

The University of the State of New York

REGENTS HIGH SCHOOL EXAMINATION

COMPREHENSIVE EXAMINATION

IN

ENGLISH**SESSION ONE****Thursday, June 14, 2007 — 9:15 a.m. to 12:15 p.m., only**

The last page of this booklet is the answer sheet for the multiple-choice questions. Fold the last page along the perforations and, slowly and carefully, tear off the answer sheet. Then fill in the heading of your answer sheet. Now circle “Session One” and fill in the heading of each page of your essay booklet.

This session of the examination has two parts. Part A tests listening skills; you are to answer all six multiple-choice questions and write a response, as directed. For Part B, you are to answer all ten multiple-choice questions and write a response, as directed.

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

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

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

Part A

Overview: For this part of the test, you will listen to an account about the power of books, answer some multiple-choice questions, and write a response based on the situation described below. You will hear the account twice. You may take notes on the next page anytime you wish during the readings.

The Situation: To open the local library's book fair, you have been asked to give a speech about the power of books. In preparation for writing your speech, listen to an account by author Gary Paulsen. Then use relevant information from the account to write your speech.

Your Task: Write a speech for the local library's book fair in which you discuss the power of books.

Guidelines:

Be sure to

- Tell your audience what they need to know about the power of books
- Use specific, accurate, and relevant information from the account to support your discussion
- Use a tone and level of language appropriate for a speech at a local library's book fair
- Organize your ideas in a logical and coherent manner
- Indicate any words taken directly from the account by using quotation marks or referring to the speaker
- Follow the conventions of standard written English

NOTES

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

Part B

Directions: Read the text and study the graphic on the following pages, answer the multiple-choice questions, and write a response based on the situation described below. You may use the margins to take notes as you read and scrap paper to plan your response.

The Situation: As part of a unit on contemporary issues, your science class is preparing a panel discussion on the social responsibility of scientists. In preparing for the panel discussion, your teacher has asked you to write an essay in which you discuss what volcanologists are doing to lessen the dangers of volcanic eruptions.

Your Task: Using relevant information from *both* documents, write an essay for your science class in which you discuss what volcanologists are doing to lessen the dangers of volcanic eruptions.

Guidelines:

Be sure to

- Tell your audience what they need to know about what volcanologists are doing to lessen the dangers of volcanic eruptions
- Use specific, accurate, and relevant information from the text *and* the graphic to support your discussion
- Use a tone and level of language appropriate for an essay for your science class
- Organize your ideas in a logical and coherent manner
- Indicate any words taken directly from the text by using quotation marks or referring to the author
- Follow the conventions of standard written English

Text

...There are about 1,500 active volcanoes, not counting hundreds more under the oceans, and any of them could erupt at any time, said Dr. Tom Casadevall, western regional director of the United States Geological Survey in Menlo Park, Calif[ornia]. Of the 1,500, 583 have exploded within the last 400 years, making them particularly dangerous. Each year, scientists observe 50 to 60 volcanoes in various stages of eruption, some gently extruding lava like red hot toothpaste down hillsides, others heaving molten rock particles and noxious gases many miles up into the atmosphere.

The number of people living on the sides of volcanoes and in the valleys below has skyrocketed, said Dr. Stanley Williams, a volcanologist at Arizona State University in Tempe. At least 500 million people live dangerously close to volcanoes, he said. Many dwell in megacities in Asia and Latin America — Tokyo, Manila, Jakarta, Mexico City, Quito — or in cities of at least a million people. Here in the United States, the people of Seattle and Tacoma live in the shadow of Mount Rainier, a 13,000-foot volcano whose mudflows have swept through the places where the cities are situated....

Most of the time, the people who colonize danger areas do not know any better. And the people who do know better, scientists and civil disaster officials, “are not always listened to,” said Dr. Grant Heiken, a volcanologist at the Los Alamos National Laboratory in New Mexico.

For example, scientists issued a warning when a high volcano, capped with ice, began rumbling in the mountains of Colombia in 1985. On Nov[ember] 13, the icecap exploded above the town of Novado del Ruiz. The eruption melted snow fields that picked up debris and went roaring down the side of the volcano toward the villages 30 to 40 miles away. The residents were warned that night that a large volcanic mudflow was on the way, Dr. Heiken said. “But it was raining,” he said. “People said, ‘Why worry, the volcano is far away.’ They had only to walk 100 yards to a hill to be safe. That night, 26,000 people died.”

Scientists were horrified, said Dr. Chris Newhall, a volcanologist at the United States Geological Survey at the University of Washington in Seattle. This episode and other natural disasters prompted the United Nations to declare the 1990’s the International Decade of Natural Hazard Reduction, he said. “The notion was, look, the world population is growing, the hazards are not getting any less,” he said. “People are moving into marginal lands that are more prone to disasters — volcanoes, floods, earthquakes and hurricanes. The basic idea was to encourage countries to take a hard look at the hazards that their populations were facing and to undertake projects to try and reduce risks.”

But the United Nations did not have money for the program, Dr. Newhall said. The International Decade of Hazard Reduction has existed in name only.

So the scientists began taking action on their own. Under the auspices of the International Association of Volcanology and Chemistry of the Earth’s Interior, “we volcanologists got together and scratched our heads for ideas,” Dr. Newhall said. “We came up with three.”

First, they made a video that depicts what volcanoes can do to people and property, with such horrifying accuracy that it is not recommended for children under 15. It is being shown to mayors and other public officials in charge of getting people to evacuate when volcanoes threaten to explode.

Second, the scientists picked 15 volcanoes around the world to study intensely. These so-called decade volcanoes are near large population centers and could erupt any time. Workshops have been held at most of them, bringing

together scientists and disaster relief officials from the local regions.

Third, there has been an effort to make better predictions of when volcanoes will erupt, using new scientific instruments and insights.

55 Although real progress has been made, volcanologists face a couple of intractable¹ problems, Dr. Williams said. One is the tendency for people to deny danger even when it is obvious. Also, once a threat is passed, they tend to dismiss it. “They forget that grandma once told a story about how her grandmother was killed by a volcano,” he said. And second is the sheer perversity² of volcanoes. They may show all the signs and symptoms of erupting and then quiet down, 60 leading the public to accuse scientists of “crying wolf.”...

The major cause of death in volcanoes is not hot lava or rivers of mud, but rather glowing clouds of super-hot gas and ash particles that silently sweep down the volcano’s flank and across the countryside at 60 miles an hour, vaporizing everything in their path. These pyroclastic³ flows can knock down stone walls 10 65 feet thick and have killed thousands of people in less than two minutes, he said.

In the movies, people outrun the flows, but in real life, the flows desiccate⁴ the flesh and fry the lungs of everyone in their path. Ninety-eight percent of the people in Guatemala live on the surface of a pyroclastic flow that raced over the countryside 75,000 years ago, Dr. Williams said.

70 From watching volcano movies and films of the rather gentle and atypical volcanoes in Hawaii, people think they can walk away from danger, Dr. Heiken said. The volcanologists’ video shows otherwise. It is very blunt and shows dead bodies, he said. “When people see it, they gulp and say, ‘Could that really happen here? How far did you say the town was from that volcano?’”

75 In 1991, a rough cut of the newly made video was rushed to the Philippines, where Mount Pinatubo was threatening to erupt. The day after it was shown on television, 50,000 people evacuated voluntarily. A few days later, the volcano erupted, spewing 12 cubic kilometers of material. “We are convinced that the video saved tens of thousands of lives,” Dr. Heiken said.

80 Getting the word out and convincing people to evacuate is a huge challenge, Dr. Williams said. Ultimately, whether people live or die depends as much on communication as on science. “We try to teach people how not to freak out,” he said. “They think falling ash is lethal, but it’s not. The problem is that the ash is three times heavier than water so their roof can collapse in hours. We teach 85 people to get under the strongest table in the room, near the corner. The air is full of static electricity, so radios and traffic lights go haywire and they get scared.”

Such public education saves lives, Dr. Heiken said. In September 1994, a volcano at Rabaul in Papua New Guinea destroyed 75 percent of the homes in the city. But because the citizens had been trained in evacuation procedures, 90 they did not panic and got away safely. Only five people died....

—Sandra Blakeslee
excerpted from “Facing the Peril of Earth’s
Cauldrons, Scientists Try to Save Lives”
The New York Times, August 26, 1997

¹intractable — not easily managed

²perversity — defying reason

³pyroclastic — formed as a result of volcanic action

⁴desiccate — dry out

Forecasting a Volcanic Frenzy

Surveillance by satellite is costly and still in its infancy. Nevertheless it offers some of the best future prospects in forecasting volcanic eruptions. **The Global Positioning System (GPS)** for example is used to monitor ground displacements, including those around volcanoes, which might pinpoint future activity. GPS uses data transmitted by orbiting satellites.

- **Seismology.** Sensors buried in the ground or set on rocks pick up faint vibrations indicating deep movements of magma.

Plume

Crater

Lava dome

- **Seismometer**

- **Tilt meters.** Sensors like those of a carpenter's level can tell if accumulating magma is beginning to swell the volcano's upper reaches.

- **Scanning the Sky for Clues**
A new technique tries to find hints of impending chaos in the volcanic plume. High levels of carbon dioxide, read remotely by a small instrument far from the scene, may give safe and reliable warnings of volcanic upheaval.

- **Crack measurement.** Sensors and surveying can reveal changes in the size of cracks and gullies on a volcano's flanks.

- **Ground crack meters**

Monitoring is an expensive endeavor, and not all active volcanoes are monitored. Still, if people living around volcanoes are aware of some of the precursor phenomena that occur, they may be able to communicate their findings of anomalous¹ events to scientists who begin monitoring on a regular basis and help prevent pending disaster.

Education and communication are essential in reducing risk from volcanic hazards!

¹anomalous — unusual

Sources: (adapted) Dr. Stanley N. Williams, National Autonomous University of Mexico; "Understanding Earth" (W. H. Freeman); Prof. Stephen A. Nelson, "Volcanic Hazards & Prediction of Volcanic Eruptions," www.tulane.edu; "Prediction of Danger," <http://library.thinkquest.org>

Underlying crust

Magma

Multiple-Choice Questions

Directions (7–16): Select the best suggested answer to each question and write its number in the space provided on the answer sheet. The questions may help you think about ideas and information you might want to use in your writing. You may return to these questions anytime you wish.

- 7 The world's 1,500 active volcanoes have the common characteristic of
- (1) location
 - (2) height
 - (3) unpredictability
 - (4) unattractiveness
- 8 According to the text, people are often victimized by volcanoes because people
- (1) believe myths
 - (2) ignore warnings
 - (3) lack transportation
 - (4) treasure valuables
- 9 The mission of the International Decade of Natural Hazard Reduction was threatened by a lack of
- (1) program funding
 - (2) natural disasters
 - (3) cooperative scientists
 - (4) national legislation
- 10 Volcanologists created a video in order to educate
- (1) authorities
 - (2) scientists
 - (3) merchants
 - (4) children
- 11 Scientists selected 15 “decade volcanoes” to study because these were
- (1) less researched
 - (2) essentially dormant
 - (3) easily accessible
 - (4) most threatening
- 12 “Pyroclastic flows” (line 64) are dangerous because of their
- (1) weight
 - (2) speed
 - (3) noise
 - (4) unpredictability
- 13 The text indicates that the eruptions of Mt. Pinatubo and Rabaul were unusual because of the
- (1) amount of property saved
 - (2) number of warnings issued
 - (3) number of residents evacuated
 - (4) amount of data obtained
- 14 According to the graphic, seismometers measure
- (1) distance
 - (2) heat
 - (3) fumes
 - (4) motion
- 15 According to the graphic, satellite monitoring of volcanoes is
- (1) temporary
 - (2) promising
 - (3) erroneous
 - (4) traditional
- 16 According to the graphic, where are tilt meters and crack measurement sensors placed?
- (1) along the slopes
 - (2) within the crater
 - (3) high in the air
 - (4) under the magma

After you have finished these questions, turn to page 5. Review **The Situation** and read **Your Task** and the **Guidelines**. Use scrap paper to plan your response. Then write your response to Part B, beginning on page 7 of your essay booklet.

COMPREHENSIVE EXAMINATION IN ENGLISH

SESSION ONE

Thursday, June 14, 2007 — 9:15 a.m. to 12:15 p.m., only

ANSWER SHEET

Session One – Essay A _____
Essay B _____

Session Two – Essay A _____
Essay B _____

Total Essay Score

Session One –
A–Multiple Choice _____
B–Multiple Choice _____

Session Two –
A–Multiple Choice _____

Total Multiple Choice

Final Score

Tear Here

Student Sex: Male Female

School Grade Teacher

Write your answers to the multiple-choice questions for Part A and Part B on this answer sheet.

Part A

Part B

1 _____

7 _____

2 _____

8 _____

3 _____

9 _____

4 _____

10 _____

5 _____

11 _____

6 _____

12 _____

13 _____

14 _____

15 _____

16 _____

HAND IN THIS ANSWER SHEET WITH YOUR ESSAY BOOKLET,
SCRAP PAPER, AND EXAMINATION BOOKLET.

Your essay responses for Part A and Part B should be written in the essay booklet.

I do hereby affirm, at the close of this examination, that I had no unlawful knowledge of the questions or answers prior to the examination and that I have neither given nor received assistance in answering any of the questions during the examination.

Signature

Tear Here

Tear Here

Tear Here