The University of the State of New York

REGENTS HIGH SCHOOL EXAMINATION

REGENTS EXAMINATION

IN

(Common Core)

Thursday, August 18, 2016 — 12:30 to 3:30 p.m., only

The possession or use of any communications device is strictly prohibited when taking this examination. If you have or use any communications device, no matter how briefly, your examination will be invalidated and no score will be calculated for you.

A separate answer sheet has been provided for you. Follow the instructions for completing the student information on your answer sheet. You must also fill in the heading on each page of your essay booklet that has a space for it, and write your name at the top of each sheet of scrap paper.

The examination has three parts. For Part 1, you are to read the texts and answer all 24 multiple-choice questions. For Part 2, you are to read the texts and write one source-based argument. For Part 3, you are to read the text and write a text-analysis response. The source-based argument and text-analysis response should be written in pen. Keep in mind that the language and perspectives in a text may reflect the historical and/or cultural context of the time or place in which it was written.

When you have completed the examination, you must sign the statement printed at the bottom of the front of the answer sheet, indicating that you had no unlawful knowledge of the questions or answers prior to the examination and that you have neither given nor received assistance in answering any of the questions during the examination. Your answer sheet cannot be accepted if you fail to sign this declaration.

DO NOT OPEN THIS EXAMINATION BOOKLET UNTIL THE SIGNAL IS GIVEN.

Part 1

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Directions (1–24): Closely read each of the three passages below. After each passage, there are several multiple-choice questions. Select the best suggested answer to each question and record your answer on the separate answer sheet provided for you. You may use the margins to take notes as you read.

Reading Comprehension Passage A

...Three years in London had not changed Richard, although it had changed the way he perceived the city. Richard had originally imagined London as a gray city, even a black city, from pictures he had seen, and he was surprised to find it filled with color. It was a city of red brick and white stone, red buses and large black taxis, bright red mailboxes and green grassy parks and cemeteries. ...

Two thousand years before, London had been a little Celtic village on the north shore of the Thames, which the Romans had encountered, then settled in. London had grown, slowly, until, roughly a thousand years later, it met the tiny Royal City of Westminster immediately to the west, and, once London Bridge had been built, London touched the town of Southwark directly across the river; and it continued to grow, fields and woods and marshland slowly vanishing beneath the flourishing town, and it continued to expand, encountering other little villages and hamlets as it grew, like Whitechapel and Deptford to the east, Hammersmith and Shepherd's Bush to the west, Camden and Islington in the north, Battersea and Lambeth across the Thames to the south, absorbing all of them, just as a pool of mercury encounters and incorporates smaller beads of mercury, leaving only their names behind.

London grew into something huge and contradictory. It was a good place, and a fine city, but there is a price to be paid for all good places, and a price that all good places have to pay.

After a while, Richard found himself taking London for granted; in time, he began to pride himself on having visited none of the sights of London (except for the Tower of London, when his Aunt Maude came down to the city for a weekend, and Richard found himself her reluctant escort).

But Jessica changed all that. Richard found himself, on otherwise sensible weekends, accompanying her to places like the National Gallery and the Tate Gallery, where he learned that walking around museums too long hurts your feet, that the great art treasures of the world all blur into each other after a while, and that it is almost beyond the human capacity for belief to accept how much museum cafeterias will brazenly charge for a slice of cake and a cup of tea. ...

Richard had been awed by Jessica, who was beautiful, and often quite funny, and was certainly going somewhere. And Jessica saw in Richard an enormous amount of potential, which, properly harnessed by the right woman, would have made him the perfect matrimonial accessory. If only he were a little more focused, she would murmur to herself, and so she gave him books with titles like *Dress for Success* and *A Hundred and Twenty-Five Habits of Successful Men*, and books on how to run a business like a military campaign, and Richard always said thank you, and always intended to read them. In Harvey Nichols's men's fashion department she would pick out for him the kinds of clothes she thought that he should wear—and he wore them, during the week, anyway; and, a year to the day after their first encounter, she told him she thought it was time that they went shopping for an engagement ring.

"Why do you go out with her?" asked Gary, in Corporate Accounts, eighteen months later. "She's terrifying."

Richard shook his head. "She's really sweet, once you get to know her."

Gary put down the plastic troll doll he had picked up from Richard's desk. "I'm surprised she still lets you play with these." ...

It was a Friday afternoon. Richard had noticed that events were cowards: they didn't occur singly, but instead they would run in packs and leap out at him all at once. Take this particular Friday, for example. It was, as Jessica had pointed out to him at least a dozen times in the last month, the most important day of his life. So it was unfortunate that, despite the Post-it note Richard had left on his fridge door at home, and the other Post-it note he had placed on the photograph of Jessica on his desk, he had forgotten about it completely and utterly.

Also, there was the Wandsworth report, which was overdue and taking up most of his head. Richard checked another row of figures; then he noticed that page 17 had vanished, and he set it up to print out again; and another page down, and he knew that if he were only left alone to finish it...if, miracle of miracles, the phone did not ring....It rang. He thumbed the speakerphone.

"Hello? Richard? The managing director needs to know when he'll have the report."

Richard looked at his watch. "Five minutes, Sylvia. It's almost wrapped up. I just have to attach the P & L projection."

"Thanks, Dick. I'll come down for it." Sylvia was, as she liked to explain, "the MD's PA," [Managing Director's Personal Assistant] and she moved in an atmosphere of crisp efficiency. He thumbed the speakerphone off; it rang again, immediately. "Richard," said the speaker, with Jessica's voice, "it's Jessica. You haven't forgotten, have you?"

"Forgotten?" He tried to remember what he could have forgotten. He looked at Jessica's photograph for inspiration and found all the inspiration he could have needed in the shape of a yellow Post-it note stuck to her forehead.

"Richard? Pick up the telephone."

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He picked up the phone, reading the Post-it note as he did so. "Sorry, Jess. No, I hadn't forgotten. Seven P.M., at Ma Maison Italiano. Should I meet you there?"

"Jessica, Richard. Not Jess." She paused for a moment. "After what happened last time? I don't think so. You really could get lost in your own backyard, Richard." ...

"I'll meet you at your place," said Jessica. "We can walk down together."

"Right, Jess. Jessica—sorry."

"You have confirmed our reservation, haven't you, Richard."

"Yes," lied Richard earnestly. The other line on his phone had begun to ring. "Jessica, look, I..."

"Good," said Jessica, and she broke the connection. He picked up the other line.

"Hi Dick. It's me, Gary." Gary sat a few desks down from Richard. He waved. "Are we still on for drinks? You said we could go over the Merstham account."

"Get off the bloody phone, Gary. Of course we are." Richard put down the phone. There was a telephone number at the bottom of the Post-it note; Richard had written the Post-it note to himself, several weeks earlier. And he *had* made the reservation: he was almost certain of that. But he had not confirmed it. He had kept meaning to, but there had been so much to do and Richard had known that there was plenty of time. But events run in packs...

Sylvia was now standing next to him. "Dick? The Wandsworth report?"

"Almost ready, Sylvia. Look, just hold on a sec, can you?"

He finished punching in the number, breathed a sigh of relief when somebody answered. "Ma Maison. Can I help you?"

"Yes," said Richard. "A table for three, for tonight. I think I booked it. And if I did I'm confirming the reservation. And if I didn't, I wondered if I could book it. Please." No, they had no record of a table for tonight in the name of Mayhew. Or Stockton. Or Bartram—Jessica's surname. And as for booking a table...

They had put down the phone.

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"Richard?" said Sylvia. "The MD's waiting."

"Do you think," asked Richard, "they'd give me a table if I phoned back and offered them extra money?" ...

—Neil Gaiman excerpted and adapted from *Neverwhere*, 1997 Avon Books

- 1 The author most likely includes the description of London in lines 1 through 19 to
 - (1) provide reasons for Richard's dislike of the city
 - (2) highlight opportunities for Richard's career in the city
 - (3) convey a sense of Richard's frustration with the city
 - (4) illustrate the nature of Richard's life in the city
- 2 The figurative language used in line 15 reinforces the
 - (1) growth of the city
 - (2) problems with development
 - (3) increase in isolation
 - (4) history of the towns
- 3 The narrator uses lines 24 through 29 to help the reader understand Richard's
 - (1) continuous efforts to save money while on dates
 - (2) willingness to tolerate undesirable situations to please others
 - (3) overall acceptance of cultural experiences in the city
 - (4) affection for newfound experiences when shared with others

- 4 In the context of the text as a whole, which statement regarding lines 41 through 43 is true?
 - (1) Gary is jealous of Richard because he has a girlfriend.
 - (2) Gary has a moody temperament and hides his feelings.
 - (3) Richard has a plan and wishes to keep it a secret.
 - (4) Richard is in a state of denial regarding his relationship.
- 5 How do lines 46 and 47 contribute to the characterization of Richard?
 - (1) by portraying him as inefficient at organizing his time
 - (2) by indicating that he works well under pressure
 - (3) by describing him as likely to succeed
 - (4) by suggesting that he is unmotivated in his job
- 6 The narrator's description of Sylvia as moving "in an atmosphere of crisp efficiency" (lines 62 and 63) presents a
 - (1) shift

- (3) contrast
- (2) possibility
- (4) solution

- 7 Lines 68 through 72 contribute to a central idea by highlighting Jessica's
 - (1) domineering nature
 - (2) compassionate side
 - (3) lack of responsibility
 - (4) sense of humor
- 8 The narrator's use of dialogue in lines 68 through 81 enhances a mood of
 - (1) satisfaction
- (3) confidence
- (2) stress
- (4) remorse
- 9 Richard's question in lines 97 and 98 reveals his
 - (1) subtle refinement
- (3) honest gratitude
- (2) suppressed hostility
- (4) quiet desperation

- 10 Which quote best reflects a central theme in the text?
 - (1) "London grew into something huge and contradictory ... and a price that all good places have to pay." (lines 17 through 19)
 - (2) "Richard checked another row of figures ... and he set it up to print out again;" (lines 54 and 55)
 - (3) "Richard looked at his watch. Five minutes, Sylvia. It's almost wrapped up. I just have to attach the P & L projection." (lines 59 and 60)
 - (4) "He finished punching in the number, breathed a sigh of relief when somebody answered. 'Ma Maison. Can I help you?' " (lines 89 and 90)

Reading Comprehension Passage B

We Are Many

Of the many men whom I am, whom we are, I cannot settle on a single one.

They are lost to me under the cover of clothing. They have departed for another city.

When everything seems to be set to show me off as a man of intelligence, the fool I keep concealed on my person takes over my talk and occupies my mouth.

On other occasions, I am dozing in the midst of people of some distinction, and when I summon my courageous self, a coward completely unknown to me swaddles¹ my poor skeleton in a thousand tiny reservations.

When a stately home bursts into flames, instead of the fireman I summon, an arsonist bursts on the scene, and he is I. There is nothing I can do. What must I do to distinguish myself?
How can I put myself together?

All the books I read lionize² dazzling hero figures, always brimming with self-assurance. I die with envy of them; and, in films where bullets fly on the wind, I am left in envy of the cowboys, left admiring even the horses.

But when I call upon my dashing being, out comes the same old lazy self,

30 and so I never know just who I am, nor how many I am, nor who we will be being. I would like to be able to touch a bell and call up my real self, the truly me, because if I really need my proper self,

35 I must not allow myself to disappear.

¹swaddles — wraps

²lionize — glorify

While I am writing, I am far away; and when I come back, I have already left. I should like to see if the same thing happens to other people as it does to me,

- to see if as many people are as I am, and if they seem the same way to themselves.

 When this problem has been thoroughly explored, I am going to school myself so well in things that, when I try to explain my problems,
- 45 I shall speak, not of self, but of geography.

—Pablo Neruda from *We Are Many*, 1970 translated by Alastair Reid Grossman Publishers

- 11 The overall purpose of the figurative language in lines 12 through 14 is to show the narrator's
 - (1) contempt for self-reliance
 - (2) desire for adventure
 - (3) lack of self-confidence
 - (4) jealousy of writers
- 12 A primary function of the questions in lines 19 and 20 is to
 - (1) introduce the narrator's biases
 - (2) challenge the narrator's beliefs
 - (3) clarify the narrator's dilemma
 - (4) explain the narrator's decision

- 13 The contradictions presented throughout the poem serve to illustrate the relationship between
 - (1) society's conflicts and the narrator's reaction
 - (2) the narrator's sensibilities and his determination
 - (3) society's expectations and the narrator's possibilities
 - (4) the narrator's idealism and his reality
- 14 The solution proposed in lines 42 through 45 can best be described as
 - (1) balanced
- (3) inappropriate
- (2) universal
- (4) unrealistic

Reading Comprehension Passage C

...By natural design, dogs' ears have evolved to hear certain kinds of sounds. Happily, that set of sounds overlaps with those we can hear and produce: if we utter it, it will at least hit the eardrum of a nearby dog. Our auditory range is from 20 hertz to 20 kilohertz: from the lowest pitch on the longest organ pipe to an impossibly squeaky squeak. We spend most of our time straining to understand sounds between 100 hertz and 1 kilohertz, the range of any interesting speech going on in the vicinity. Dogs hear most of what we hear and then some. They can detect sounds up to 45 kilohertz, much higher than the hair cells of our ears bother to bend to. Hence the power of the dog whistle, a seemingly magical device that makes no apparent sound and yet perks the ears of dogs for blocks around. We call this sound "ultrasonic," since it's beyond our ken, but it is within the sonic range for many animals in our local environment. Don't think for a moment that apart from the occasional dog whistle, the world is quiet for dogs up at those high registers. Even a typical room is pulsing with high frequencies, detectable by dogs constantly. Think your bedroom is quiet when you rise in the morning? The crystal resonator used in digital alarm clocks emits a never-ending alarm of high-frequency pulses audible to canine ears. Dogs can hear the navigational chirping of rats behind your walls and the bodily vibrations of termites within your walls. That compact fluorescent light you installed to save energy? You may not hear the hum, but your dog probably can.

The range of pitches we are most intent on are those used in speech. Dogs hear all sounds of speech, and are nearly as good as we are at detecting a change of pitch—relevant, say, for understanding statements, which end in a low pitch, versus questions, which in English end in a raised pitch: "Do you want to go for a walk(?)" With the question mark, this sentence is exciting to a dog with experience going on walks with humans. Without it, it is simply noise. Imagine the confusion generated by the recent growth of "up-talking," speech that ends every sentence with the sound of a question?

If dogs understand the stress and tones—the *prosody*—of speech, does this hint that they understand language? This is a natural but vexed² question. Since language use is one of the most glaring differences between the human animal and all other animals, it has been proposed as the ultimate, incomparable criterion for intelligence. This raises serious hackles³ in some animal researchers (not thought of as a hackled species, ironically), who have set about trying to demonstrate what linguistic ability animals have. Even those researchers who may agree that language is necessary for intelligence have nonetheless added reams of results to the growing pile of evidence of linguistic ability in non-human animals. All parties agree, though, that there has been no discovery of a humanlike language—a corpus⁴ of infinitely combinable words that often carry many definitions, with rules for combining words into meaningful sentences—in animals.

This is not to say that animals might not understand some of our language use, even if they don't produce it themselves. There are, for instance, many examples of animals taking advantage of the communicative system of nearby unrelated animal species. Monkeys can make use of nearby birds' warning calls of a nearby predator to themselves take protective action. Even an animal who deceives another animal by mimicry—which some snakes, moths, and even flies can do—is in some way using another species's [sic] language.

The research with dogs suggests that they do understand language—to a limited degree. On the one hand, to say that dogs understand *words* is a misnomer. Words exist in a

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¹ken — recognition

²vexed — problematic

³raises serious hackles — arouses anger

⁴corpus — collection

language, which itself is product of a culture; dogs are participants in that culture on a very different level. Their framework for understanding the application of the word is entirely different. There is, no doubt, more to the words of their world than Gary Larson's Far Side comics suggest: eat, walk, and fetch. But he is on to something, insofar as these are organizing elements of their interaction with us: we circumscribe the dog's world to a small set of activities. Working dogs seem miraculously responsive and focused compared to city pets. It is not that they are innately more responsive or focused, but that their owners have added to their vocabularies types of things to do.

One component in understanding a word is the ability to discriminate it from other words. Given their sensitivity to the prosody of speech, dogs do not always excel at this. Try asking your dog on one morning to go for a walk; on the next, ask if your dog wants to snow forty locks in the same voice. If everything else remains the same, you'll probably get the same, affirmative reaction. The very first sounds of an utterance seem to be important to dog perception, though, so changing the swallowed consonants for articulated ones and the long vowels for short ones—ma for a polk?—might prompt the confusion merited by this gibberish. Of course humans read meaning into prosody, too. English does not give the prosody of speech syntactical leverage but it is still part of how we interpret "what has just been said."

If we were more sensitive to the sound of what we say to dogs, we might get better responses from them. High-pitched sounds mean something different than low sounds; rising sounds contrast with falling sounds. It is not accidental that we find ourselves cooing to an infant in silly, giddy tones (called *motherese*)—and might greet a wagging dog with similar baby talk. Infants can hear other speech sounds, but they are more interested in motherese. Dogs, too, respond with alacrity ⁵ to baby talk—partially because it distinguishes speech that is directed at them from the rest of the continuous vammering above their heads. Moreover, they will come more easily to high-pitched and repeated call requests than to those at a lower pitch. What is the ecology behind this? High-pitched sounds are naturally interesting to dogs: they might indicate the excitement of a tussle or the shrieking of nearby injured prey. If a dog fails to respond to your reasonable suggestion that he come right now, resist the urge to lower and sharpen your tone. It indicates your frame of mind and the punishment that might ensue for his prior uncooperativeness. Correspondingly, it is easier to get a dog to sit on command to a longer, descending tone rather than repeated, rising notes. Such a tone might be more likely to induce relaxation, or preparation for the next command from their talky human. ...

> —Alexandra Horowitz excerpted from *Inside of a Dog*, 2010 Scribner

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 $^{^{5}}$ alacrity — eagerness

- 15 Lines 1 through 11 introduce the central idea of the passage by
 - (1) explaining how ear structure affects sound
 - (2) describing various frequencies dogs hear
 - (3) explaining various ways humans hear
 - (4) describing how dog whistle tones differ
- 16 Lines 19 through 22 best support the idea that
 - (1) dogs cannot learn to obey human signals
 - (2) human actions are difficult for dogs to interpret
 - (3) humans can verbally communicate with dogs
 - (4) dogs can learn complex human language
- 17 Based on lines 19 through 25, humans can possibly confuse dogs by
 - (1) speaking to dogs in a nonsense language
 - (2) giving dogs only direct commands
 - (3) making gestures when speaking to dogs
 - (4) altering the intonation of familiar words
- 18 Lines 26 through 29 illustrate that language use is an indicator of
 - (1) higher-level thinking
 - (2) basic survival instinct
 - (3) increased emotional response
 - (4) problem-solving skills
- 19 In lines 33 through 36, the author states there is agreement that non-human animals cannot
 - (1) master complicated directions
 - (2) duplicate human sound pitches
 - (3) create human sentence structures
 - (4) interpret foreign languages
- 20 The primary function of the examples in lines 38 through 42 is to show how some animals can
 - (1) imitate behavior and sound
 - (2) foster community and diversity
 - (3) transform from prey to predator
 - (4) compromise freedom for safety

- 21 The author uses the term "gibberish" in line 60 to emphasize the
 - (1) importance of word order
 - (2) complexity of spoken sounds
 - (3) relevance of hidden gestures
 - (4) necessity of voice and movement
- 22 Which sentence best restates a central idea in lines 57 through 65?
 - (1) High-pitched sounds often cause dogs to become agitated.
 - (2) How we speak to dogs is more important than what we say.
 - (3) Dogs must learn to interpret human speech early in life.
 - (4) Dogs become distressed when they hear baby talk.
- 23 The author's reference to "motherese" (line 66) helps to illustrate a connection between the
 - (1) combinations of languages and the effects on listeners
 - (2) volume of speech and possible misperception
 - (3) importance of word choice and its impact on understanding
 - (4) styles of spoken communication and likely responses
- 24 The primary purpose of the text is to
 - (1) explain a popular myth regarding dogs' behavior
 - (2) promote a new method for working with dogs
 - (3) educate people about dogs' experience with sound
 - (4) present an alternative to traditional dog training

Part 2

Argument

Directions: Closely read each of the *four* texts provided on pages 12 through 19 and write a source-based argument on the topic below. You may use the margins to take notes as you read and scrap paper to plan your response. Write your argument beginning on page 1 of your essay booklet.

Topic: Should the United States government create strict sugar regulations?

Your Task: Carefully read each of the *four* texts provided. Then, using evidence from at least *three* of the texts, write a well-developed argument regarding whether or not the United States government should create strict sugar regulations. Clearly establish your claim, distinguish your claim from alternate or opposing claims, and use specific, relevant, and sufficient evidence from at least *three* of the texts to develop your argument. Do *not* simply summarize each text.

Guidelines:

Be sure to:

- Establish your claim regarding whether or not the United States government should create strict sugar regulations
- Distinguish your claim from alternate or opposing claims
- Use specific, relevant, and sufficient evidence from at least *three* of the texts to develop your argument
- Identify each source that you reference by text number and line number(s) or graphic (for example: Text 1, line 4 or Text 2, graphic)
- Organize your ideas in a cohesive and coherent manner
- Maintain a formal style of writing
- Follow the conventions of standard written English

Texts:

Text 1 – FDA Urged to Regulate Sugar in Drinks

Text 2 – Sugar Should Be Regulated As Toxin, Researchers Say

Text 3 – The Toxic Truth About Sugar

Text 4 – Sugar Taxes Are Unfair and Unhealthy

Text 1

FDA Urged to Regulate Sugar in Drinks

WASHINGTON — The US Food and Drug Administration [FDA] should regulate the amount of added sugars in soda and other sweetened beverages to reverse the obesity epidemic, a Washington-based nutrition activist group urged in a petition signed by Harvard School of Public Health researchers, the Boston Public Health Commission, and others.

"The FDA considers sugar to be a safe food at the recommended level of consumption, but Americans are consuming two to three times that much," Michael Jacobson, executive director of the Center for Science in the Public Interest, which filed the petition, said at a press briefing on Wednesday. He added that the average American consumes 78 pounds of added sugars each year, mostly from high fructose corn syrup prevalent in sugary sodas, sports drinks, and fruit punch. ...

Over the past half-century, Americans have dramatically increased their intake of sugary drinks, and research suggests this has contributed to the obesity epidemic and a rise in related diseases such as type 2 diabetes, heart disease, and a variety of cancers.

"The evidence is very robust that when we eat more sugar we gain weight and when we eat less, we lose weight," said Dr. Walter Willett, chairman of nutrition at the Harvard School of Public Health, who also spoke at the briefing. "Each 12-ounce serving of soda a person consumes each day raises type 2 diabetes risk by 10 to 15 percent, and many Americans are consuming five or six servings."

While the FDA has the authority to set limits on ingredients on its "generally recognized as safe" list, it has not done so for many of them, including table sugar and high fructose corn syrup.

Jeffrey Senger, former acting chief counsel of the FDA who is now a partner at the law firm Sidley Austin, said it is unlikely the agency would act to restrict sugar. "Any food, if it's abused, can be unhealthy," he said. "Sugar isn't the same thing as arsenic. It's not a food that's inherently unsafe." ...

She [FDA spokeswoman, Shelly Burgess] confirmed that the latest petition was received and would be reviewed by FDA officials, but added that the FDA was not aware of any evidence highlighting added safety risks from high fructose corn syrup compared with other sugars such as honey, table sugar, or molasses.

That suggests that the agency might have a hard time requiring Coke or Pepsi to limit their products to 10 grams of added sugar per serving — what many public health specialists recommend — without also requiring the same limits on cereal, baked goods, and other processed foods.

"To limit the amount of added sugars in beverages, the FDA would need to establish that there is enough scientific evidence to justify limiting these ingredients and to go through a rulemaking process that allows for public comment," said Miriam Guggenheim, a partner in the food and beverage practice at Covington & Burling LLP in Washington, D.C.

Taking a firm position against government regulations to limit added sugars, the American Beverage Association, which represents soft drink manufacturers, pointed out in a statement on its website that companies have already made efforts to reduce sugar in sweetened beverages.

"Today about 45 percent of all non-alcoholic beverages purchased have zero calories," the group said, "and the overall average number of calories per beverage serving is down 23 percent since 1998." ...

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About half of Americans consume sugary beverages on any given day, according to the latest data from the federal Centers for Disease Control and Prevention, and consumption of sugary beverages has increased among children and adults over the past 30 years.

—Deborah Kotz excerpted and adapted from "FDA Urged to Regulate Sugar in Drinks" http://www.bostonglobe.com, February 14, 2013

Text 2

Sugar Should Be Regulated As Toxin, Researchers Say

A spoonful of sugar might make the medicine go down. But it also makes blood pressure and cholesterol go up, along with your risk for liver failure, obesity, heart disease and diabetes.

Sugar and other sweeteners are, in fact, so toxic to the human body that they should be regulated as strictly as alcohol by governments worldwide, according to a commentary in the current issue of the journal Nature by researchers at the University of California, San Francisco (UCSF).

The researchers propose regulations such as taxing all foods and drinks that include added sugar, banning sales in or near schools and placing age limits on purchases.

Although the commentary might seem straight out of the Journal of Ideas That Will Never Fly, the researchers cite numerous studies and statistics to make their case that added sugar — or, more specifically, sucrose, an even mix of glucose and fructose found in high-fructose corn syrup and in table sugar made from sugar cane and sugar beets — has been as detrimental to society as alcohol and tobacco.

Sour words about sugar

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...Many researchers are seeing sugar as not just "empty calories," but rather a chemical that becomes toxic in excess. At issue is the fact that glucose from complex carbohydrates, such as whole grains, is safely metabolized by cells throughout the body, but the fructose element of sugar is metabolized primarily by the liver. This is where the trouble can begin — taxing the liver, causing fatty liver disease, and ultimately leading to insulin resistance, the underlying causes of obesity and diabetes.

Added sugar, more so than the fructose in fiber-rich fruit, hits the liver more directly and can cause more damage — in laboratory rodents, anyway. Some researchers, however, remained unconvinced of the evidence of sugar's toxic effect on the human body at current consumption levels, as high as they are.

Economists to the rescue

[Robert] Lustig, a medical doctor in UCSF's Department of Pediatrics, compares added sugar to tobacco and alcohol (coincidentally made from sugar) in that it is addictive, toxic and has a negative impact on society, thus meeting established public health criteria for regulation. Lustig advocates a consumer tax on any product with added sugar.

Among Lustig's more radical proposals are to ban the sale of sugary drinks to children under age 17 and to tighten zoning laws for the sale of sugary beverages and snacks around schools and in low-income areas plagued by obesity, analogous to alcoholism and alcohol regulation.

Economists, however, debate as to whether a consumer tax — such as a soda tax proposed in many U.S. states — is the most effective means of curbing sugar consumption. Economists at Iowa State University led by John Beghin suggest taxing the sweetener itself at the manufacturer level, not the end product containing sugar.

This concept, published last year in the journal Contemporary Economic Policy, would give companies an incentive to add less sweetener to their products. After all, high-fructose corn syrup is ubiquitous¹ in food in part because it is so cheap and serves as a convenient substitute for more high-quality ingredients, such as fresher vegetables in processed foods.

 $^{^{1}}$ ubiquitous — present everywhere

Some researchers argue that saturated fat, not sugar, is the root cause of obesity and chronic disease. Others argue that it is highly processed foods with simple carbohydrates. Still others argue that it is a lack of physical exercise. It could, of course, be a matter of all these issues.

—Christopher Wanjek excerpted and adapted from "Sugar Should Be Regulated As Toxin, Researchers Say" http://www.livescience.com, February 1, 2012

Text 3

The Toxic Truth About Sugar

...No Ordinary Commodity

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In 2003, social psychologist Thomas Babor and his colleagues published a landmark book called *Alcohol: No Ordinary Commodity*, in which they established four criteria, now largely accepted by the public-health community, that justify the regulation of alcohol — unavoidability (or pervasiveness throughout society), toxicity, potential for abuse and negative impact on society. Sugar meets the same criteria, and we believe that it similarly warrants some form of societal intervention.

First, consider unavoidability. Evolutionarily, sugar as fruit was available to our ancestors for only a few months a year (at harvest time), or as honey, which was guarded by bees. But in recent years, sugar has been added to virtually every processed food, limiting consumer choice. Nature made sugar hard to get; man made it easy. In many parts of the world, people are consuming an average of more than 500 calories per day from added sugar alone.

Now, let's consider toxicity. A growing body of epidemiological and mechanistic¹ evidence argues that excessive sugar consumption affects human health beyond simply adding calories. Importantly, sugar induces all of the diseases associated with metabolic syndrome. This includes: hypertension (fructose increases uric acid, which raises blood pressure); high triglycerides and insulin resistance through synthesis of fat in the liver; diabetes from increased liver glucose production combined with insulin resistance; and the ageing process, caused by damage to lipids, proteins and DNA [deoxyribonucleic acid] through non-enzymatic binding of fructose to these molecules. It can also be argued that fructose exerts toxic effects on the liver similar to those of alcohol. This is no surprise, because alcohol is derived from the fermentation of sugar. Some early studies have also linked sugar consumption to human cancer and cognitive decline.

Sugar also has a clear potential for abuse. Like tobacco and alcohol, it acts on the brain to encourage subsequent intake. There are now numerous studies examining the dependence-producing properties of sugar in humans. Specifically, sugar dampens the suppression of the hormone ghrelin, which signals hunger to the brain. It also interferes with the normal transport and signalling of the hormone leptin, which helps to produce the feeling of satiety.² And it reduces dopamine signalling in the brain's reward centre, thereby decreasing the pleasure derived from food and compelling the individual to consume more.

Finally, consider the negative effects of sugar on society. Passive smoking and drink-driving fatalities provided strong arguments for tobacco and alcohol control, respectively. The long-term economic, health-care and human costs of metabolic syndrome place sugar overconsumption in the same category. The United States spends \$65 billion in lost productivity and \$150 billion on health-care resources annually for co-morbidities³ associated with metabolic syndrome. Seventy-five per cent of all US health-care dollars are now spent on treating these diseases and resultant disabilities. Because 75% of military applicants are now rejected for obesity-related reasons, the past three US surgeons general and the chairman of the US Joint Chiefs of Staff have declared obesity a "threat to national security".

 $^{^{1}\}mathrm{epidemiological}$ and mechanistic — evidence based on the study of the causes, incidence, and treatment of diseases

²satiety — fullness

³co-morbidities — diseases that occur simultaneously

How to Intervene

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How can we reduce sugar consumption? After all, sugar is natural. Sugar is a nutrient. Sugar is pleasure. So is alcohol, but in both cases, too much of a good thing is toxic. It may be helpful to look to the many generations of international experience with alcohol and tobacco to find models that work. So far, evidence shows that individually focused approaches, such as school-based interventions that teach children about diet and exercise, demonstrate little efficacy. Conversely, for both alcohol and tobacco, there is robust evidence that gentle 'supply side' control strategies which stop far short of all-out prohibition — taxation, distribution controls, age limits — lower both consumption of the product and accompanying health harms. Successful interventions all share a common end-point: curbing availability. . . .

DEADLY EFFECT Excessive consumption of fructose can cause many of the same health problems as alcohol.				
Chronic ethanol exposure	Chronic fructose exposure			
Hematologic disorders				
Electrolyte abnormalities				
Hypertension	Hypertension (uric acid)			
Cardiac dilatation				
Cardiomyopathy	Myocardial infarction (dyslipidemia, insulin resistance)			
Dyslipidemia	Dyslipidemia (de novo lipogenesis)			
Pancreatitis	Pancreatitis (hypertriglyceridemia)			
Obesity (insulin resistance)	Obesity (insulin resistance)			
Malnutrition	Malnutrition (obesity)			
Hepatic dysfunction (alcoholic steatohepatitis)	Hepatic dysfunction (non-alcoholic steatohepatitis)			
Fetal alcohol syndrome				
Addiction	Habituation, if not addiction			

The Possible Dream

Government-imposed regulations on the marketing of alcohol to young people have been quite effective, but there is no such approach to sugar-laden products. Even so, the city of San Francisco, California, recently instituted a ban on including toys with unhealthy meals such as some types of fast food. A limit — or, ideally, ban — on television commercials for products with added sugars could further protect children's health. ...

Ultimately, food producers and distributors must reduce the amount of sugar added to foods. But sugar is cheap, sugar tastes good, and sugar sells, so companies have little incentive to change. Although one institution alone can't turn this juggernaut 5 around, the US Food

⁴efficacy — power to produce an effect

⁵juggernaut — powerful force

and Drug Administration could "set the table" for change. To start, it should consider removing fructose from the Generally Regarded as Safe (GRAS) list, which allows food manufacturers to add unlimited amounts to any food. Opponents will argue that other nutrients on the GRAS list, such as iron and vitamins A and D, can also be toxic when over-consumed. However, unlike sugar, these substances have no abuse potential. Removal from the GRAS list would send a powerful signal to the European Food Safety Authority and the rest of the world. ...

—Robert H. Lustig, Laura A. Schmidt, and Claire D. Brindis excerpted and adapted from "The Toxic Truth About Sugar" *Nature*, February 2, 2012

Text 4

Sugar Taxes Are Unfair and Unhealthy

If the regulatory discussion about sugar is going to be based on science, rather than science fiction, it needs to move beyond kicking the soda can.

Conventional wisdom says draconian¹ regulation—specifically, a high tax—on sugary drinks and snacks reduces unhealthy consumption, and thereby improves public health. There are many reasons, however, why high sugar taxes are at best unsuccessful, and at worst economically and socially harmful.

Research finds that higher prices don't reduce soda consumption, for example. No scientific studies demonstrate a difference either in aggregate² soda consumption or in child and adolescent Body Mass Index [BMI] between the two thirds of states with soda taxes and those without such taxes.

The study that did find taxes might lead to a moderate reduction in soda consumption also found this had no effect on adolescent obesity, as the reduction was completely offset by increases in consumption of other calorific drinks.

Economic research finds sugar taxes are a futile instrument in influencing the behavior and habits of the overweight and the obese. Why do sugar taxes fail? Those consumers who strongly prefer unhealthy foods continue to eat and drink according to their individual preferences until such time as it becomes prohibitively expensive to do so.

Demand for food is largely insensitive to price. A 10 percent increase in price reduces consumption by less than 1 percent. Applied to soda, this means that to reduce consumption by 10 percent, the tax rate on sugary drinks would need to be 100 percent!

A sugar tax also has undesirable social and economic consequences. This tax is economically regressive, as a disproportionate share of the tax is paid by low earners, who pay a higher proportion of their incomes in sales tax and also consume a disproportionate share of sugary snacks and drinks.

Such taxes also have perverse, unintended consequences. Taxes on sugary snacks lead many consumers to replace the taxed food with equally unhealthy foods. Poorer consumers react to higher food prices not by changing their diets but by consuming even fewer healthy foods, such as fruits and vegetables, and eating more processed foods. For instance, taxes levied specifically on sugar content increase saturated fat consumption.

Sugar taxes have failed where they've been tried, and are unfair and unhealthy. Given that there's no compelling evidence they'll improve public health, we can't justify using the tax code to shape the sweetness of our dietary choices.

—Patrick Basham excerpted and adapted from "Sugar Taxes Are Unfair and Unhealthy" http://www.usnews.com, March 30, 2012

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¹draconian — severe

 $^{^2}$ aggregate — total

Part 3

Text-Analysis Response

Your Task: Closely read the text provided on pages 21 and 22 and write a well-developed, text-based response of two to three paragraphs. In your response, identify a central idea in the text and analyze how the author's use of **one** writing strategy (literary element or literary technique or rhetorical device) develops this central idea. Use strong and thorough evidence from the text to support your analysis. Do **not** simply summarize the text. You may use the margins to take notes as you read and scrap paper to plan your response. Write your response in the spaces provided on pages 7 through 9 of your essay booklet.

Guidelines:

Be sure to:

- Identify a central idea in the text
- Analyze how the author's use of **one** writing strategy (literary element or literary technique or rhetorical device) develops this central idea. Examples include: characterization, conflict, denotation/connotation, metaphor, simile, irony, language use, point-of-view, setting, structure, symbolism, theme, tone, etc.
- Use strong and thorough evidence from the text to support your analysis
- Organize your ideas in a cohesive and coherent manner
- Maintain a formal style of writing
- Follow the conventions of standard written English

...In the air now, I feel a new excitement, a slight surge of energy, a new light of a new dawn. This anticipation is like grass in the path of a distant approaching thunderstorm. I feel that the "spirit line" out of our complacencies in art has been drawn. A fresh expression of our passions, our joys and pains is in the making. A new generation of interpretations of our legends and stories, strengths and weaknesses as Navajo people are replacing the images of stoic tribalism that so pervaded our recent art history. To paraphrase another artist, "realness instead of redness." I feel as do other young fine artists of the northern reservation, that there is much potential for individual expression of beauty, of power, of mysteries to be created within the perimeter of our culture in this time. But what inspires us young Navajo artists to create these interpretations of our culture? What force drives us to seek fresher means of expression? We all have our reasons and means to do this. It may be money, it may be recognition or self-satisfaction. For me, it is a means of confronting myself, my fears and mysteries. A means of coming to terms with childhood phobias and a recognition of my strength and weaknesses in this day. In Navajo society, it is necessary to journey that road to self-discovery. To attain a spiritual growth, we will have to go beyond the world we retreat into. We must recognize and acknowledge this new high tech world, yet still maintain an identity. We must draw a line beyond which we don't venture. Be able to compromise wisely and know how much to expose of ourselves. Know ourselves and our past, yet still have faith in the future. We are a segment of a society that has been thrust into the 20th century all within 30 years. We will not allow ourselves to become casualties in this collision of cultures. The art that we represent must be flexible and adaptable, like the nature of our grandfather, if it is to survive, lest we become brittle and blow away like shells of dry piñon nuts. The art that we represent, like the role of the medicine man of today, must help in creating a positive evolution into this new era for our people and those coming after us. It will scream of tomorrow, yet be dressed in the truth of our past. I believe this to be a collective therapy for us, for our culture and our art. ...

When I was around four years old, I traveled with my grandmother to the foot of the Sacred Mountain of the West. During this time, she told me many things. She told me that we are responsible in maintaining and nurturing a good identity with our grandparents every single day. Each day before the sun rises, we should greet the new coming day with pollen and re-affirm our relationship with it. To a young piñon tree, we greet "Yá'áhtééh shima'sáni" (Hello, my grandmother); to a young juniper tree; "Yá áhtééh shí cheii" (hello, my grandfather). In this manner, we bring new light and life to our world. At this age I learned to feel, see and smell my world. I still associate lots of pieces of past experiences, painful and pleasant, to these subtleties. There are few things more pleasant than waking up in the morning to see dew on blades of grass, or to hear rolling of the thunder as dark clouds gather on spring days. To smell wet sand and hear the raindrops dancing on parched ground. The cornstalks weeping for joy. Forming figures from clay and feeling like a god. The soft crunching sound in the snow as I make my way home with a rabbit or two on moonlit winters [sic] night, or even being momentarily lost in a blizzard. To feel as a tumbleweed rolling across rough landscape, to see the last ray of sunlight hitting the mesa after an autumn day, light reflecting off a distant passing car makes me feel vulnerable and sad at times. These past feelings and experiences, associated with time and places, I regard as a reservoir of my inspiration.

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¹stoic — calm and uncomplaining

Like most young Navajos my age, we spent many winter nights gathered around 45 our father, listening to stories passed down through generations. We sat in expectation as we journeyed up from the womb of the Mother in creation stories. We sat mesmerized by coyote stories. Laughing at his antics and frightened by his cruelties. We sat in awe as First Man and First Woman brought forth life upon the Fourth World. We journey back 50 from the west, the home of Changing Woman, into the midst of the Four Sacred Mountains after the creation of our clans. "Slayer of Enemies" and "Born for Water," the hero and savior of the fourth world, came alive for us these nights. I felt the pain of their fathers' testing in the roaring fire of the hearth. Their war with the Monster Gods raged as the snow storm dusted outside our door, snow sifting through the cracks of the door. Shadows leaping on cribbed wall of the *hooghan*² brought to life the animal beings as the shoe game 55 was created. As the nights were on, the youngest ones of us fell asleep where we sat. My mother's spindle scratching the floor set the tempo of these late night journeys...back.

From these sources I draw my inspirations. I am humbled by its beauty and strengthened by its power. With great respect, I relive this in every creation, every all-night Blessingway chant and every vision of glory upon this land. With good intentions, I recreate this in every piece of art: intentions of preserving and passing on, intentions of sharing and inviting all good-willed people for the sake of us as American Indians in general, as Navajos in particular and the beauty of our culture. This culture through art, in whatever form, however expressed, will endure. ...

—Shonto W. Begay excerpted from "The View From The Mesa: A Source of Navajo Creativity" Anii Ánáádaalyaa'Ígíí (Recent ones that are made), 1988 Wheelright Museum of the American Indian

 $^{^2\}mathrm{hooghan}$ — traditional dwelling of the Navajo people

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