, past the borders, into the universe beyond.

The universe is empty, for the most part, but here and there, separated by immense intervals, we find other stellar systems, comparable with our own. They are so remote that, except in the nearest systems, we do not see the individual stars of which they are composed. These huge stellar systems appear as dim patches of light. Long ago they were named "nebulae" or "clouds"—mysterious bodies whose nature was a favorite subject for speculation.

But now, thanks to great telescopes, we know something of their nature, something of their real size and brightness, and their mere appearance indicates the general order of their distances. They are scattered through space as far as telescopes can penetrate. We see a few that appear large and bright. These are the nearer nebulae. Then we find them smaller and fainter, in constantly increasing numbers, and we know that we are reaching out into space, farther and ever farther, until, with the faintest nebulae that can be detected with the greatest telescope, we arrive at the frontiers of the known universe.

This last horizon defines the observable region of space. It is

a vast sphere, perhaps a thousand million light-years in diameter. Throughout the sphere are scattered a hundred million nebulae—stellar systems—in various stages of their evolutionary history. The nebulae are distributed singly, in groups, and occasionally in great clusters, but when large volumes of space are compared, the tendency to cluster averages out. To the very limits of the telescope, the large-scale distribution of nebulae is approximately uniform.

Passage 2

Margaret Geller first met the stickman in the fall of 1986. While the exact date has faded from her recollection, she remembers the time as midafternoon and her reaction as a kind of euphoria. No one had ever seen the stickman before—at least, not really. Valérie de Lapparent noticed it but says she was too inexperienced to understand its implication. John Huchra says he took one look at the stickman and assumed he had botched his observations. It took Geller's eye to recognize the stickman as something real and important.

Geller, Huchra, and de Lapparent had mapped the nearby universe, taking several months to carefully measure the distance to 1,000 galaxies, some as near as 30 million light-years away, others as far as 650 million. De Lapparent had fed the distance and positions of those galaxies into a computer program that printed out a two-dimensional representation of their three-dimensional distribution in the universe. On the printout was this slice of the northern sky, sprinkled with 1,000 distant galaxies, and smack in the middle, says Geller, was this remarkable stickman figure. The distribution of galaxies looked like a child's drawing of a somewhat bowlegged person. It's a whimsical name for a grand figure: the stickman extended 500 million light-years across the universe. Its torso was composed of hundreds of galaxies, a massive congregation known to

astronomers as the Coma cluster. Its arms were two more sheets of galaxies streaming across the night sky.

The stickman was grand not just in dimension but in destiny. You might even say it changed our understanding of the universe. Until the stickman, the universe appeared to be a smooth and homogeneous place. Astronomers believed that galaxies were distributed at random, although they might occasionally form clusters like Coma containing as many as a thousand or so galaxies like the Milky Way. There was even some evidence that the universe contained at least one enormous void, in the constellation Boötes, which seemed to extend for some 200 million light-years—and other suggestions that galaxies could be found strung out on long filaments. But in 1985 most astronomers assumed these structures were products not of the universe itself but of the methods used to survey it.

Then Geller saw the stickman, which constituted compelling evidence that galaxies were congregating on two-dimensional structures, as though they had condensed out of the cosmic nothingness on the surfaces of invisible bubbles.

Based on the passages, it can reasonably be concluded that before 1985, the universe was thought to

A. consist of nearby galaxies.
B. lack large-scale structure.
C. extend a short distance past the Milky Way.
D. have a limit beyond which no galaxies existed.

Choice B is the best answer. Passage 1, which represents a point of view before 1985, asserts in its last paragraph that “to the very limits of the telescope,” the distribution of nebulae is approximately uniform, since nebulae clusters and empty space between nebulae average out when large expanses of the universe are surveyed. The third paragraph of Passage 2 notes that in 1985, evidence of large-scale structure (including “one enormous void” and concentrations of galaxies “strung out on long filaments”) was dismissed by most astronomers as “products not of the universe itself but of the methods used to survey it.” Taken together, both passages suggest that before 1985, the prevailing view was that the universe lacked large-scale structure.

Choices A and C are incorrect because both passages imply that previously the universe was thought to be filled with galaxies stretching into its farther reaches, often with immense expanses of space between them, not that the universe consisted only of “nearby galaxies” (choice A) or stretched just “a short distance past the Milky Way” (choice C). Choice D is incorrect because neither passage implies that before 1985, the prevailing model of the universe stipulated any limit beyond which no galaxies existed.

Question Difficulty: Hard