

Part III

DOCUMENT-BASED QUESTION

This question is based on the accompanying documents. The question is designed to test your ability to work with historical documents. Some of these documents have been edited for the purposes of this 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. Keep in mind that the language used in a document may reflect the historical context of the time in which it was written.

Historical Context:

Throughout history, people have changed their environments to meet their needs. These changes have had both positive and negative effects on people, societies, and regions. Examples include the *development of irrigation in ancient Egypt*, the *construction of chinampas by the Aztecs*, and the *mining of coal in Great Britain during the Industrial Revolution*.

Task: Using the 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

Select **two** changes people have made to their environment mentioned in the historical context and for **each**

- Explain why this change to their environment was needed
- Discuss how this change affected people, a society, and/or a region

In developing your answers to Part III, 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 A
Short-Answer Questions

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

Document 1

The first successful efforts to control the flow of water were made in Mesopotamia and Egypt, where the remains of the prehistoric irrigation works still exist. In ancient Egypt, the construction of canals was a major endeavor of the pharaohs and their servants, beginning in Scorpio's time. One of the first duties of provincial governors was the digging and repair of canals, which were used to flood large tracts of land while the Nile was flowing high. The land was checkerboarded with small basins, defined by a system of dikes. Problems regarding the uncertainty of the flow of the Nile were recognized. During very high flows, the dikes were washed away and villages flooded, drowning thousands. During low flows, the land did not receive water, and no crops could grow. In many places where fields were too high to receive water from the canals, water was drawn from the canals or the Nile directly by a swape or a shaduf. These consisted of a bucket on the end of a cord that hung from the long end of a pivoted boom, counterweighted at the short end. The building of canals continued in Egypt throughout the centuries....

Source: Larry W. Mays, "Irrigation Systems, Ancient," *Water Encyclopedia* online (adapted)

- 1 Based on this document, state **two** problems ancient Egyptians faced as a result of the uncertain flow of the Nile. [2]

(1) _____

_____ Score

(2) _____

_____ Score

Document 2a



This frieze, or architectural adornment, on an ancient temple portrays Egyptians using shadufs, devices that enabled them to transfer water from the Nile to their fields.

Source: James Barter, *The Nile*, Lucent Books

Document 2b

After the death of Alexander the Great, a series of three pharaohs named Ptolemy ruled Egypt. The culture of Egypt during that period was primarily Greek.

... In the Ptolemaic period, Greek temple records presented each region as an economic unit, and referred to the name of the canal which irrigates the region, the cultivated region which is located on the river's banks and is directly irrigated with its water, and the lands located on the region's border that could be reclaimed. The beds irrigation system allowed cultivating one winter crop; while in summer, the only lands that could be cultivated were the high lands away from the flood. Thus, when the Egyptians invented tools to lift water, such as the shaduf, they were able to cultivate two crops per year, which was considered a great advance in the field of irrigation. The shaduf was invented in the Amarna period and is a simple tool which needs two to four men to operate. The shaduf consists of a long, suspended pole weighted at one end and a bucket tied at the other end. It can lift about 100 cubic meters (100,000 liters) in 12 hours, which is enough for irrigating a little over a third of an acre....

Source: Agriculture – Part I, Ancient Egypt History, EgyptHistory.com

2 Based on these documents, what was **one** effect the invention of the shaduf had on the Egyptians? [1]

Score

Document 3

... The water laws of ancient Egypt were primarily concerned with ensuring that each farmer along the river had fair access to the waters during the floods and that no farmers were denied their fair share of irrigated water. If a farmer, for example, farmed many miles from the river, those owning land close to the river had to allow him to have access to a water canal running through their land.

Water laws also prohibited the taking of water from canals by farmers not contributing to the labor of filling the canal with water. How much water one was entitled to take from a canal depended on how much time one spent filling that canal. If, for example, ten farmers contributed ten hours of labor filling irrigation canals with water, any one of them who took more than one hour's worth of water could be put to death....

Source: James Barter, *The Nile*, Lucent Books

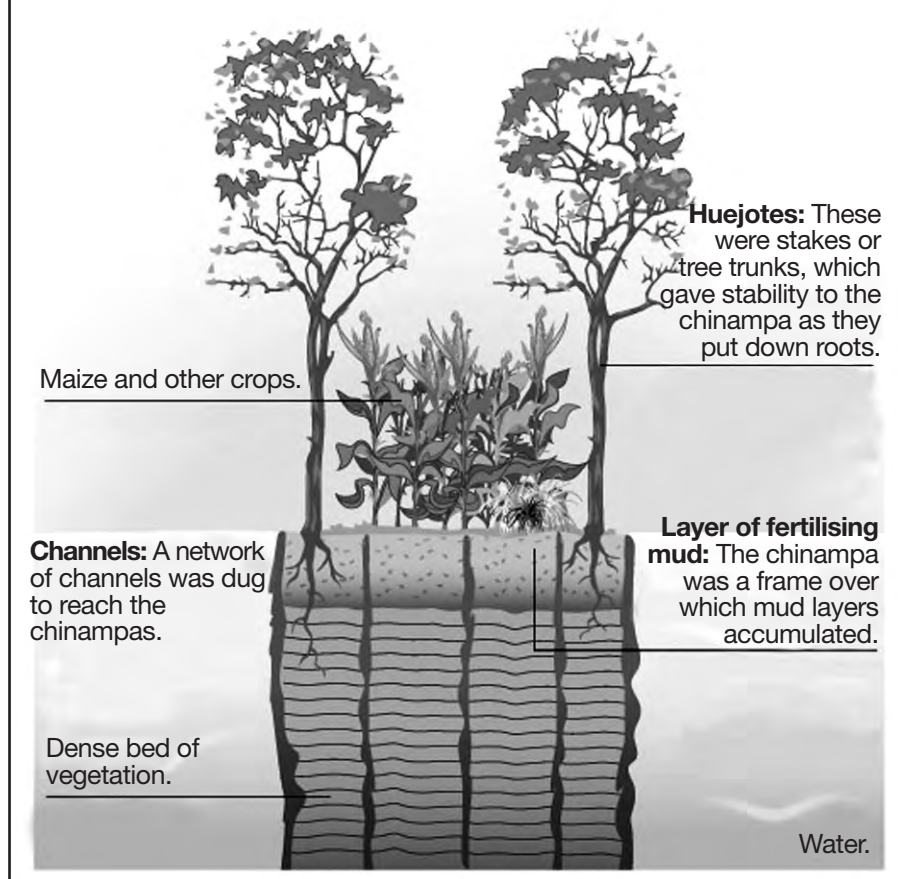
3 According to James Barter, in what way did the government ensure that farmers had fair access to water? [1]

Score

Aztec Farming Method

The chinampas

These were real floating gardens which made it possible to create areas for cultivation in the shallow parts of the lakes.



Source: www.icarito.cl (adapted)

4 Based on the information provided by this diagram, why did the Aztecs build chinampas? [1]

Score

Document 5

... Chinampas added both living and agricultural space to the island. Houses could be built on chinampas after they were firmly in place, and the plots were used to grow a great variety of products, from maize and beans to tomatoes and flowers. The Mexica [Aztec] built chinampas all around Tenochtitlan, like their neighbors in the freshwater lakes to the south. They were, however, constantly faced with the danger of flooding, which brought salty water across the chinampas and ruined the land and crops. Lake Texcoco accumulated minerals from the river water running into it, which caused the water to be brackish [mix of fresh and salt water]. In the mid-15th century, this problem was solved; a dike was built, separating the western section of the lake where Tenochtitlan was located and protecting the city from salty water and some flooding...

Source: Frances F. Berdan, *The Aztecs*, Chelsea House Publishers

5a According to Frances F. Berdan, what was **one** way the chinampas benefited the Aztecs? [1]

Score

b According to Frances F. Berdan, what was **one** problem that farmers on the chinampas faced? [1]

Score

Document 6

... The capital city, which may have had a population as high as 200,000 to 300,000 in the early sixteenth century, was a superb example of planned growth. By building out into the lake, the Aztecs consolidated and enlarged the original two islands which in turn were linked to the mainland by three large causeways. Fresh water was brought to the city from the mainland by aqueduct....

Source: Jeremy A. Sabloff, *The Cities of Ancient Mexico: Reconstructing a Lost World*, Thames and Hudson

- 6 According to Jeremy A. Sabloff, what was **one** way building out into the lake benefited the Aztec Empire and its capital city of Tenochtitlán? [1]

Score

Document 7a

... The shortage of wood was very serious. Wood was the main fuel used for cooking. It was essential for ship-building, and charcoal was needed to smelt [process] iron ore. A new source of energy was urgently required. This was supplied by coal.

Already coal had replaced wood for cooking and heating in any place that could be reached by sea or by navigable river. Iron was being imported, although there was plenty of iron ore in Britain. Coal was growing harder to mine, as seams near the surface were exhausted, and deeper seams needed pumps to drain them [water from the mines]....

Source: Diana Knox, *The Industrial Revolution*, Greenhaven Press

7a According to Diana Knox, why was coal needed? [1]

Score

Document 7b

... At first, coal was dug from open pits, but gradually the mines had to go deeper. Shafts were sunk down, and galleries [underground rooms] were dug sideways into coal seams. As the shafts went lower, they began to fill with water. Some miners had to work all day with their legs in water. It was not until steam pumps were introduced in the early 1700s that the water could be drained....

Source: Andrew Langley, *The Industrial Revolution*, Viking

7b According to Andrew Langley, what was **one** way people modified the environment to obtain coal? [1]

Score

Document 8

Prior to the use of coal, water was the primary source of power for factories and machines in Great Britain. Water sources that could fuel these factories were limited. Therefore industries were not able to grow and factories were often remotely located.

... With the shift to coal, the pattern was reversed, reflecting the difference in the power source. Coal spawned [generated] much larger and ever more mechanized factories because the power available from underground was so much greater than that supplied by a waterwheel. And, because its energy had already been handily condensed over millions of years, coal concentrated the factories and workforces in urban areas instead of dispersing them throughout the countryside. In short, coal allowed the industrialization of Britain to gain a momentum that was nothing short of revolutionary...

Source: Barbara Freese, *Coal: A Human History*, Perseus Publishing

8 According to Barbara Freese, what was **one** effect the shift from water power to the use of coal as a source of power had on Great Britain? [1]

Score

Document 9

A Rainton Mine Disaster in Durham, Great Britain on December 18, 1817

An explosion claimed twenty seven lives, eleven men and sixteen boys. The blast occurred before all the men had descended [into the mine]. Had it occurred later there would have been 160 men and boys in the pit. Early reports of the total number of lives lost amounted to twenty six, and those principally boys. The explosion took place at 3 o'clock in the morning, before the hewers [men who cut coal from the seam] had descended the pit and from this circumstance about 160 lives have been preserved. Every exertion was made to render assistance to those in the mine and two men fell having been suffocated by the impure state of the air. The viewers and agents were extremely active and had nearly shared the same fate. The pit in which this accident occurred, was always considered to be quite free from explosive matter and in consequence of this supposed security the safety lamps had never been introduced into it the miners continuing to work by the light of candles.

Source: The Coalmining History Resource Centre online, UK

9 According to this document, what were **two** dangers workers faced in the Rainton coal mine? [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 your essay. Support your response with relevant facts, examples, and details. Include additional outside information.

Historical Context:

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Select *two* changes people have made to their environment mentioned in the historical context and for *each*

- Explain why this change to their environment was needed
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Guidelines:

In your essay, be sure to

- Develop all aspects of the task
- Incorporate information from *at least four* documents
- Incorporate relevant outside information
- Support the theme with relevant facts, examples, and details
- Use a logical and clear plan of organization, including an introduction and a conclusion that are beyond a restatement of the theme