

The University of the State of New York

REGENTS HIGH SCHOOL EXAMINATION

**GLOBAL HISTORY
AND GEOGRAPHY**

Wednesday, January 28, 2004 — 9:15 a.m. to 12:15 p.m., only

Student Name _____

School Name _____

Print your name and the name of your school on the lines above. Then turn to the last page of this booklet, which is the answer sheet for Part I. 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 print your name and the name of your school in the heading of each page of your essay booklet.

This examination has three parts. You are to answer **all** questions in all parts. Use black or dark-blue ink to write your answers.

Part I contains 50 multiple-choice questions. Record your answers to these questions on the separate answer sheet.

Part II contains one thematic essay question. Write your answer to this question in the essay booklet, beginning on page 1.

Part III is based on several documents:

Part III A contains the documents. Each document is followed by one or more question(s). In the test booklet, write your answer to each question on the lines following that question. Be sure to enter your name and the name of your school on the first page of this section.

Part III B contains one essay question based on the documents. Write your answer to this question in the essay booklet, beginning on page 7.

When you have completed the examination, you must sign the statement printed on the Part I 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 I

Answer all questions in this part.

Directions (1–50): For each statement or question, write on the separate answer sheet the *number* of the word or expression that, of those given, best completes the statement or answers the question.

- 1 • What to produce?
• How to produce?
• For whom to produce?

Which social scientist studies how these questions would be answered for a specific society?

- (1) a sociologist
 - (2) an economist
 - (3) an anthropologist
 - (4) a geographer

- 2 How did topography and climate affect the history of Africa?

 - (1) The slave trade declined in western Africa.
 - (2) Islam spread into southern Africa.
 - (3) European colonization of central Africa was delayed.
 - (4) Trade increased between southern and northern Africa.

- 3 Italy, Korea, Spain, and India are similar in that each is considered

 - (1) an archipelago
 - (2) a peninsula
 - (3) a landlocked nation
 - (4) an island nation

- 5 According to Buddhist principles, believers can end personal suffering by

 - (1) doing good deeds
 - (2) eliminating selfish desires
 - (3) making pilgrimages to Mecca
 - (4) relying on divine help

- 6 Christianity, Islam, and Judaism are similar in that they all ask their followers to

 - (1) believe in reincarnation
 - (2) strive for nirvana
 - (3) follow a code of behavior
 - (4) practice polytheism

- 7 Shintoism and animism share a belief in the importance of

 - (1) reincarnation
 - (2) spirits in nature
 - (3) holy books
 - (4) missionaries

- 8 In a comparison of the ancient cities of Athens and Sparta, Sparta placed more emphasis on

 - (1) education
 - (2) military service
 - (3) family order
 - (4) human rights

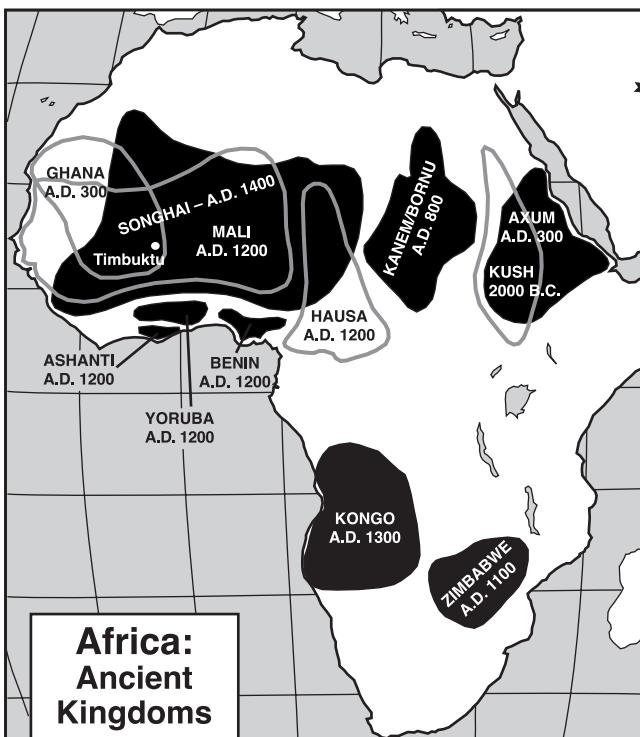
- 9 One way in which the Twelve Tables and Justinian's Code were similar is that both provided

 - (1) a standardized system of laws
 - (2) a means of achieving social equality
 - (3) the freedom to pursue their own religion
 - (4) the right to a public education

- 10 After the western Roman Empire fell to Germanic invaders in the 5th century A.D., the eastern part of the empire eventually became known as the

 - (1) Byzantine Empire
 - (2) Carthaginian Empire
 - (3) Islamic Empire
 - (4) Persian Empire

Base your answer to question 11 on the map below and on your knowledge of social studies.



Source: Sue Ann Kime, et al., *World Studies: Global Issues & Assessments*, N & N Publishing, Inc. (adapted)

11 What is a valid conclusion that can be reached by studying this map?

- (1) Africans had centralized governments during the age of European feudalism.
 - (2) African kingdoms did not exist before the Europeans arrived in Africa.
 - (3) African civilizations existed only in southern Africa.
 - (4) Africa's civilizations established many trade routes to India.
-

12 The Age of Pericles in Athens, the Gupta Empire in India, and the Tang dynasty in China all experienced a golden age with

- (1) advancements in the principles of democratic governments
- (2) outstanding contributions in the arts and sciences
- (3) the end of foreign domination
- (4) the furthest expansion of their borders

13 The travels of Marco Polo resulted in the

- (1) introduction of gunpowder to China
- (2) decline of Mongol rule in China
- (3) expansion of trade between China and Europe
- (4) use of Confucian teachings in Europe

14 • In less than 50 years, it was the largest unified land empire in history.

- In 1279, it was the first foreign group to gain complete control of China.
- It made the caravan routes across Asia safe for trade and travel.
- When attempting to conquer Japan in 1274 and 1281, its fleets were destroyed by storms.

Which empire is most closely associated with these statements?

- | | |
|--|---|
| <ol style="list-style-type: none"> (1) Persian (2) Gupta | <ol style="list-style-type: none"> (3) Ottoman (4) Mongol |
|--|---|

15 The wealth and power of Mali's ruler, Mansa Musa, were significant because they contributed to the

- (1) start of the Crusades
- (2) spread of Islam
- (3) growth of European imperialism
- (4) rise of Arab nationalism

16 An important effect of the Protestant Reformation in Europe was that it strengthened the

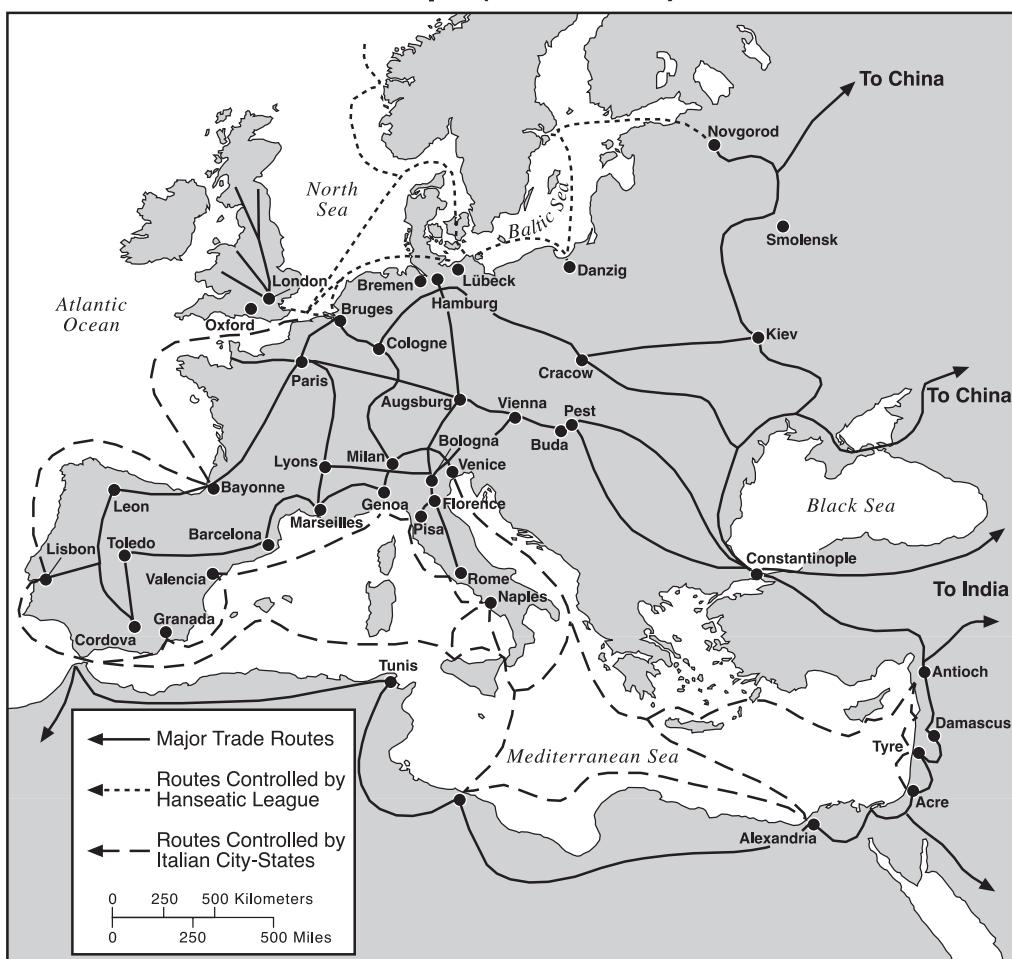
- (1) power of monarchies
- (2) power of the pope
- (3) belief in polytheism
- (4) unity of Europe

17 How did the Inca adapt to their physical environment?

- (1) They built large fishing fleets to feed their populations.
- (2) They built footbridges that connected their roads across the Andes.
- (3) They established extensive trade agreements with Europe.
- (4) They raised cattle and horses on the pampas.

Base your answer to question 18 on the map below and on your knowledge of social studies.

Europe (1280–1500)



Source: Henry Brun et al., *Reviewing Global History and Geography*, AMSCO (adapted)

18 Which conclusion can be drawn from the information provided by the map?

- (1) Africa was Europe's most active trading partner.
- (2) The Hanseatic League controlled trade in the Black Sea.
- (3) Asians and Europeans traded primarily by water routes.
- (4) A vast network of trade routes connected the centers of trade in Europe.

19 The need to possess warm-water ports greatly influenced the foreign policy of which nation?

- | | |
|-------------|------------|
| (1) England | (3) France |
| (2) Russia | (4) Egypt |

20 The astrolabe and improvements in cartography helped Europeans to

- (1) launch the Crusades
- (2) defeat the Mongols
- (3) expel the Moors
- (4) explore the Western Hemisphere

21 The purpose of colonies is to ship raw materials to the colonial power and buy finished goods from the colonial power.

This statement reflects the basic idea of which economic system?

- | | |
|---------------|------------------|
| (1) socialism | (3) mercantilism |
| (2) communism | (4) capitalism |

Base your answers to questions 22 and 23 on the quotation below and on your knowledge of social studies.

“...Finally, let us put together the things so great and so august [exalted] which we have said about royal authority. Behold an immense people united in a single person; behold this holy power, paternal and absolute; behold the secret cause which governs the whole body of the state, contained in a single head: you see the image of God in the king, and you have the idea of royal majesty. God is holiness itself, goodness itself, and power itself. In these things lies the majesty of God. In the image of these things lies the majesty of the prince. . . .”

— Bishop Jacques-Bénigne Bossuet, 1679

22 This passage suggests that the authority to rule in 17th-century France was based on

- (1) popular sovereignty
- (2) parliamentary consent
- (3) feudal obligation
- (4) divine right

23 In this passage, Bossuet was describing the power held by

- | | |
|-----------------|-----------------|
| (1) Charlemagne | (3) Louis XIV |
| (2) Joan of Arc | (4) Robespierre |

24 The writings of Jean Jacques Rousseau, Baron de Montesquieu, and John Locke were similar in that each supported the principles of

- (1) a military dictatorship
- (2) an autocracy
- (3) a theocratic society
- (4) a democratic republic

25 Laissez-faire capitalism as attributed to Adam Smith called for

- (1) heavy taxation of manufacturers
- (2) strict government control of the economy
- (3) minimal government involvement in the economy
- (4) government investments in major industries

Base your answer to question 26 on the chart below and on your knowledge of social studies.

**Population of Selected British Cities
1801–1891**

Town	1801	1861	1891
Birmingham	74,000	296,000	523,000
Leeds	53,000	207,000	429,000
Liverpool	80,000	444,000	704,000
Manchester	90,000	339,000	645,000

Source: B.R. Mitchell, *International Historical Statistics: Europe, 1750–1988*, Stockton Press, Third Edition (adapted)

26 Which event caused this population shift in Great Britain?

- (1) the bubonic plague
- (2) emigration to the Americas
- (3) the Industrial Revolution
- (4) rebellions in Ireland

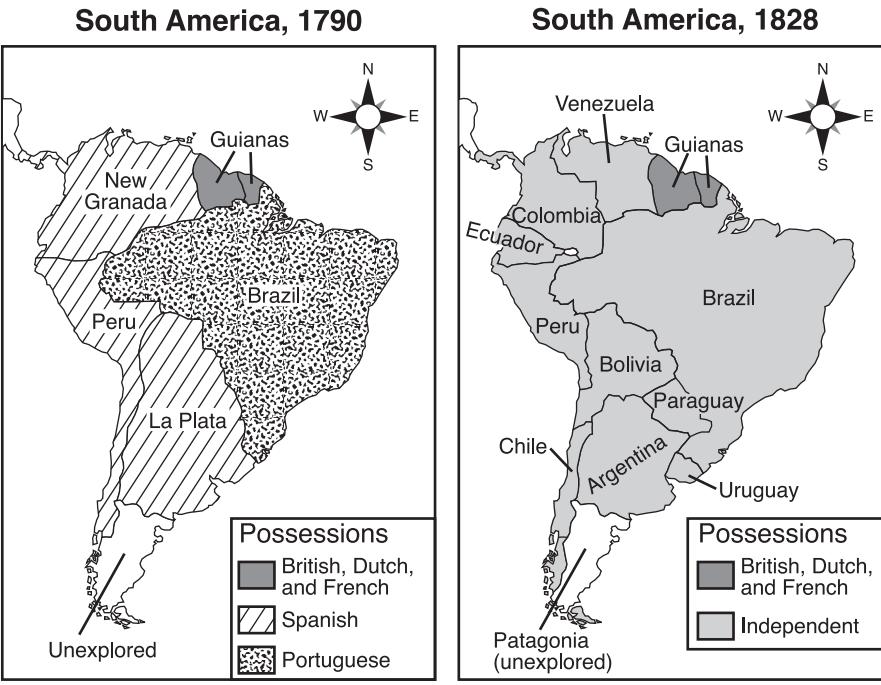
27 “. . . But after a long period of commercial intercourse [trade], there appear among the crowd of barbarians both good persons and bad, unevenly. Consequently there are those who smuggle opium to seduce the Chinese people and so cause the spread of the poison to all provinces. Such persons who only care to profit themselves, and disregard their harm to others, are not tolerated by the laws of heaven and are unanimously hated by human beings. His Majesty the Emperor, upon hearing of this, is in a towering rage. He has especially sent me, his commissioner, to come to Kwangtung [Guangdong Province], and together with the governor-general and governor jointly to investigate and settle this matter. . . .”

— “Letter of Advice to Queen Victoria”
from Lin Zexu (Lin Tse-Hsü),
Chinese Commissioner of Canton, 1839

This letter to Queen Victoria relates most directly to the outbreak of the

- (1) Chinese civil war
- (2) Sino-Japanese War
- (3) Communist Revolution
- (4) Opium Wars

Base your answer to question 28 on the maps below and on your knowledge of social studies.



Source: Steven Goldberg and Judith Clark DuPré, *Brief Review in Global History and Geography*, Prentice Hall (adapted)

- 28 Between 1790 and 1828, which situation helped cause the change reflected on these maps of South America?
- The Aztecs regained control of many areas of South America.
 - South American voters removed Spanish and Portuguese rulers from power.
 - Spain sent conquistadores to South America.
 - Enlightenment and revolutionary ideas spread from Europe and the United States to South America.
-

- 29 The theory of Social Darwinism was sometimes used to justify
- the establishment of communist governments in Asia
 - Latin American revolutions in the early 19th century
 - the independence movement in India
 - European imperialism in the late 19th century
- 30 Japan's increased foreign trade during the Meiji Restoration was closely related to its
- need to maintain a traditional society
 - desire for a modern industrialized society
 - colonization by Western nations
 - encouragement of foreign investment

- 31 Which event occurred *first* and led to the other three?
- rise of fascism in Europe
 - Bolshevik Revolution
 - World War I
 - signing of the Treaty of Versailles
- 32 The early 20th-century Zionist movement calling for the establishment of a Jewish homeland was an example of
- | | |
|-----------------|------------------|
| (1) imperialism | (3) capitalism |
| (2) nationalism | (4) isolationism |

- 33 ". . . Passive resistance is a method of securing rights by personal suffering, it is the reverse of resistance by arms. When I refuse to do a thing that is repugnant [objectionable] to my conscience, I use soul-force. For instance, the Government of the day has passed a law which is applicable to me. I do not like it. If by using violence I force the Government to repeal the law, I am employing what may be termed body force. If I do not obey the law and accept the penalty for its breach, I use soul-force. It involves sacrifice of self. . . ."

Source: M. K. Gandhi, *Indian Home Rule*, Navajivan Publishing

This statement reflects the belief that individuals

- (1) have no control over events
- (2) can influence events by following moral guidelines
- (3) must use violence to influence events
- (4) can influence events by using military force

- 34 Which situation is an example of totalitarianism in Germany in the 1930s?

- (1) frequent meetings of the German Reichstag
- (2) decline of the German economy
- (3) strict government control of the press
- (4) negotiation of a nonaggression pact with the Soviet Union

- 35 Between the late 1800s and the end of World War II, Japan implemented a policy of imperialism mainly because Japan

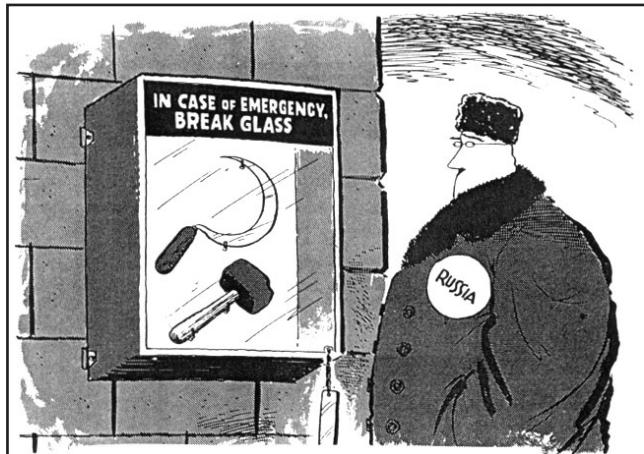
- (1) admired the economic power of China
- (2) lacked coal, iron, and other important resources
- (3) wanted to unify the governments of East Asia
- (4) feared the expansion of Nazi Germany in the Pacific

- 36 The partition of India and the division of Yugoslavia were similar in that both were divided

- (1) as a result of the Berlin Conference
- (2) because of religious or ethnic differences
- (3) to form communist and noncommunist states
- (4) to conform to United Nations guidelines

- 37 One similarity in the histories of Germany and Vietnam is that both nations
- (1) were once divided but have since been reunited
 - (2) remained nonaligned during the Cold War period
 - (3) have chosen a democratic form of government in recent years
 - (4) were once colonized by other European nations

Base your answer to question 38 on the cartoon below and on your knowledge of social studies.



Source: Jack Ohman, *The Oregonian*, 1995

- 38 This 1995 cartoon is suggesting that communism

- (1) has no appeal in Russia
- (2) still dominates the Russian government
- (3) may return if democracy fails in Russia
- (4) is the best system for the Russian people

- 39 Which situation existed under the policy of apartheid in South Africa?

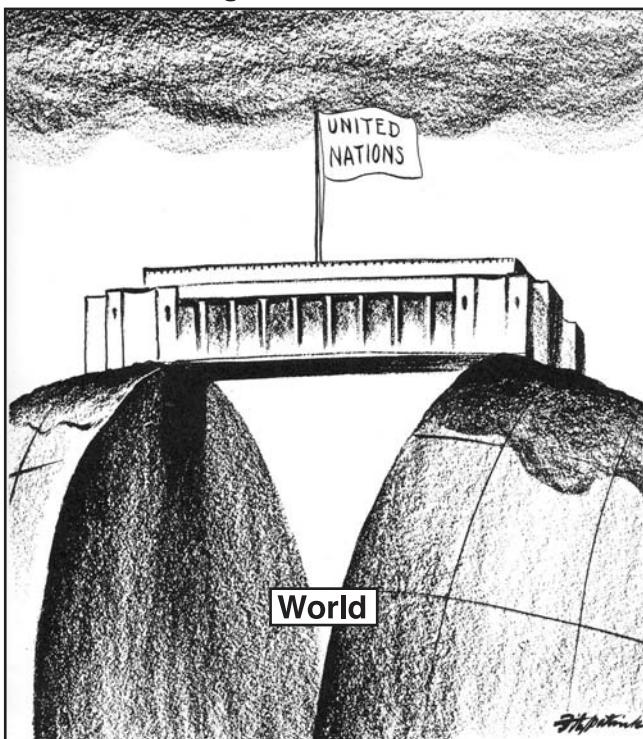
- (1) All people were guaranteed suffrage.
- (2) The black majority held the most political power.
- (3) Society was controlled by the white minority.
- (4) Social inequality was eliminated.

- 40 The global problems of pollution, acid rain, and the breakdown of the ozone layer indicate a need for

- (1) greater international cooperation
- (2) increased urbanization
- (3) a balance of trade between nations
- (4) an increase in space exploration

Base your answer to question 41 on the cartoon below and on your knowledge of social studies.

The Meeting Will Now Come to Order



Source: Daniel Fitzpatrick, *St. Louis Post-Dispatch* (adapted)

41 This cartoon raises the question as to whether the United Nations is able to

- (1) administer former colonial areas
 - (2) deliver aid to people in need
 - (3) separate political issues from economic issues
 - (4) unite opposing forces and differing ideologies
-

42 The reason that the Organization of Petroleum Exporting Countries (OPEC) greatly influences the world today is that it

- (1) commands the loyalty of the worldwide Islamic community
- (2) develops and exports important technology
- (3) controls access to trade routes between the East and West
- (4) manages the oil supply that affects the global economy

- 43 Several geographic features in the Balkans, including location, have helped lead to the
- (1) peaceful development of the region
 - (2) development of democracy in the region
 - (3) cultural diversity of the region
 - (4) growing wealth of the region

Base your answer to question 44 on the chart below and on your knowledge of social studies.

Demographic Indicators for China	2000	2025*
Births per 1,000 population	16.0	12.0
Deaths per 1,000	7.0	8.0
Rate of natural increase (percent)	0.9	0.3
Life expectancy at birth (years)	71.4	77.4
Total fertility rate (per woman)	1.8	1.8

*projected

Source: U.S. Census Bureau, International Data Base

44 Which conclusion about the population of China between 2000 and 2025 can be drawn from the information provided by this chart?

- (1) The fertility rate of Chinese women is expected to increase.
 - (2) Chinese life expectancy will likely decrease.
 - (3) The rate of population growth is expected to decline.
 - (4) By 2025, the birthrate in China will probably double.
-

45 What is a major reason for the differences in economic prosperity in various areas of the world today?

- (1) an unequal distribution of resources
- (2) the success of nationalist movements
- (3) religious unity between nations
- (4) membership in the United Nations

46 Control of the Bosphorus and Dardanelles straits was a strategic objective in both World War I and World War II because these straits

- (1) link Africa to Europe
- (2) allow waterway passage into Germany
- (3) separate Italy from the Balkan peninsula
- (4) provide access from the Black Sea to the Mediterranean Sea

- 47 Which historical development showed the desire of a group to gain independence from a colonial power?
- (1) rise of the Nazi Party in Germany
 - (2) Solidarity movement in Poland
 - (3) Tiananmen Square uprising in China
 - (4) Sepoy Mutiny in India
- 48 Which statement describes a similarity between the French Revolution and the Bolshevik Revolution in Russia?
- (1) The leaders in power before the revolutions favored changing the political system in their country.
 - (2) Both revolutions were the result of government denial of basic human rights and stressful economic conditions.
 - (3) Most of the revolutionary support was provided by radicals from other countries.
 - (4) The new democracies created by the revolutions gave people greater representation in their governments.
- 49 • Block printing, gunpowder, and the abacus were developed.
• Porcelain making and black-ink painting on silk paper were perfected.
• The compass was discovered and used to improve the determination of direction when sailing.
- These advances are associated with the
- (1) Tang and Sung dynasties of China
 - (2) Gupta Empire in India
 - (3) Ghana and Mali civilizations of Africa
 - (4) Byzantine Empire in the Middle East
- 50 One similarity between Stalin's five-year plans and Mao Zedong's Great Leap Forward was that both programs attempted to
- (1) increase industrial production
 - (2) privatize the ownership of land
 - (3) correct environmental pollution
 - (4) strengthen international trade

Answers to the essay questions are to be written in the separate essay booklet.

In developing your answer to Part II, be sure to keep these general definitions in mind:

- (a) **explain** means “to make plain or understandable; to give reasons for or causes of; to show the logical development or relationships of”
- (b) **discuss** means “to make observations about something using facts, reasoning, and argument; to present in some detail”

Part II

THEMATIC ESSAY QUESTION

Directions: Write a well-organized essay that includes an introduction, several paragraphs addressing the task below, and a conclusion.

Theme: Change [Individuals Who Have Changed History]

The beliefs and achievements of individuals have changed global history. These beliefs and achievements have had positive and negative effects on society.

Task:

Identify ***two*** individuals who have changed global history and for ***each***:

- Explain ***one*** belief or achievement of that individual
- Discuss the positive ***and/or*** negative effects of the individual’s belief or achievement

You may use any individual from your study of global history ***except*** **Nicholas Copernicus, Sir Isaac Newton, and Norman Borlaug**. The individuals you identify must have had a major role in shaping global history and ***must not be from the United States***. Some individuals that you might consider include Hammurabi, Confucius, Aristotle, Alexander the Great, Muhammad, Johannes Gutenberg, Queen Isabella, Leonardo da Vinci, John Locke, Catherine the Great, Simón Bolívar, or Nelson Mandela.

You are not limited to these suggestions.

Guidelines:

In your essay, be sure to

- Address all aspects of the *Task*
- Support the theme with relevant facts, examples, and details
- Use a logical and clear plan of organization
- Include an introduction and a conclusion that are beyond a simple restatement of the *Theme*

In developing your answer to Part III, be sure to keep these general definitions in mind:

- (a) discuss means “to make observations about something using facts, reasoning, and argument; to present in some detail”
- (b) explain means “to make plain or understandable; to give reasons for or causes of; to show the logical development or relationships of”

Part III

DOCUMENT-BASED QUESTION

This question is based on the accompanying documents (1–9). The question is designed to test your ability to work with historical documents. Some of the documents have been edited for the purposes of the question. As you analyze the documents, take into account the source of each document and any point of view that may be presented in the document.

Historical Context:

The term *revolution* refers to change that has a significant impact on history. Although the term is most often used to describe political revolutions, it can also describe social, intellectual, and/or economic change, as in the Neolithic, Scientific, and Green Revolutions.

Task: Using information from the documents and your knowledge of global history, answer the questions that follow each document in Part A. Your answers to the questions will help you write the Part B essay in which you will be asked to:

- Discuss **two** of these revolutions: the Neolithic Revolution, the Scientific Revolution, the Green Revolution
- Explain the significant social, intellectual, **and/or** economic changes resulting from **each** of the **two** revolutions

Part A

Short-Answer Questions

Directions: Analyze the documents and answer the short-answer questions that follow each document in the space provided.

Document 1

Before the Neolithic Revolution

. . . Man survived the fierce test of the Ice Ages because he had the flexibility of mind to recognise inventions and to turn them into community property. Evidently the Ice Ages worked a profound change in the way man could live. They forced him to depend less on plants and more on animals. The rigours of hunting on the edge of the ice also changed the strategy of hunting. It became less attractive to stalk single animals, however large. The better alternative was to follow herds and not to lose them — to learn to anticipate and in the end to adopt their habits, including their wandering migrations. This is a peculiar adaptation — the trans-humance [nomadic] mode of life on the move. It has some of the earlier qualities of hunting, because it is a pursuit; the place and the pace are set by the food animal. And it has some of the later qualities of herding, because the animal is tended and, as it were, stored as a mobile reservoir of food. . . .

Source: Jacob Bronowski, *The Ascent of Man*, Little, Brown and Company

- 1 Based on this document, identify **two** characteristics of life before the Neolithic Revolution. [2]

(1) _____

Score

(2) _____

Score

Document 2

... The Neolithic Revolution also changed the way people lived. In place of scattered hunting communities, the farmers lived in villages. Near groups of villages, small towns grew up, and later cities too. Thus the Neolithic Revolution made civilization itself possible. (The Ancient Near East)

Within the villages, towns and cities, it was possible for people to specialize in the sort of work they could do best. Many stopped producing food at all, making instead tools and other goods that farmers needed, and for which they gave them food in exchange. This process of exchange led to trade and traders, and the growth of trade made it possible for people to specialize even more. . . .

Source: D. M. Knox, *The Neolithic Revolution*, Greenhaven Press

- 2 Based on this document, state **one** impact of the Neolithic Revolution on the way people lived. [1]

Score

Document 3

This extract summarizes the findings of several archaeologists in the 1950s and 1960s.

. . . The first archaeological evidence for the domestication of cereals, and some of the earliest evidence for the domestication of animals, comes from a broad region stretching from Greece and Crete in the west to the foothills of the Hindu Kush south of the Caspian in the east. Here are found the wild plants from which wheat and barley were domesticated, whilst it is only in this zone that the wild progenitors [ancestors] of sheep, goats, cattle and pigs were found together, for the latter two had a much broader distribution than wild sheep and goats. By the tenth millennium B.C. peoples who relied upon hunting and gathering were reaping wild barley and wild wheat with knives, grinding the grain and using storage pits. By the sixth millennium there is evidence of village communities growing wheat and barley, and keeping sheep and goats, in Greece and Crete in the west, in southern Turkey, the Galilean uplands of the eastern littoral [coastal region] of the Mediterranean, in the Zagros mountains of Iran and Iraq, the interior plateaux of Iran, and in the foothills south east of the Caspian. Subsequently the number of domesticated plants grown was increased, including flax, for its oil rather than for fibre, peas, lentils and vetch [plants used for food]. By the fourth millennium the olive, vine and fig, the crops which give traditional Mediterranean agriculture much of its distinctiveness, had been domesticated in the eastern Mediterranean. Cattle and pigs are thought to have been domesticated after sheep and goats. Cattle were used as draught animals, and for meat; not until the late fourth millennium is there evidence of milking in South West Asia. . . .

Source: D. B. Grigg, *The Agricultural Systems of the World*, Cambridge University Press

- 3 Based on this document, state **two** changes in agriculture that occurred during the Neolithic Revolution. [2]

(1) _____

Score

(2) _____

Score

Document 4

... Gradually scientists came to challenge more and more what the ancients [past civilizations] taught. They came to develop new, better methods of finding out how things worked. Mathematical knowledge increased and helped them to reason. They began to think up experiments to check on their ideas in a methodical way. The scientific revolution had begun.

Many men were needed to bring this about. These men came from every part of Europe. They wrote books to explain their ideas. The printing press made it possible to produce thousands of copies which found their way all over Europe. Scientists were able to learn from one another and give one another new ideas. So the Scientific Revolution was not the work of Englishmen, or Frenchmen, or Italians alone. It was the work of Europeans. And, as we have seen, even they did not do it all by themselves. The Chinese, the Indians, the Persians, and the Arabs all gave something before it came about. Today this is not hard to understand, because men and women from all over the world add to scientific knowledge and so help one another. . . .

Source: Peter Amey, *Scientific Revolution*, Greenhaven Press

- 4 Based on this document, state **two** changes resulting from the Scientific Revolution. [2]

(1) _____

Score

(2) _____

Score

Document 5

. . . Assumptions

1. There is no one center of all the celestial [heavenly] circles or spheres [planets].
2. The center of the earth is not the center of the universe, but only of gravity and of the lunar sphere.
3. All the spheres [planets] revolve about the sun as their mid-point, and therefore the sun is the center of the universe. . . .

— Nicholas Copernicus, *The Commentariolus*, (1510)

Source: Edward Rosen, *Three Copernican Treatises*, Columbia University Press

- 5 State **one** scientific belief of Copernicus that is being described in this passage. [1]

Score

Document 6

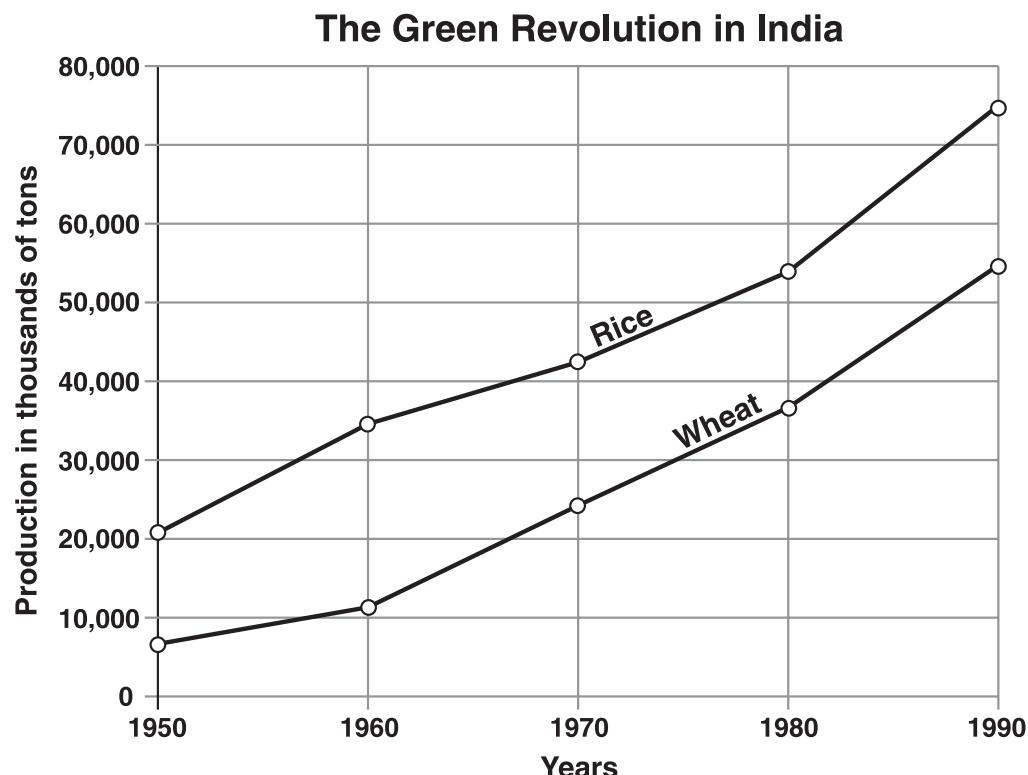
. . . As in Mathematicks, so in natural philosophy, the investigation of difficult things by the method of analysis [scientific method], ought ever to precede the method of composition. This analysis consists in making experiments and observations, and in drawing general conclusions from them by induction [reason], and admitting of no objections against the conclusions, but such as are taken from experiments, or other certain truths. For hypotheses [theories] are not to be regarded in experimental philosophy. And although the arguing from experiments and observations by induction be no demonstration of general conclusions; yet it is the best way of arguing which the nature of things admits of, and may be looked upon as so much the stronger, by how much the induction is more general. And if no exception occur from phenomena [facts], the conclusion may be pronounced generally. But if at any time afterwards any exception shall occur from experiments, it may then begin to be pronounced with such exceptions as occur. By this way of analysis we may proceed from compounds to ingredients, and from motions to the forces producing them; and in general, from effects to their causes, and from particular causes to more general ones, till the argument end in the most general. This is the method of analysis [scientific method]: and the synthesis [combination of parts] consists in assuming the causes discovered, and established as principles, and by them explaining the phenomena proceeding from them, and proving the explanations. . . .

Source: Sir Isaac Newton, *Opticks*, 1718

- 6 According to this document, why is the scientific method important? [1]

Score

Document 7



Source: Library of Congress, Federal Research Division (adapted)

- 7 Based on this document, state **one** way the Green Revolution affected India. [1]
-
-

Score

Document 8

The Green Revolution

... [Norman] Borlaug is an eighty-two-year-old plant breeder who for most of the past five decades has lived in developing nations, teaching the techniques of high-yield agriculture. He received the Nobel [Peace Prize] in 1970, primarily for his work in reversing the food shortages that haunted India and Pakistan in the 1960s. Perhaps more than anyone else, Borlaug is responsible for the fact that throughout the postwar era, except in Sub-Saharan Africa, global food production has expanded faster than the human population, averting the mass starvations that were widely predicted—for example, in the 1967 best seller *Famine—1975!* The form of agriculture that Borlaug preaches may have prevented a billion deaths. . . .

The Ford and Rockefeller Foundations and the World Bank, once sponsors of his work, have recently given Borlaug the cold shoulder. Funding institutions have also cut support for the International Maize and Wheat Center—located in Mexico and known by its Spanish acronym, CIMMYT—where Borlaug helped to develop the high-yield, low pesticide dwarf wheat upon which a substantial portion of the world's population now depends for sustenance [food]. And although Borlaug's achievements are arguably the greatest that Ford or Rockefeller has ever funded, both foundations have retreated from the last effort of Borlaug's long life: the attempt to bring high-yield agriculture to Africa. . . .

To Borlaug, the argument for high-yield cereal crops, inorganic fertilizers, and irrigation became irrefutable when the global population began to take off after the Second World War. But many governments of developing nations were suspicious, partly for reasons of tradition (wheat was then a foreign substance in India) and partly because contact between Western technical experts and peasant farmers might shake up feudal cultures to the discomfort of the elite classes. Meanwhile, some commentators were suggesting that it would be wrong to increase the food supply in the developing world: better to let nature do the dirty work of restraining the human population. . . .

Source: Greg Easterbrook, "Forgotten Benefactor of Humanity," *Atlantic Monthly*, January 1997

- 8a Based on this document, state **one** development since World War II that led to the Green Revolution. [1]

Score

- b Based on this document, identify **one** effect of the Green Revolution on food production. [1]

Score

Document 9

. . . It is not clear which are greater—the successes of modern high-intensity agriculture, or its shortcomings. The successes are immense. Because of the green revolution, agriculture has met the food needs of most of the world's population even as the population doubled during the past four decades. But there has been a price to pay, and it includes contamination of groundwaters, release of greenhouse gases, loss of crop genetic diversity and eutrophication [pollution] of rivers, streams, lakes and coastal marine ecosystems (contamination by organic and inorganic nutrients that cause oxygen depletion, spread of toxic species and changes in the structure of aquatic food webs). It is unclear whether high-intensity agriculture can be sustained, because of the loss of soil fertility, the erosion of soil, the increased incidence of crop and livestock diseases, and the high energy and chemical inputs associated with it. The search is on for practices that can provide sustainable yields, preferably comparable to those of high-intensity agriculture but with fewer environmental costs. . . .

Source: David Tilman, "The Greening of the Green Revolution," *Nature*, November 1998

- 9 According to David Tilman, what are **two** effects of the Green Revolution? [2]

(1) _____

Score

(2) _____

Score

Part B

Essay

Directions: Write a well-organized essay that includes an introduction, several paragraphs, and a conclusion.

Use evidence from at least **four** documents in the body of the essay. Support your response with relevant facts, examples, and details. Include additional outside information.

Historical Context:

The term *revolution* refers to change that has a significant impact on history. Although the term is most often used to describe political revolutions, it can also describe social, intellectual, and/or economic change, as in the Neolithic, Scientific, and Green Revolutions.

Task: Using information from the documents and your knowledge of global history, write an essay in which you:

- Discuss **two** of these revolutions: the Neolithic Revolution, the Scientific Revolution, the Green Revolution
- Explain the significant social, intellectual, **and/or** economic changes resulting from **each** of the **two** revolutions

Guidelines:

In your essay, be sure to

- Address all aspects of the *Task* by accurately analyzing and interpreting at least **four** documents
- Incorporate information from the documents
- Incorporate relevant outside information
- Support the theme with relevant facts, examples, and details
- Use a logical and clear plan of organization
- Include an introduction and a conclusion that are beyond a simple restatement of the *Historical Context*

GLOBAL HISTORY AND GEOGRAPHY

Wednesday, January 28, 2004 — 9:15 a.m. to 12:15 p.m., only

ANSWER SHEET

Male

Student Sex: Female

Teacher

School

Write your answers for Part I on this answer sheet, write your answers to Part III A in the test booklet, and write your answers for Parts II and III B in the separate essay booklet.

FOR TEACHER USE ONLY

Part I Score _____

Part III A Score _____

Total Part I and III A Score

Part II Essay Score _____

Part III B Essay Score _____

Total Essay Score

**Final Score
(obtained from conversion chart)**

1.....	26.....
2.....	27.....
3.....	28.....
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No.
Right

The declaration below should be signed when you have completed the examination.

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