SAT ANSWER SHEET

It is recommended that you use a No. 2 pencil. It is very important that you fill in the entire circle darkly and completely. If you change your response, erase as completely possible. Incomplete marks or erasures may affect your score.

COMPLETE MARK •

SECTION 1

1	A B C D	14 A B C D	27 (A) (B) (C) (D)	40 (A) (B) (C) (D)
2	ABCD	15 A B C D	28 A B C D	41 A B C D
3	ABCD	16 A B C D	29 A B C D	42 A B C D
4	A B C D	17 A B C D	30 (A) (B) (C) (D)	43 A B C D
5	A B C D	18 A B C D	31 (A) (B) (C) (D)	44 A B C D
6	A B C D	19 A B C D	32 A B C D	45 A B C D
7	A B C D	20 A B C D	33 A B C D	46 A B C D
8	A B C D	21 (A) (B) (C) (D)	34 (A) (B) (C) (D)	47 A B C D
9	A B C D	22 A B C D	35 A B C D	48 A B C D
10	A B C D	23 A B C D	36 A B C D	49 A B C D
11	A B C D	24 A B C D	37 A B C D	50 A B C D
12	A B C D	25 A B C D	38 A B C D	51 A B C D
13	ABCD	26 A B C D	39 (A) (B) (C) (D)	52 A B C D

SECTION 2

1	ABCD	12 A B C D	23 A B C D	34 A B C D
2	ABCD	13 A B C D	24 A B C D	35 A B C D
3	ABCD	14 A B C D	25 A B C D	36 A B C D
4	A B C D	15 A B C D	26 A B C D	37 A B C D
5	A B C D	16 A B C D	27 A B C D	38 A B C D
6	A B C D	17 A B C D	28 A B C D	39 A B C D
7	A B C D	18 A B C D	29 A B C D	40 A B C D
8	A B C D	19 A B C D	30 (A) (B) (C) (D)	41 A B C D
9	A B C D	20 A B C D	31 (A) (B) (C) (D)	42 A B C D
10	ABCD	21 (A) (B) (C) (D)	32 A B C D	43 A B C D
11	ABCD	22 A B C D	33 A B C D	44 A B C D

SECTION 3

1 A B C D	4 (A) (B) (C) (D)	7 A B C D	10 A B C D	13 A B C D
2 A B C D	5 A B C D	8 A B C D	11 A B C D	14 A B C D
3 A B C D	6 (A) (B) (C) (D)	9 A B C D	12 A B C D	15 A B C D

Only answers that a	re gridded will be scored.	You will not receive	credit for anything written	in the boxes.
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NO CALCULATOR ALLOWED



SECTION 4

1	A B C D	7	ABCD	13	ABCD	19	A B C D	25	A B C D
2	ABCD	8	ABCD	14	ABCD	20	ABCD	26	ABCD
3	ABCD	9	A B C D	15	ABCD	21	ABCD	27	ABCD
4	ABCD	10	A B C D	16	ABCD	22	ABCD	28	ABCD
5	A B C D	11	ABCD	17	ABCD	23	ABCD	29	ABCD
6	ABCD	12	ABCD	18	ABCD	24	ABCD	30	A B C D

Only answers that are gridded will be scored. You will not receive credit for anything written in the boxes.

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IMPORTANT REMINDERS

1

A No. 2 pencil is required for the test. Do not use a mechanical pencil or pen.

2

Sharing any questions with anyone is a violation of Test Security and Fairness policies and may result in your scores being canceled.

This cover is representative of what you'll see on the test day.

THIS TEST BOOK MUST NOT BE TAKEN FROM THE ROOM. UNAUTHORIZED REPRODUCTION OR USE OF ANY PART OF THIS TEST BOOK IS PROHIBITED.

Reading Test

65 MINUTES, 52 QUESTIONS

Turn to Section 1 of your answer sheet to answer the questions in this section.

DIRECTIONS

Each passage or pair of passages below is followed by a number of questions. After reading each passage or pair, choose the best answer to each question based on what is stated or implied in the passage or passages and in any accompanying graphics (such as a table or graph).

Questions 1-10 are based on the following passage.

It is an excerpt from Chapter 23 of John Steinbeck's *East of Eden*. Lee and Samuel have known each other for more than ten years.

"They are fine old men. They smoke their two pipes of opium in the afternoon and it rests and sharpens them , and they sit through the night and their Line minds are wonderful. I guess no other people have 5 been able to use opium well."

Lee dampened his tongue in the black brew. " I respectfully submitted my problem to one of these sages, read him the story, and told him what I understood from it. The next night four of them met 10 and called me in. We discussed the story all night long."

Lee laughed. " I guess it's funny," he said. " I know I wouldn't dare tell it to many people. Can you imagine four old gentlemen, the youngest is over

- 15 ninety now, taking on the study of Hebrew? They engaged a learned rabbi. They took to the study as though they were children. Exercise books, grammar, vocabulary, simple sentences. You should see Hebrew written in Chinese ink with a brush! The right to left
- 20 didn't bother them as much as it would you, since we write up to down. Oh, they were perfectionists! They went to the root of the matter."

"And you?" said Samuel.

- "I went along with them, marveling at the 25 beauty of their proud clean brains. I began to love my race, and for the first time I wanted to be Chinese. Every two weeks I went to a meeting with them, and in my room here I covered pages with writing. I bought every known Hebrew dictionary. But the old
- 30 gentlemen were always ahead of me. It wasn't long before they were ahead of our rabbi; he brought a colleague in. Mr. Hamilton, you should have sat through some of those nights of argument and discussion. The questions, the inspection, oh, the 35 lovely thinking-the beautiful thinking. "

"After two years we felt that we could approach your sixteen verses of the fourth chapter of Genesis . My old gentlemen felt that these words were very important too — ' Thou shalt' and ' Do thou'. And

- 40 this was the gold from our mining : 'Thou mayest .' 'Thou mayest rule over sin.' The old gentlemen smiled and nodded and felt the years were well spent . It brought them out of their Chinese shells too, and right now they are studying Greek."
- 45 Samuel said, "It's a fantastic story. And I've tried to follow and maybe I've missed somewhere. Why is this word so important?"

Lee's hand shook as he filled the delicate cups. He drank his down in one gulp . " Don't you see ? "

- 50 he cried. "The American Standard translation orders men to triumph over sin, and you can call sin ignorance. The King James translation makes a promise in 'Thou shalt', meaning that men will surely triumph over sin. But the Hebrew word, the word
- 55 timshel— 'Thou mayest '—that gives a choice. It might be the most important word in the world. That says the way is open. That throws it right back on a man. For if 'Thou mayest '—it is also true that 'Thou mayest not'. Don't you see?"
- 60 "Yes, I see. I do see. But you do not believe this is divine law. Why do you feel its importance ? " "Ah!" said Lee. "I' ve wanted to tell you this for a long time. I even anticipated your questions and I am well prepared. Any writing which has influenced
- 65 the thinking and the lives of innumerable people is important. Now, there are many millions in their sects and churches who feel the order, 'Do thou', and the 77 row their weight into obedience. And there are millions more who feel predestination in 'Thou shalt'.
- 70 Nothing they may do can interfere with what will be. But 'Thou mayest' ! Why, that makes a man great, that gives him stature with the gods, for in his weakness and his filth and his murder of his brother he has still the great choice. He can choose his course and fight it
- 75 through and win." Lee's voice was a chant of triumph.
- What does "perfectionists" mean in the context of the 3rd paragraph (Line 21)?
 - A. Truth-seekers
 - B. Academics
 - C. Precise and devoted problem-solvers
 - D. Professionals

- 2. In this passage, how can the dynamic between Lee and Samuel be best described?
 - A. Two friends engaging an a conversation as equals
 - B. Two friends, one of which is recounting a story to an enthralled companion
 - C. A teacher posing questions to an inquisitive student
 - D. Two unfamiliar people talking for the first time at a bar

- 3. What is the purpose of the passage?
 - A. To describe how Lee resolved an issue he had with different translations of a Biblical passage, and the implications that passage has
 - B. To serve as a conduit for Lee and Samuel to discuss theology
 - C. To demonstrate to the reader that Lee and Samuel share a close relationship
 - D. To discuss why Lee felt as if he wanted to be Chinese (line 26)
- 4. Why does Lee call the translation of "Thou mayest" the "gold from our mining"?
 - A. Because Lee feels he can market and sell this translation, which he feels is evidently better than both the King James and the American Standard
 - B. Because Lee was able to learn Hebrew, which he believes is valuable, through translating this passage
 - C. Because Lee sees value in the fact that "thou mayest" holds a distinct meaning from both the translations offered by the King James and the American Standard
 - D. Because Lee and Samuel both agree that "Thou mayest" signifies divine law
- 5. What literary device does Steinbeck use in the third paragraph, from lines 12—22, in describing the "old gentlemen" as "children"?
 - A. Juxtaposition
 - B. Metaphor
 - C. Simile
 - D. Synecdoche
- 6. It can be inferred from this passage that
 - A. Both Lee and Samuel are men of wealth and leisure
 - B. Both Lee and Samuel have an interest in Biblical studies
 - C. Both Lee and Samuel are religious
 - D. Both Lee and Samuel are Chinese
- 7. Why does Lee believe that "Thou mayest" is so important?
 - A. It implies that humans beings have the ability to choose their destiny rather than being bound to predestination or divine commands
 - B. Lee and the old gentlemen believe that the translation is a result of many years of valued work
 - C. Lee believes in predestination, and thinks that "Thou mayest" is a contradiction of his deep-seated belief
 - D. Lee sees that "Thou mayest" is a way of liberating

him from his murder of his brother

- 8. What does "sages" (line 8) mean in the context of the passage?
 - A. Educated ones
 - B. Lee's elders
 - C. The community's elders
 - D. Rabbis
- 9. Why is it significant that the old gentlemen have begun to study Greek (line 44)?
 - A. That they, like Lee, no longer want to consider themselves Chinese
 - B. That they took the advice of their translation to heart, and embraced their ability to decide their own futures

- C. That they developed new skills for learning Hebrew and tried to see if they could apply that skill to Greek
- D. That they no longer smoked opium pipes
- 10. From this passage, Lee can be best described as
 - A. A demagogue preaching to his unwitting friend
 - B. A scholar searching for the deeper meaning of a seemingly innocuous discrepancy between translations
 - C. An agnostic combing through different translations of the Bible to justify a belief in God
 - D. A rabbi-in-training who feels conflicted between his Chinese heritage and his Jewish religion

Questions 11—20 are based on the following passage. It is an excerpt from a book by Dan Ariely, a professor of economics at the Massachusetts Institute of Technology. In this passage, Prof. Ariely discusses a concept in economics called the zero-price effect. Emphasis is from the original.

IN ONE EXPERIMENT, Kristina Shampanier (a PhD student at MIT), Nina Mazar (a professor at the University of Toronto), and I went Line into the chocolate business. Well, sort of. We set up a 5 table at a large public building and offered two kinds of chocolates — Lindt truffles and Hershey's Kisses. There was a large sign above our table that read, " One chocolate per customer." Once the potential customers stepped closer, they could see the two types of 10 chocolate and their prices.

For those of you who are not chocolate connoisseurs, Lindt is produced by a Swiss firm that has been blending fine cocoas for 160 years. Lindt's chocolate truffles are particularly prized — exquisitely

- 15 creamy and just about irresistible. They cost about 30 cents each when we buy them in bulk. Hershey's Kisses, on the other hand, are good little chocolates, but let's face it, they are rather ordinary: Hershey cranks out 80 million Kisses a day. In Hershey,
- 20 Pennsylvania, even the streetlamps are made in the shape of the ubiquitous Hershey's Kiss.

So what happened when the "customers" flocked to our table? When we set the price of a Lindt truffle at 15 cents and a Kiss at one cent, we were not 25 surprised to find that our customers acted with a good deal of rationality: they compared the price and quality of the Kiss with the price and quality of the truffle, and then made their choice. About 73 percent of them chose the truffle and 27 percent chose a Kiss.

30 Now we decided to see how FREE! might change the situation. So we offered the Lindt truffle for 14 cents and the Kisses free. Would there be a difference ? Should there be? After all, we had merely lowered the price of both kinds of chocolate by one 35 cent.

But what a difference **FREE**! made. The humble Hershey's Kiss became a big favorite. Some 69 percent of our customers (up from 27 percent before) chose the **FREE**! Kiss, giving up the 40 opportunity to get the Lindt truffle for a very good price. Meanwhile, the Lindt truffle took a tumble ; customers choosing it decreased from 73 to 31 percent.

What was going on here? First of all, let me say that there are many times when getting 45 **FREE**! items can make perfect sense. If you find a bin of free athletic socks at a department store, for instance, there's no downside to grabbing all the socks you can. The critical issue arises when **FREE** ! becomes a struggle between a free item and 50 another item — a struggle in which the presence of

- **FREE** ! leads us to make a bad decision. For instance, imagine going to a sports store to buy a pair of white socks, the kind with a nicely padded heel and a gold toe. Fifteen minutes later you' re leaving the store, not
- 55 with the socks you came in for, but with a cheaper pair that you don't like at all (without a padded heel and gold toe) but that came in a package with a FREE ! second pair. This is a case in which you gave up a better deal and settled for something that was not
- 60 what you wanted, just because you were lured by the FREE!

To replicate this experience in our chocolate experiment, we told our customers that they could choose only a single sweet — the Kiss or the truffle. It

- 65 was an either or decision, like choosing one kind of athletic sock over another. That's what made the customers' reaction to the FREE ! Kiss so dramatic: Both chocolates were discounted by the same amount of money. The relative price difference between the
- 70 two was unchanged and so was the expected pleasure from both.

According to standard economic theory (simple cost — benefit analysis), then, the price reduction should not lead to any change in the behavior of our

- 75 customers. Before, about 27 percent chose the Kiss and 73 percent chose the truffle. And since nothing had changed in relative terms, the response to the price reduction should have been exactly the same. A passing economist, twirling his cane and espousing
- 80 conventional economic theory, in fact, would have said that since everything in the situation was the same, our customers should have chosen the truffles by the same margin of preference.
- And yet here we were, with people pressing 85 up to the table to grab our Hershey's Kisses, not because they had made a reasoned cost — benefit analysis before elbowing their way in, but simply because the Kisses were **FREE** ! How strange (but predictable) we humans are!
- 11. Why does Ariely mention the "streetlamps" when referring to Hershey's Kisses?

- A. To underscore that the Kisses were made in the shape of the streetlamps in Hershey, Pennsylvania
- B. To emphasize that the Hershey's Kisses were much smaller compared to the Lindt truffles, and that "80 million Kisses" (line 19) equaled the mass of a streetlamp
- C. To demonstrate that the Hershey's Kisses were "good little chocolates" (line 17)
- D. To illustrate that Hershey's Kisses were "ubiquitous" (line 21)
- 12. What does "ubiquitous" (line 21) most closely mean in the context of the passage?
 - A. Everywhere
 - B. Common
 - C. Quotidian
 - D. Numerous
- 13. Through this passage, Ariely can be best described as
 - A. An ideologue firmly committed to classical economics
 - B. An instructor teaching his students about a new way of approaching economics
 - C. An empiricist trying to draw conclusions from data
 - D. An academic defending his new research
- 14. The "passing economist" in line 79 serves what narrative effect?
 - A. It demonstrates the disdain of mainstream economics towards Ariely's hypothesis
 - B. It provides a critique from the point of classical economics towards Ariely's hypothesis
 - C. It presents most economists and the field of economics as monolithic and unchanging
 - D. It demonstrates the incompatibility of conventional economic theory with Ariely's study
- 15. What, according to the passage, is the effect of pricing a low value item as **FREE**! relative to another item of higher value?
 - A. People will always pick the higher-value item despite having to pay more
 - B. People pay more attention to the **FREE**! and ignore considerations of value
 - C. People will tend to ignore the effect of **FREE**! on product pricing
 - D. The effect of **FREE**! depends on the original pricing difference between the two objects
- 16. What does "espousing" (line 79) most closely mean in

the context of the passage?

- A. Advocating B. Believing
- C. Preaching D. Marrying
- 17. What narrative purpose does the example of the athletic socks serve (lines 46-61)?
 - A. Ariely describes a parallel experiment to the chocolate experiment to confirm his findings
 - B. Ariely uses a rhetorical example to demonstrate the zero-price effect in the chocolate experiment
 - C. Ariely gives an example of a possible experiment he would like to conduct with Shampanier and Mazar
 - D. Ariely uses the athletic socks to demonstrate the difference in value between the Lindt truffles and the Hershey's Kisses
- 18. Throughout the passage, why is **FREE**! emphasized in bold uppercase letters?
 - A. To demonstrate the importance of zero price
 - B. To show that zero price is the focus of Ariely's experiment
 - C. To underscore how zero price can affect how people make decisions
 - D. Both A and B

- 19. Why did Ariely limit the customers to only one chocolate per person?
 - A. To replicate the situation described in the athletic socks example
 - B. To control the experiment for a real economic choice and trade-off
 - C. To observe how people would make choices given the single chocolate constraint
 - D. All of the above
- 20. Why does Ariely mention that Lindt truffles are "particularly prized" (line 14)?
 - A. To show that he and the other members of the team spent a sizeable portion of their budget on the chocolates
 - B. To indicate their relative high value to the Hershey's Kisses
 - C. To show that they were high-demand products
 - D. To demonstrate that they were the faster-selling product

Questions 21—30 are based on the following passage. It is an excerpt from George Washington's *Farewell Address*, the letter he wrote to the American people when he left office after his second term. President Washington was the first President of the United States, and held office for two terms from 1789—1797.

Friends and Citizens:

The period for a new election of a citizen to administer the executive government of the United Line States being not far distant, and the time actually 5 arrived when your thoughts must be employed in designating the person who is to be clothed with that important trust, it appears to me proper, especially as it may conduce to a more distinct expression of the public voice, that I should now apprise you of the

10 resolution I have formed, to decline being considered among the number of those out of whom a choice is to be made.

I beg you, at the same time, to do me the justice to be assured that this resolution has not been

15 taken without a strict regard to all the considerations appertaining to the relation which binds a dutiful citizen to his country; and that in withdrawing the tender of service, which silence in my situation might imply, I am influenced by no diminution of zeal for 20 your future interest, no deficiency of grateful respect

- for your past kindness, but am supported by a full conviction that the step is compatible with both. The acceptance of, and continuance hitherto
- in, the office to which your suffrages have twice called 25 me have been a uniform sacrifice of inclination to the opinion of duty and to a deference for what appeared to be your desire. I constantly hoped that it would have been much earlier in my power, consistently with motives which I was not at liberty to disregard, to
- 30 return to that retirement from which I had been reluctantly drawn. The strength of my inclination to do this, previous to the last election, had even led to the

preparation of an address to declare it to you; but mature reflection on the then perplexed and critical 35 posture of our affairs with foreign nations, and the unanimous advice of persons entitled to my confidence, impelled me to abandon the idea.

I rejoice that the state of your concerns, external as well as internal, no longer renders the 40 pursuit of inclination incompatible with the sentiment of duty or propriety, and am persuaded, whatever partiality may be retained for my services, that, in the present circumstances of our country, you will not disapprove my determination to retire.

45 The impressions with which I first undertook the arduous trust were explained on the proper occasion. In the discharge of this trust, I will only say that I have, with good intentions, contributed towards the organization and administration of the

50 government the best exertions of which a very fallible judgment was capable. Not unconscious in the outset of the inferiority of my qualifications, experience in my own eyes, perhaps still more in the eyes of others, has strengthened the motives to diffidence of myself;

55 and every day the increasing weight of years admonishes me more and more that the shade of retirement is as necessary to me as it will be welcome . Satisfied that if any circumstances have given peculiar value to my services, they were temporary, I have the

60 consolation to believe that, while choice and prudence invite me to quit the political scene, patriotism does not forbid it.

In looking forward to the moment which is intended to terminate the career of my public life, my 65 feelings do not permit me to suspend the deep acknowledgment of that debt of gratitude which I owe to my beloved country for the many honors it has

conferred upon me; still more for the steadfastconfidence with which it has supported me; and for70 the opportunities I have thence enjoyed of manifesting

- my inviolable attachment, by services faithful and persevering, though in usefulness unequal to my zeal. If benefits have resulted to our country from these services, let it always be remembered to your praise,
- $75\,$ and as an instructive example in our annals, that under

circumstances in which the passions, agitated in every direction, were liable to mislead, amidst appearances sometimes dubious, vicissitudes of fortune often discouraging, in situations in which not unfrequently

- 80 want of success has countenanced the spirit of criticism, the constancy of your support was the essential prop of the efforts, and a guarantee of the plans by which they were effected.
- 21. What is the purpose of the passage?
 - A. Washington is confirming his intention to stand for reelection as President
 - B. Washington is proposing a new model of democratic governance
 - C. Washington is informing the public that he will not be contesting a third term and elaborating on why
 - D. Washington is nominating his successor in the upcoming election
- 22. What is Washington's prevailing attitude throughout the passage?
 - A. Regretful B. Accepting
 - C. Dolorous D. Polemic
- 23. What does "peculiar" (line 58) most closely mean in the context of the passage?
 - A. Strange B. Anomalous
 - C. Unique D. Outlying
- 24. In Washington's opinion, he was unfit to be President because
 - A. He was a poor military commander
 - B. He was too strict a leader
 - C. He was only made to look competent because of the circumstances in which he found himself
 - D. His close associates told him he was unfit
- 25. What is the purpose of lines 13-22?
 - A. To suggest that Washington is abandoning his post as President because he feels betrayed
 - B. To reaffirm Washington's continuing concern for the American people, and his gratitude for their support
 - C. To call for American citizens to take politics and governance more seriously and consider running for public office
 - D. To ask for justice for wrongs he feels have been committed against him

E

- 26. What does "suspend" (line 65) most closely mean in the context of the passage?
 - A. Hang B. Stop
 - C. Forget D. Freeze
- 27. What is the overall tone of the passage?
 - A. Conciliatory B. Hopeful
 - C. Pedantic D. Chastising
- 28. According to the passage, the "inviolable attachment" of line 71 refers to what?
 - A. Washington's love for his country
 - B. Washington's will to live
 - C. Washington's political obligations
 - D. Washington's dedication to liberty

- 29. Who or what does Washington credit with the success of his presidency?
 - A. His political allies
 - B. His wealth
 - C. The support of the American people
 - D. Prevailing political trends
- 30. How does Washington view the idea of retirement, according to the passage?
 - A. With appreciation
 - B. With dread
 - C. With acceptance
 - D. Both A and C

Questions 31—40 are based on the following excerpt from Daniel Kahneman's *Thinking*, *Fast and Slow*. Dr. Kahneman received the 2002 Nobel Memorial Prize in Economics for his work in prospect theory. Kahneman's conceptions of Systems 1 and 2 describe two modes of thought within human brains; System 1 makes quick, impulsive, and instinctive decisions, while System 2 makes slow, deliberate, and reasoned decisions.

It is now a well-established proposition that both self-control and cognitive effort are forms of mental work. Several psychological studies have Line shown that people who are simultaneously challenged

- 5 by a demanding cognitive task and by a temptation are more likely to yield to the temptation. Imagine that you are asked to retain a list of seven digits for a minute or two. You are told that remembering the digits is your top priority. While your attention is
- 10 focused on the digits, you are offered a choice between two desserts: a sinful chocolate cake and a virtuous fruit salad. The evidence suggests that you would be more likely to select the tempting chocolate cake when your mind is loaded with digits. System 1
- 15 has more influence on behavior when System 2 is busy, and it has a sweet tooth.

People who are cognitively busy are also more likely to make selfish choices, use sexist language, and make superficial judgments in social 20 situations. Memorizing and repeating digits loosens

- the hold of System 2 on behavior, but of course cognitive load is not the only cause of weakened selfcontrol. A few drinks have the same effect, as does a sleepless night. The self-control of morning people is
- 25 impaired at night; the reverse is true of night people.

Too much concern about how well one is doing in a task sometimes disrupts performance by loading shortterm memory with pointless anxious thoughts. The conclusion is straightforward: self-control requires 30 attention and effort. Another way of saying this is that controlling thoughts and behaviors is one of the tasks that System 2 performs.

A series of surprising experiments by the psychologist Roy Baumeister and his colleagues has 35 shown conclusively that all variants of voluntary effort — cognitive, emotional, or physical — draw at least partly on a shared pool of mental energy. Their experiments involve successive rather than simultaneous tasks.

- 40 Baumeister's group has repeatedly found that an effort of will or self-control is tiring; if you have had to force yourself to do something, you are less willing or less able to exert self-control when the next challenge comes around. The phenomenon has
- 45 been named ego depletion. In a typical demonstration, participants who are instructed to stifle their emotional reaction to an emotionally charged film will later perform poorly on a test of physical stamina — how long they can maintain a strong grip on a
- 50 dynamometer in spite of increasing discomfort. The emotional effort in the first phase of the experiment

reduces the ability to withstand the pain of sustained muscle contraction, and ego-depleted people therefore succumb more quickly to the urge to quit. In another

- 55 experiment, people are first depleted by a task in which they eat virtuous foods such as radishes and celery while resisting the temptation to indulge in chocolate and rich cookies. Later, these people will give up earlier than normal when faced with a difficult
- 60 cognitive task.

The list of situations and tasks that are now known to deplete self-control is long and varied. All involve conflict and the need to suppress a natural tendency. They include:

- avoiding the thought of white bears
 - inhibiting the emotional response to a stirring film
 - making a series of choices that involve conflict
- *70* trying to impress others
 - responding kindly to a partner's bad behavior
 - interacting with a person of a different race (for prejudiced individuals)
- 75 The list of indications of depletion is also highly diverse:
 - deviating from one's diet
 - overspending on impulsive purchases
 - reacting aggressively to provocation
- *80* persisting less time in a handgrip task
 - performing poorly in cognitive tasks and logical decision making

The evidence is persuasive: activities that impose high demands on System 2 require self-control,

- 85 and the exertion of self-control is depleting and unpleasant. Unlike cognitive load, ego depletion is at least in part a loss of motivation. After exerting selfcontrol in one task, you do not feel like making an effort in another, although you could do it if you really
- 90 had to. In several experiments, people were able to resist the effects of ego depletion when given a strong incentive to do so. In contrast, increasing effort is not an option when you must keep six digits in short-term memory while performing a task. Ego depletion is not
- 95 the same mental state as cognitive busyness.

- 31. The primary purpose of the passage is
 - A. To discuss the differences between cognitive busyness and ego depletion
 - B. To present different models to explain cognitive busyness
 - C. To give examples of ego depletion
 - D. Both B and C
- 32. Under Kahneman's characterization, which of the following would be a symptom of depletion?
 - A. Talking to your boss about a project you've just finished
 - B. Binge eating ice cream
 - C. Thinking about an upcoming test
 - D. Eating celery sticks
- 33. What did the experiment in lines 54-60 demonstrate?
 - A. That self-control is an exercised, rather than passive, mental activity
 - B. That self-control and cognitive busyness are two different things
 - C. That self-control becomes weaker with more difficult cognitive activity
 - D. That depletion is the same for all individuals
- 34. What does "sinful" (line 11) most closely mean in the context of the passage?
 - A. Indulgent
 - B. Morally incorrect
 - C. Blasphemous
 - D. Fatty
- 35. Why does Kahneman open the passage by stating that it is now a "well-established proposition" (line 1) that "self-control and cognitive effort are forms of mental work" (line 3)?
 - A. To establish that both forms of mental work are difficult
 - B. To explore how that preposition came to be wellestablished
 - C. To set the discourse for the passage around both forms of mental work
 - D. Both B and C
- 36. Why does Kahneman use the phrase "loosens the hold" in lines 20—21?
 - A. To conceptualize System 2 to make it easier to understand
 - B. To give it personal qualities for the reader to better

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relate to it

- C. To distinguish System 2 as a character in the passage
- D. To describe how System 2 relates to the Baumeister experiment
- 37. How, does Kahneman assert, are physical and mental work similar?
 - A. Both burn calories
 - B. Both draw on a limited pool of energy
 - C. Both test the limits of self-control
 - D. Both B and C
- 38. Kahneman's writing style can be best described as...
 - A. Arcane
 - B. Esoteric
 - C. Academic
 - D. Accessible

- 39. What is the key distinction Kahneman makes between busyness and depletion?
 - A. Humans can mitigate the effects of busyness but not those of depletion
 - B. Humans respond better to busyness as opposed to depletion
 - C. Humans have workarounds for depletion as opposed to busyness
 - D. Neither; they are synonyms
- 40. Why does Kahneman mention the "drinks" (line 23) and the "sleepless night" (line 24)?
 - A. To be examples of temptations that take away from self-control
 - B. To be factors that can contribute to depletion
 - C. To be factors that can contribute to busyness
 - D. To be rhetorical devices

Questions 41—52 are based on the following passages. The first is an excerpt from *The Fabric of the Cosmos* by Brian Greene, a professor of theoretical physics at Columbia University.

"There is but one truly philosophical problem, and that is suicide," the text began. I winced. "Whether or not the world has three dimensions or the

 $\textit{Line}\xspace$ mind nine or twelve categories," it continued, "comes

- 5 afterward", such questions, the text explained, were part of the game humanity played, but they deserved attention only after the one true issue had been settled. The book was *The Myth of Sisyphus* and was written by the Algerian — born philosopher and Nobel laureate
- 10 Albert Camus. After a moment, the iciness of his words melted under the light of comprehension. Yes, of course, I thought. You can ponder this or analyze that till the cows come home, but the real question is whether all your ponderings and analyses will 15 convince you that life is worth living. That's what it all
 - comes down to. Everything else is detail.

My chance encounter with Camus' book must have occurred during an especially impressionable phase because, more than anything

20 else I'd read, his words stayed with me. Time and again I'd imagine how various people I'd met, or heard about, or had seen on television would answer this primary of all questions. In retrospect, though, it was his second assertion — regarding the role of scientific

- 25 progress that, for me, proved particularly challenging. Camus acknowledged value in understanding the structure of the universe, but as far as 1 could tell, he rejected the possibility that such understanding could make any difference to our
- 30 assessment of life's worth. Now, certainly, my teenage reading of existential philosophy was about as sophisticated as Bart Simpson's reading of Romantic poetry, but even so, Camus' conclusion struck me as off the mark. To this aspiring physicist, it seemed that

35 an informed appraisal of life absolutely required a full understanding of life's arena — the universe. I remember thinking that if our species dwelled in cavernous outcroppings buried deep underground and so had yet to discover the earth's surface, brilliant

- 40 sunlight, an ocean breeze, and the stars that lie beyond, or if evolution had proceeded along a different pathway and we had yet to acquire any but the sense of touch, so everything we knew came only from our tactile impressions of our immediate environment, or
- 45 if human mental faculties stopped developing during early childhood so our emotional and analytical skills never progressed beyond those of a five-year-old — in short, if our experiences painted but a paltry portrait of

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reality — our appraisal of life would be thoroughly
50 compromised. When we finally found our way to earth's surface, or when we finally gained the ability to see, hear, smell, and taste, or when our minds were finally freed to develop as they ordinarily do, our collective view of life and the cosmos would, of
55 necessity, change radically. Our previously compromised grasp of reality would have shed a very

- compromised grasp of reality would have shed a very different light on that most fundamental of all philosophical questions.
- But, you might ask, what of it? Surely, any 60 sober assessment would conclude that although we might not understand everything about the universe every aspect of how matter behaves or life functions we are privy to the defining, broad-brush strokes gracing nature's canvas. Surely, as Camus intimated,
- 65 progress in physics, such as understanding the number of space dimensions; or progress in neuropsychology, such as understanding all the organizational structures in the brain; or, for that matter, progress in any number of other scientific undertakings may fill in
- 70 important details, but their impact on our evaluation of life and reality would be minimal. Surely, reality is what we think it is; reality is revealed to us by our experiences.

To one extent or another, this view of 75 reality is one many of us hold, if only implicitly. I certainly find myself thinking this way in day-today life; it's easy to be seduced by the face nature reveals directly to our senses. Yet, in the decades since first encountering Camus' text, I've learned

- 80 that modern science tells a very different story. The overarching lesson that has emerged from scientific inquiry over the last century is that human experience is often a misleading guide to the true nature of reality. Lying just beneath the
- 85 surface of the everyday is a world we'd hardly recognize. Followers of the occult, devotees of astrology, and those who hold to religious principles that speak to а reality beyond experience have, from widely varying perspectives,
- 90 long since arrived at a similar conclusion. But that's not what I have in mind. I'm referring to the work of ingenious innovators and tireless researchers the men and women of science who have peeled back layer after layer of the 95 cosmic onion, enigma by enigma, and revealed a universe that is at once surprising, unfamiliar, exciting, elegant, and thoroughly unlike what anyone ever expected.

This second passage is an excerpt from Carl Sagan's Cosmos.

- ¹⁰⁰ Every human culture rejoices in the fact that there are cycles in nature. But how, it was thought, could such cycles come about unless the gods willed them? And if there are cycles in the years of humans, might there not be cycles in the aeons of
- 105 the gods? The Hindu religion is the only one of the world's great faiths dedicated to the idea that the Cosmos itself undergoes an immense, indeed an infinite, number of deaths and rebirths. It is the only religion in which the time scales correspond, no
- 110 doubt by accident, to those of modern scientific cosmology. Its cycles run from our ordinary day and night to a day and night of Brahma, 8.64 billion years long, longer than the age of the Earth or the Sun and about half the time since the Big Bang. And there are

115 much longer time scales still.

There is the deep and appealing notion that the universe is but the dream of the god who, after a hundred Brahma years, dissolves himself into a dreamless sleep. The universe dissolves with him — 120 until, after another Brahma century, he stirs,

- an infinite number of other universes, each with its own god dreaming the cosmic dream. These great
- 125 ideas are tempered by another, perhaps still greater. It is said that men may not be the dreams of the gods, but rather that the gods are the dreams of men.

In India there are many gods, and each god has many manifestations. The Chola bronzes, cast in

- 130 the eleventh century, include several different incarnations of the god Shiva. The most elegant and sublime of these is a representation of the creation of the universe at the beginning of each cosmic cycle, a motif known as the cosmic dance of Shiva. The god,
- 135 called in this manifestation Nataraja, the Dance King, has four hands. In the upper right hand is a drum whose sound is the sound of creation. In the upper left hand is a tongue of flame, a reminder that the universe, now newly created, will billions of years 140 from now be utterly destroyed.
 - These profound and lovely images are, I like to imagine, a kind of premonition of modern astronomical ideas. Very likely, the universe has been expanding since the Big Bang, but it is by no
- 145 means clear that it will continue to expand forever. The expansion may gradually slow, stop and reverse itself. If there is less than a certain critical amount of matter in the universe, the gravitation of the receding galaxies will be insufficient to stop the expansion,
- 150 and the universe will run away forever. But if there is more matter than we can see — hidden away in black holes, say, or in hot but invisible gas between the galaxies — then the universe will hold together gravitationally and partake of a very Indian
- 155 succession of cycles, expansion followed by contraction, universe upon universe, Cosmos without end. If we live in such an oscillating universe, then the Big Bang is not the creation of the Cosmos but merely the end of the previous cycle, the destruction 160 of the last incarnation of the Cosmos.
 - Neither of these modern cosmologies may be altogether to our liking. In one, the universe is created, somehow, ten or twenty billion years ago and expands forever, the galaxies mutually receding
- 165 until the last one disappears over our cosmic horizon. Then the galactic astronomers are out of business, the stars cool and die, matter itself decays and the universe becomes a thin cold haze of elementary particles. In the other, the oscillating universe, the
- 170 Cosmos has no beginning and no end, and we are in the midst of an infinite cycle of cosmic deaths and rebirths with no information trickling through the cusps of the oscillation. Nothing of the galaxies, stars,

- planets, life forms or civilizations evolved in the 175 previous incarnation of the universe oozes into the cusp, flutters past the Big Bang, to be known in our present universe. The fate of the universe in either cosmology may seem a little depressing, but we may take solace in the time scales involved. These events
- 180 will occupy tens of billions of years, or more. Human beings and our descendants, whoever they might be, can accomplish a great deal in tens of billions of years, before the Cosmos dies.
- 41. Both authors discuss elements of philosophy and religion as it relates to cosmology. What purposes do these discussions serve in the passages?
 - A. Greene contrasts his view of reality to Camus' arguments as a contrasting backdrop; Sagan discusses religion and science as complementary fields
 - B. Greene tries to integrate Camus' philosophy into his study; Sagan clearly separates religion and science
 - C. Greene adopts a more formal tone by citing Camus; Sagan writes more casually and uses Hindu religion as more of an afterthought
 - D. Greene uses Camus' writings to serve as the introduction of his piece; Sagan closes off by discussing Hindu theology
- 42. How do the authors' tones differ?
 - A. Greene is more critical; Sagan is more accepting
 - B. Greene uses technical language, while Sagan uses more casual diction
 - C. Greene conveys a neutral tone; Sagan is more optimistic
 - D. Greene discusses the mentality behind his view of science, while Sagan recounts scientific discoveries
- 43. What does "oscillating" (line 156) most closely mean in the context of the passage?
 - A. Rotating B. Revolving
 - C. Repeating D. Returning
- 44. What common sentiment is conveyed both in lines 78—
 80 of Greene's passage ("Yet... story") and in lines
 161—162 of Sagan's passage ("Neither... liking")?
 - A. That people generally feel an antipathy towards scientific discovery
 - B. That scientific breakthroughs have often forced people to face inconvenient truths
 - C. That both Greene and Sagan are disturbed by

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unorthodox scientific theories

- D. That both authors find it somewhat difficult to reconcile their perceptions of their realities with scientific facts
- 45. What is the distinction between Greene's two conceptions of reality (lines 74-80)?
 - A. One is a fiction; the other is scientific fact
 - B. One is based on individual perception; the other on scientific observation
 - C. One is Greene's view of the world; the other is Camus' perspective
 - D. One is based on subjective ideals; the other is based on objective reality
- 46. Lines 116—117 ("There... dream") in the second passage, serve best to
 - A. Serve as an introduction to the immense scale of the universe
 - B. Conceptualize the size of the universe
 - C. Illustrate the complexity of the universe with mystical imagery
 - D. Compare the Hindu conception of the universe with the modern scientific view of the cosmos
- 47. Why does Sagan describe the cosmos as a "cycle" (line 133)?
 - A. Sagan recognizes that there is an element of recursion in the cosmos
 - B. Sagan is acknowledging the Hindu worldview
 - C. Sagan imagines that the Hindu view of the universe may well be correct
 - D. Sagan posits that the modern and the Hindu views of the cosmos can coexist
- 48. Both authors would likely agree that
 - A. There is still much to explore in the universe
 - B. Alternative schools of thought offer valuable insights to science
 - C. The dearth of information about the universe gives humanity a meaningful opportunity for exploration and discovery
 - D. Science and philosophy are incompatible

- 49. What is Greene's primary disagreement with Camus?
 - A. Greene believes that Camus is outright incorrect about the nature of life
 - B. Greene asserts that scientific discovery can add meaning to life, while Camus denies this
 - C. Greene argues that suicide is not a philosophical problem, while Camus states the opposite
 - D. Greene does not disagree with Camus at all
- 50. What is a common theme in both passages?
 - A. Both authors confront a difficult cosmic truth through personal experience
 - B. Both authors acknowledge that modern science has its shortcomings
 - C. Both passages confront facts about the universe by asserting human potential
 - D. Both passages recount how different scientific experiments have shaped our perception of reality
- 51. A key difference between the two passages is
 - A. Greene's focus on individual life and perception compared to Sagan's general statements about the universe
 - B. Greene's total rejection of unscientific thought compared to Sagan's open mind
 - C. Sagan's refusal to accept alternative theories, compared to Greene's tolerance
 - D. Sagan's doctrinarian views, compared to Greene's empirical research
- 52. What is the implication in Sagan's passage, lines 125—127 ("It is said ... dreams of men")?
 - A. That the cosmos is a "god"
 - B. That the conception of a "god" was based on a Hindu understanding of the universe
 - C. That it is men, not gods, who decide the fate of the universe
 - D. That gods certainly exist

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