Choice $B$ is incorrect because it is stated in the passage. Choices $C$ and $D$ are incorrect because they are not assumptions made by the authors.

## QUESTION 50.

Choice $\mathbf{B}$ is the best answer. The table shows that 77 percent of the honeybee colonies with colony collapse disorder were infected by all four pathogens.

Choices A, C, and D are incorrect because they do not identify the percent of honeybee colonies with colony collapse disorder that were infected by all four pathogens as based on data in the table.

## QUESTION 51.

Choice $\mathbf{D}$ is the best answer. The table shows that 81 percent of colonies without colony collapse disorder were affected by the pathogen Nosema ceranae.

Choices A, B, and C are incorrect because they do not identify the pathogen that infected the highest percentage of honeybee colonies without colony collapse disorder as based on data in the table.

## QUESTION 52.

Choice D is the best answer. The table discusses pathogen occurrence in honeybee colonies, but it includes no information as to whether these honeybees were infected with mites. Because the table does not suggest mites infested the honeybee colonies, no conclusions can be made as to whether mites increased the honeybees' "susceptibility to secondary infection with fungi, bacteria or viruses" (lines 4-5).

Choices A, B, and C are incorrect because the table provides no information about whether these honeybees were infected with mites.

## Section 2: Writing and Language Test

## QUESTION 1.

Choice $\mathbf{A}$ is the best answer because by providing the comparative adjective "healthier" and the word "more" to make "productive" comparative, it creates a parallel structure within the list that begins with "happier."

Choices B, C, and D are incorrect because none creates a parallel structure within the list of qualities.

## QUESTION 2.

Choice B is the best answer. The ways in which exposure to natural light affects employees is the main subject of the passage.

Choices A, C, and D are incorrect because none introduces the topic discussed in the remainder of the passage.

## QUESTION 3.

Choice $\mathbf{C}$ is the best answer. It accurately notes that the proposed sentence would be placed directly between the first mention of circadian rhythms and the explanation of the term.

Choices A, B, and D are incorrect because each misinterprets the relationship between the proposed additional text and the ideas in the paragraph.

## QUESTION 4.

Choice $\mathbf{C}$ is the best answer. It provides the correct possessive construction for "body," which must be a singular noun when discussed in general terms as in this sentence. Choice C also provides the correct plural construction for "clocks."

Choices A, B, and D are incorrect because each applies either a possessive or a plural construction in a place where it doesn't belong.

## QUESTION 5.

Choice A is the best answer. The singular verb "is" agrees with the singular noun "absenteeism."

Choices B, C, and D are incorrect because each provides a verb that either fails to agree with the singular subject "absenteeism" or introduces redundancy.

## QUESTION 6.

Choice B is the best answer. It contains a direct reference to productivity, the topic introduced in the previous sentence.

Choices A, C, and D are incorrect because none directly addresses employee productivity, the primary subject of the previous sentence.

## QUESTION 7.

Choice A is the best answer. It opens with a reference to lowered worker productivity, creating a transition from the previous paragraph, and clearly positions the high energy costs of artificial light sources as an additional disadvantage.

Choices B, C, and D are incorrect because none of the choices offer an adequate transition from the previous paragraph: Each awkwardly inserts the issue of lower worker productivity into a statement about the high energy costs of artificial light sources.

## QUESTION 8.

Choice D is the best answer. The word "annual" is adequate to communicate that the savings occurred every year.

Choices A, B, and C are incorrect because each proposes an option that would result in a redundancy with "annual."

## QUESTION 9.

Choice C is the best answer. It provides a transitional adverb that accurately communicates that this sentence describes an option that companies could choose ("light tubes") instead of the option described in the previous sentence ("full-pane windows").

Choices A, B, and D are incorrect because each proposes a transitional adverb that does not accurately reflect the relationship between this sentence and the one preceding it.

## QUESTION 10.

Choice C is the best answer. It provides the correct relative pronoun to correspond with the plural referent "light tubes" and the correct verb to introduce the definition that follows.

Choices $\mathrm{A}, \mathrm{B}$, and D are incorrect because each offers a pronoun inappropriate for opening a dependent clause defining "light tubes."

## QUESTION 11.

Choice B is the best answer. The preposition "of" idiomatically follows the noun "means," particularly as a way to connect it to another noun or verb.

Choices A, C, and D are incorrect because each results in nonstandard phrasing with "means."

## QUESTION 12.

Choice A is the best answer. The plural reflexive pronoun "themselves" corresponds with the plural noun "settlers."

Choices B, C, and D are incorrect because each provides either a nonstandard phrase or a singular pronoun that does not correspond with "settlers."

## QUESTION 13.

Choice $\mathbf{C}$ is the best answer. It creates a transition from the poor food quality mentioned in the previous sentence to the information about Harvey in the remainder of the sentence.

Choices $\mathrm{A}, \mathrm{B}$, and D are incorrect because none offers a transition from the previous sentence or a detail that corresponds precisely with the information in the remainder of the sentence.

## QUESTION 14.

Choice D is the best answer. It correctly provides a comma to close the modifying clause "an English-born entrepreneur," which opens with a comma.

Choices A, B, and C are incorrect because each proposes punctuation that creates an inappropriately strong separation between the subject "Fred Harvey" and the verb "decided."

## QUESTION 15.

Choice B is the best answer. It provides the plural verb and plural possessive pronoun that grammatically correspond to the plural referent "Harvey Houses."

Choices A, C, and D are incorrect because each either fails to provide a verb that corresponds with the plural referent "Harvey Houses" or fails to provide the appropriate possessive pronoun.

## OUESTION 16.

Choice C is the best answer. It accurately echoes an earlier characterization of the food as being of "terrible quality," while maintaining the established tone of the passage.

Choices A, B, and D are incorrect either because the word is less formal than the established tone of the passage ("icky") or because it illogically attributes agency to food ("sinister", "surly").

## QUESTION 17.

Choice C is the best answer. It accurately interprets "not content to follow conventional business practices" as logically introducing the new practice of "employing women" described in the following sentences.

Choices A, B, and D are incorrect because none recognizes why the sentence is relevant to this particular location in the passage.

## QUESTION 18.

Choice B is the best answer. It is concise and free of redundancies.
Choices A, C, and D are incorrect because each pairs "overwhelming" and "tremendous," adjectives so close in meaning that together they present a redundancy.

## QUESTION 19.

Choice D is the best answer. It contains the pronoun "they," a necessary reference to "such regulations" in the previous clause.

Choices A, B, and C are incorrect because each lacks a necessary subject, such as a pronoun or noun.

## QUESTION 20.

Choice C is the best answer. It refers directly to benefits for the restaurants' female employees, the subject of the previous sentence.

Choices A, B, and D are incorrect because none logically builds upon the sentence that precedes it.

## QUESTION 21.

Choice $\mathbf{D}$ is the best answer. It provides punctuation that indicates that the opening dependent clause modifies the subject "Harvey Girls."

Choices A, B, and C are incorrect because each uses the punctuation for a dependent clause ("Living independently and demonstrating an intense work ethic") as if it were an independent clause.

## QUESTION 22.

Choice $\mathbf{A}$ is the best answer. It recognizes that the new information supports the previous sentence's claim that "the Harvey Girls became known as a transformative force."

Choices B, C, and D are incorrect because each misinterprets the relationship between the proposed text and the passage.

## QUESTION 23.

Choice A is the best answer. It opens with a clause that identifies how 1-MCP affects apples, which focuses the sentence on 1-MCP as the subject and allows the ideas in the sentence to progress logically.

Choices B, C, and D are incorrect because each displays awkward or flawed modification and progression of ideas, or creates redundancy.

## QUESTION 24.

Choice D is the best answer. Only the comma is necessary to separate "ethylene" from the appositive noun phrase that defines it.

Choices A, B, and C are incorrect because each creates a comma splice and/ or adds unnecessary words.

## QUESTION 25.

Choice B is the best answer. It offers an adjective that accurately describes fresh apples.

Choices A, C, and D are incorrect because each proposes an adjective that does not describe a plausible fruit texture.

## OUESTION 26.

Choice A is the best answer. The plural possessive pronoun "their" corresponds with the plural referent "apples."

Choices B, C, and D are incorrect because none provides a pronoun that is both possessive and plural.

## OUESTION 27.

Choice D is the best answer. It provides the pronoun "who," which accurately identifies the referent "consumers" as people and appropriately begins the relative clause.

Choices A, B, and C are incorrect because each contains a pronoun that either does not correspond with the human referent "consumers" or does not correctly begin the relative clause.

## QUESTION 28.

Choice B is the best answer. It provides the present tense verb "do," which corresponds to the present tense established earlier in the sentence.

Choices A, C, and D are incorrect because each contains a verb that deviates from the simple present tense established in the sentence.

## QUESTION 29.

Choice B is the best answer. It provides a colon to appropriately introduce the clause that follows, an elaboration on the preceding claim that Bartlett pears are an example of fruit that "do not respond as well to 1-MCP treatment."

Choices A, C, and D are incorrect because each either creates a comma splice or uses a transitional phrase ("For instance") illogically.

## QUESTION 30.

Choice $B$ is the best answer. Sentence 4 begins with "But," indicating a contrast with a previous idea, and goes on to mention that 1-MCP can have negative effects. Sentence 1 continues the discussion of benefits of 1-MCP, and sentence 2 names the adverse effect of limiting scent production, so the most logical spot for sentence 4 is between these sentences.

Choices A, C, and D are incorrect because each proposes placing the sentence at a point where it would compromise the logical development of ideas in the paragraph.

## QUESTION 31.

Choice $\mathbf{D}$ is the best answer. It most accurately reflects the data in the graph, which shows a steep decrease in percentage of flesh browning when untreated apples are left in the open air for three weeks rather than placed immediately into a controlled atmosphere.

Choices A, B, and C are incorrect because each presents an inaccurate interpretation of the data in the graph.

## QUESTION 32.

Choice B is the best answer. It accurately interprets the data as indicating that "roughly half of their flesh turns brown" when apples are treated with $1-\mathrm{MCP}$ : both bars representing 1-MCP treatment are near the $50 \%$ line.

Choices A, C, and D are incorrect because each proposes an inaccurate interpretation of the data.

## QUESTION 33.

Choice C is the best answer. It describes an action, weighing the relative values, that fruit sellers must take as a result of 1-MCP's limitations.

Choices A, B, and D are incorrect because none specifically connects the shortcomings of 1-MCP with any action on the part of fruit sellers.

## QUESTION 34.

Choice $\mathbf{D}$ is the best answer. It clearly communicates that the preceding dependent clause modifies "works by human artists."

Choices A, B, and C are incorrect because each fails to link the preceding dependent clause to an independent clause, resulting in an incomplete sentence.

## QUESTION 35.

Choice B is the best answer. It provides the necessary em dash to close the aside about artist C.M. Coolidge, which opens with an em dash.

Choices A, C, and D are incorrect because each provides closing punctuation for the aside that does not correspond with the opening punctuation.

## QUESTION 36.

Choice C is the best answer. The plural verb "portray" corresponds with the plural noun "works of art."

Choices $\mathrm{A}, \mathrm{B}$, and D are incorrect because none provides the plural verb in the present tense that the sentence requires.

## QUESTION 37.

Choice D is the best answer. It names a "museum in Russia," which is the subject of the next paragraph.

Choices A, B, and C are incorrect because each provides an overly general phrase that does not specifically link to the paragraph that follows.

## OUESTION 38.

Choice C is the best answer. It creates parallelism with the verb "could damage" that appears earlier in the clause ("rodents that could damage . . . [and could] scare off visitors").

Choices A, B, and D are incorrect because each presents a verb tense that is inconsistent with the sentence's other present-tense verb ("could damage") that shares "mice, rats, and other rodents" as its subject.

## QUESTION 39.

Choice C is the best answer. Sentence 5, which discusses Peter the Great's daughter continuing his tradition, most logically follows the sentence about Peter the Great.

Choices A, B, and D are incorrect because each presents a placement that would compromise the logical development of the paragraph.

## QUESTION 40.

Choice B is the best answer. "Commissioned" describes the act of hiring an artist to create a specific work.

Choices A, C, and D are incorrect because each provides a word that does not correspond logically with the context.

## QUESTION 41.

Choice $\mathbf{D}$ is the best answer. It provides punctuation that clearly places the noun phrase "digital artist Eldar Zakirov" as an appositive identifying the person mentioned in the previous phrase, "The person chosen for this task."

Choices A, B, and C are incorrect because each fails to open and close the uninterrupted appositive noun phrase "digital artist Eldar Zakirov" with commas.

## OUESTION 42.

Choice A is the best answer. The phrase "noble individuals" corresponds with the subsequent examples of portraits where the cats are depicted as "aristocratic," "stately," and like a "trusted royal advisor."

Choices B, C, and D are incorrect because each provides a statement that does not logically connect to the examples that follow.

## QUESTION 43.

Choice $\mathbf{D}$ is the best answer. It accurately states that the information in the proposed additional sentence is not related to formal portraits of cats, the main topic of the paragraph.

Choices A, B, and C are incorrect because each fails to recognize that the proposed sentence interrupts the logical development of the paragraph.

## OUESTION 44.

Choice $\mathbf{D}$ is the best answer. The tone corresponds with that established in the passage, and the phrasing appropriately focuses on the cats' contribution to protecting artwork rather than on simply killing rodents.

Choices A, B, and C are incorrect because none makes explicit the link between the cats' hunting activities and the service to the museum.

## Section 3: Math Test - No Calculator

## QUESTION 1.

Choice C is correct. The painter's fee is given by $n K \ell h$, where $n$ is the number of walls, $K$ is a constant with units of dollars per square foot, $\ell$ is the length of each wall in feet, and $h$ is the height of each wall in feet. Examining this equation shows that $\ell$ and $h$ will be used to determine the area of each wall. The variable $n$ is the number of walls, so $n$ times the area of the walls will give the amount of area that will need to be painted. The only remaining variable is $K$, which represents the cost per square foot and is determined by the painter's time and the price of paint. Therefore, $K$ is the only factor that will change if the customer asks for a more expensive brand of paint.

Choice A is incorrect because a more expensive brand of paint would not cause the height of each wall to change. Choice $B$ is incorrect because a more expensive brand of paint would not cause the length of each wall to change. Choice D is incorrect because a more expensive brand of paint would not cause the number of walls to change.

## QUESTION 2.

Choice $\mathbf{D}$ is correct. Dividing each side of the equation $3 r=18$ by 3 gives $r=6$. Substituting 6 for $r$ in the expression $6 r+3$ gives $6(6)+3=39$.

Alternatively, the expression $6 r+3$ can be rewritten as $2(3 r)+3$. Substituting 18 for $3 r$ in the expression $2(3 r)+3$ yields $2(18)+3=36+3=39$.

