Đề thi thật 1: Travel Accounts

Questions 1-8

Complete the table below.

Write **NO MORE THAN TWO WORDS** from Reading Passage for each answer.

Write your answer in boxes **1-8** on your answer sheet.

TIME	DESTINATION	TRAVELER	PURPOSE
Classical era	Egypt and Anatolia	Herodotus	To obtain information on **1**
1st century BC	Central Asia	Zhang Qian	To seek **2**
Roman Empire	Mediterranean	Ptolemy, Strabo, Pliny the Elder	To gather **3**
Post-classical era	Eastern Hemisphere	Muslims	For business and **4**
5th to 9th centuries CE	India	Asian Buddhists	To study with **5**
Early modern era	Distant places of the globe	The Europeans	To meet the public's expectation for the outside
19th century	Asia, Africa	Colonial administrator	To provide information on the **6**
By the mid-century of the 1800s	Europe and the United States	Sun Yat-sen, Fukuzawa Yukichi	To learn **7**
20th century	Mass tourism	People from **8**	For entertainment

A

There are many reasons why individuals have traveled beyond their own societies. Some travelers may have simply desired to satisfy curiosity about the larger world. Until recent times, however, trade, business dealings, diplomacy, political administration, military campaigns, exile, flight from persecution, migration, pilgrimage, missionary efforts, and the quest for economic or educational opportunities were more common inducements for foreign travel than was a mere curiosity. While the travelers' accounts give much valuable information on these foreign lands and provide a window for the understanding of the local cultures and histories, they are also a mirror to the travelers themselves, for these accounts help them to have a better understanding of themselves.

B

Records of foreign travel appeared soon after the invention of writing, and fragmentary travel accounts appeared in both Mesopotamia and Egypt in ancient times. After the formation of large, imperial states in the classical world, travel accounts emerged as a prominent literary genre in many lands, and they held especially strong appeal for rulers desiring useful knowledge about their realms. The Greek historian Herodotus reported on his travels in Egypt and Anatolia in researching the history of the Persian wars. The Chinese envoy Zhang Qian described much of central Asia as far west as Bactria (modern-day Afghanistan) on the basis of travels undertaken in the first century BC while searching for allies for the Han dynasty. Hellenistic and Roman geographers such as Ptolemy, Strabo, and Pliny the Elder relied on their own travels through much of the Mediterranean world as well as reports of other travelers to compile vast compendia of geographical knowledge.

Đề thi thật 1: Travel Accounts

C

During the postclassical era (about 500 to 1500 CE), trade and pilgrimage emerged as major incentives for travel to foreign lands. Muslim merchants sought trading opportunities throughout much of the eastern hemisphere. They described lands, peoples, and commercial products of the Indian Ocean basin from East Africa to Indonesia, and they supplied the first written accounts of societies in sub-Saharan west Africa. While merchants set out in search of trade and profit, devout Muslims traveled as pilgrims to Mecca to make their hajj and visit the holy sites of Islam. Since the prophet Muhammad's original pilgrimage to Mecca, untold millions of Muslims have followed his example, and thousands of hajj accounts have related their experiences. One of the best known Muslim travelers, Ibn Battuta, began his travels with the hajj but then went on to visit central Asia, India, China, sub-Saharan Africa, and parts of Mediterranean Europe before returning finally to his home in Morocco. East Asian travelers were not quite so prominent as Muslims during the postclassical era, but they too followed many of the highways and sea lanes of the eastern hemisphere. Chinese merchants frequently visited Southeast Asia and India, occasionally venturing even to east Africa, and devout East Asian Buddhists undertook distant pilgrimages. Between the 5th and 9th centuries CE, hundreds and possibly even thousands of Chinese Buddhists traveled to India to study with Buddhist teachers, collect sacred texts, and visit holy sites. Written accounts recorded the experiences of many pilgrims, such as Faxian, Xuanzang, and Yijing. Though not so numerous as the Chinese pilgrims, Buddhists from Japan, Korea, and other lands also ventured abroad in the interests of spiritual enlightenment.

D

Medieval Europeans did not hit the roads in such large numbers as their Muslim and east Asian counterparts during the early part of the postclassical era, although gradually increasing crowds of Christian pilgrims flowed to Jerusalem, Rome, Santiago de Compostela (in northern Spain), and other sites. After the 12th century, however, merchants, pilgrims, and missionaries from medieval Europe traveled widely and left numerous travel accounts, of which Marco Polo's description of his travels and sojourn in China is the best known. As they became familiar with the larger world of the eastern hemisphere – and the profitable commercial opportunities that it offered – European peoples worked to find new and more direct routes to Asian and African markets. Their efforts took them not only to all parts of the eastern hemisphere but eventually to the Americas and Oceania as well.

Questions 9-13

Choose the correct letter, A, B, C or D.

Write your answers in boxes 9-13 on your answer sheet.

9. Why did some people travel in the early days?

A to do research on themselves

B to write travel books

C to have a better understanding of other people and places

D to study local culture

10. The travelers' accounts are a mirror to themselves,

A because they help them to be aware of local histories.

B because travelers are curious about the world.

C because travelers could do more research on the unknown.

D because they reflect the writers' own experience and social life.

Đề thi thật 1: Travel Accounts

E

If Muslim and Chinese peoples dominated travel writing in postclassical times, European explorers, conquerors, merchants, and missionaries took center stage during the early modern era (about 1500 to 1800 CE). By no means did Muslim and Chinese travel come to a halt in early modern times. But European peoples ventured to the distant corners of the globe, and European printing presses churned out thousands of travel accounts that described foreign lands and peoples for a reading public with an apparently insatiable appetite for news about the larger world. The volume of travel literature was so great that several editors, including Giambattista Ramusio, Richard Hakluyt, Theodore de Bry, and Samuel Purchas, assembled numerous travel accounts and made them available in enormous published collections.

F

During the 19th century, European travelers made their way to the interior regions of Africa and the Americas, generating a fresh round of travel writing as they did so. Meanwhile, European colonial administrators devoted numerous writing to the societies of their colonial subjects, particularly in Asian and African colonies they established. By midcentury, attention was flowing also in the other direction. Painfully aware of the military and technological prowess of European and Euro-American societies, Asian travelers, in particular, visited Europe and the United States in hopes of discovering principles useful for the reorganization of their own societies. Among the most prominent of these travelers who made extensive use of their overseas observations and experiences in their own writing were the Japanese reformer Fukuzawa Yukichi and the Chinese revolutionary Sun Yat-sen.

11. *Most of the people who went to holy sites during the early part of the postclassical era are*

A Europeans.

B Muslim and East Asians.

C Americans.

D Greeks.

12. *During the early modern era, a large number of travel books were published to*

A provide what the public wants.

B encourage the public's feedback.

C gain profit.

D prompt trips to the new world.

13. *What stimulated the market for traveling in the 20th century?*

A the wealthy

B travel books

C delicious food

D mass transport

Đề thi thật 1: Travel Accounts

G

With the development of inexpensive and reliable means of mass transport, the 20th century witnessed explosions both in the frequency of long-distance travel and in the volume of travel writing. While a great deal of travel took place for reasons of business, administration, diplomacy, pilgrimage, and missionary work, as in ages past, increasingly effective modes of mass transport made it possible for new kinds of travel to flourish. The most distinctive of them was mass tourism, which emerged as a major form of consumption for individuals living in the world's wealthy societies. Tourism enabled consumers to get away from home to see the sights in Rome, take a cruise through the Caribbean, walk the Great Wall of China, visit some wineries in Bordeaux, or go on safari in Kenya. A peculiar variant of the travel account arose to meet the needs of these tourists: the guidebook, which offered advice on food, lodging, shopping, local customs, and all the sights that visitors should not miss seeing. Tourism has had a massive economic impact throughout the world, but other new forms of travel have also had considerable influence in contemporary times. Recent times have seen unprecedented waves of migration, for example, and numerous migrants have sought to record their experiences and articulate their feelings about life in foreign lands. Recent times have also seen an unprecedented development of ethnic consciousness, and many are the intellectuals and writers in the diaspora who have visited the homes of their ancestors to see how much of their forebears' values and cultural traditions they themselves have inherited. Particularly notable among their accounts are the memoirs of Malcolm X and Maya Angelou describing their visits to Africa.

Đề thi thật 2: Can Hurricanes be Moderated or Diverted?

A

Each year, massive swirling storms bringing along winds greater than 74 miles per hour wipe across tropical oceans and land on shorelines—usually devastating vast swaths of territory. When these roiling tempests strike densely inhabited territories, they have the power to kill thousands and cause property damage worth of billions of dollars. Besides, absolutely nothing stands in their way. But can we ever find a way to control these formidable forces of nature?

B

To see why hurricanes and other severe tropical storms may be susceptible to human intervention, a researcher must first learn about their nature and origins. Hurricanes grow in the form of thunderstorm clusters above the tropical seas. Oceans in low-latitude areas never stop giving out heat and moisture to the atmosphere, which brings about warm, wet air above the sea surface. When this kind of air rises, the water vapour in it condenses to form clouds and precipitation. Condensation gives out heat in the process the solar heat is used to evaporate the water at the ocean surface. This so-called invisible heat of condensation makes the air more buoyant, leading to it ascending higher while reinforcing itself in the feedback process. At last, the tropical depression starts to form and grow stronger, creating the familiar eye — the calm centre hub that a hurricane spins around. When reaching the land, the hurricane no longer has a continuous supply of warm water, which causes it to swiftly weaken.

Questions 27-33

Reading Passage 3 has seven paragraphs, A-G.

Choose the correct heading for each paragraph from the list of headings below.

Write the correct number, i-viii, in boxes 27-33 on your answer sheet.

List of Headings

i. Hurricanes in history

ii. How hurricanes form

iii. How a laboratory exercise re-route a hurricane

iv. Exciting ways to utilise future technologies

v. Are hurricanes unbeatable?

vi. Re-visit earlier ideas

vii. How lives might have been saved

viii. A range of low-tech methods

27. *Paragraph A*
28. *Paragraph B*
29. *Paragraph C*
30. *Paragraph D*
31. *Paragraph E*
32. *Paragraph F*
33. *Paragraph G*

Đề thi thật 2: Can Hurricanes be Moderated or Diverted?

C

Our current studies are inspired by my past intuition when I was learning about chaos theory 30 years ago. The reason why long-range forecasting is complicated is that the atmosphere is highly sensitive to small influences and tiny mistakes can compound fast in the weather-forecasting models. However, this sensitivity also made me realise a possibility: if we intentionally applied some slight inputs to a hurricane, we might create a strong influence that could affect the storms, either by steering them away from densely populated areas or by slowing them down. Back then, I was not able to test my ideas, but thanks to the advancement of computer simulation and remote-sensing technologies over the last 10 years, I can now renew my enthusiasm in large-scale weather control.

D

To find out whether the sensitivity of the atmospheric system could be exploited to adjust such robust atmospheric phenomena as hurricanes, our research team ran simulation experiments on computers for a hurricane named Iniki that occurred in 1992. The current forecasting technologies were far from perfect, so it took us by surprise that our first simulation turned out to be an immediate success. With the goal of altering the path of Iniki in mind, we first picked the spot where we wanted the storm to stop after six hours. Then we used this target to generate artificial observations and put these into the computer model.

Questions 34-38

Complete the summary below.

Choose ONE WORD ONLY from the passage for each answer.

Write your answers in boxes 34-38 on your answer sheet.

Hurricanes originate as groups of 34 ..... over the tropical oceans. Low-latitude seas continuously provide heat and moisture to the atmosphere, producing warm, humid air above the sea surface. When this air rises, the water vapour in it condenses to form clouds and precipitation. 35 ..... releases heat—the solar heat it took to evaporate the water at the ocean surface. This so-called latent 36 ..... of condensation makes the air more buoyant, causing it to ascend still higher in a self-reinforcing feedback process. Eventually, the tropical depression begins to organise and strengthen, forming the familiar 37 ..... —the calm central hub around which a hurricane spins. On passing over 38 ....., the hurricane's sustaining source of warm water is cut off, which leads to the storm's rapid weakening.

Đề thi thật 2: Can Hurricanes be Moderated or Diverted?

E

The most significant alteration turned out to be the initial temperatures and winds. Usually, the temperature changes across the grid were only tenths of a degree, but the most noteworthy change, which was an increase of almost two degrees Celsius, took place in the lowest model layer to the west of the storm centre. The calculations produced wind-speed changes of two or three miles per hour. However, in several spots, the rates shifted by as much as 20 mph due to minor redirections of the winds close to the storm's centre. In terms of structure, the initial and altered versions of Hurricane Iniki seemed almost the same, but the changes in critical variables were so substantial that the latter one went off the track to the west during the first six hours of the simulation and then travelled due north, leaving Kauai untouched.

F

Future earth-orbiting solar power stations, equipped with large mirrors to focus the sun's rays and panels of photovoltaic cells to gather and send energy to the Earth, might be adapted to beam microwaves which turn to be absorbed by water vapour molecules inside or around the storm. The microwaves would cause the water molecules to vibrate and heat up the surrounding air, which then leads to the hurricane slowing down or moving in a preferred direction.

G

Simulations of hurricanes conducted on a computer have implied that by changing the precipitation, evaporation and air temperature, we could make a difference to a storm's route or abate its winds. Intervention could be in many different forms: exquisitely targeted clouds bearing silver iodide or other rainfall-inducing elements might deprive a hurricane of the water it needs to grow and multiply from its formidable eyewall, which is the essential characteristic of a severe tropical storm.

Questions 39-40

Choose the correct letter, A, B, C or D.

Write the correct letter in boxes 39 and 40 on your answer sheet

39. *What encouraged the writer to restart researching hurricane control?*

A. the huge damage hurricane triggers

B. the developments in computer technologies

C. the requirement of some local people

D. the chaos theory learnt as a student

40. *What was the writer's reaction after their first experiment?*

A. surprised that their intervention had not achieve a lot.

B. ecstatic with the achievement the first experiment had

C. surprised that their intervention had the intended effect

D. regretful about the impending success.

Đề thi thật 3: William Gilbert and Magnetism

A.

16th and 17th centuries saw two great pioneers of modern science: Galileo and Gilbert. The impact of their findings is eminent. Gilbert was the first modern scientist, also the accredited father of the science of electricity and magnetism, an Englishman of learning and a physician at the court of Elizabeth. Prior to him, all that was known of electricity and magnetism was what the ancients knew, nothing more than that the lodestone possessed magnetic properties and that amber and jet, when rubbed, would attract bits of paper or other substances of small specific gravity. However, he is less well-known than he deserves.

B.

Gilbert's birth predated Galileo. Born in an eminent local family in Colchester county in the UK, on May 24, 1544, he went to grammar school, and then studied medicine at St. John's College, Cambridge, graduating in 1573. Later he traveled in the continent and eventually settled down in London.

C.

He was a very successful and eminent doctor. All this culminated in his election to the president of the Royal Science Society. He was also appointed the personal physician to the Queen (Elizabeth I), and later knighted by the Queen. He faithfully served her until her death. However, he didn't outlive the Queen for long and died on December 10, 1603, only a few months after his appointment as personal physician to King James.

Questions 1-7

Reading passage 1 has seven paragraphs A-G. Choose the correct heading for each paragraph from the list of headings below. Write the correct number i-x in boxes 1-7 on your answer sheet.

List of Headings

i. Early years of Gilbert

ii. What was new about his scientific research method

iii. The development of chemistry

iv. Questioning traditional astronomy

v. Pioneers of the early science

vi. Professional and social recognition

vii. Becoming the president of the Royal Science Society

viii. The great works of Gilbert

ix. His discovery about magnetism

x. His change of focus

1. Paragraph A.....

2. Paragraph B.....

3. Paragraph C.....

4. Paragraph D.....

5. Paragraph E.....

6. Paragraph F.....

7. Paragraph G.....

Đề thi thật 3: William Gilbert and Magnetism

D.

Gilbert was first interested in chemistry but later changed his focus due to the large portion of mysticism of alchemy involved (such as the transmutation of metal). He gradually developed his interest in physics after the great minds of the ancient, particularly about the knowledge the ancient Greeks had about lodestones, strange minerals with the power to attract iron. In the meantime, Britain became a major seafaring nation in 1588 when the Spanish Armada was defeated, opening the way to British settlement of America. British ships depended on the magnetic compass, yet no one understood why it worked. Did the pole star attract it, as Columbus once speculated; or was there a magnetic mountain at the pole, as described in Odyssey, which ships would never approach, because the sailors thought its pull would yank out all their iron nails and fittings? For nearly 20 years William Gilbert conducted ingenious experiments to understand magnetism. His works include On the Magnet and Magnetic Bodies, Great Magnet of the Earth.

E.

Gilbert's discovery was so important to modern physics. He investigated the nature of magnetism and electricity. He even coined the word "electric". Though the early beliefs of magnetism were also largely entangled with superstitions such as that rubbing garlic on lodestone can neutralize its magnetism, one example being that sailors even believed the smell of garlic would even interfere with the action of compass, which is why helmsmen were forbidden to eat it near a ship's compass. Gilbert also found that metals can be magnetized by rubbing materials such as fur, plastic or the like on them. He named the ends of a magnet "north pole" and "south pole". The magnetic poles can attract or repel, depending on polarity. In addition, however, ordinary iron is always attracted to a magnet. Though he started to study the relationship between magnetism and electricity, sadly he didn't complete it. His research of static electricity using amber and jet only demonstrated that objects with electrical charges can work like magnets attracting small pieces of paper and stuff. It is a French guy named du Fay that discovered that there are actually two electrical charges, positive and negative.

Questions 8-10

Do the following statements agree with the information given in Reading Passage 1?

In boxes 8-10 on your answer sheet write:

TRUE if the sataement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

8. He is less famous than he should be.

9. He was famous as a doctor before he was employed by the Queen.

10. He lost faith in the medical theories of his time.

Đề thi thật 3: William Gilbert and Magnetism

F.

He also questioned the traditional astronomical beliefs. Though a Copernican, he didn't express in his quintessential beliefs whether the earth is at the center of the universe or in orbit around the sun. However he believed that stars are not equidistant from the earth , but have their own earthlike planets orbiting around them. The earth is itself like a giant magnet, which is also why compasses always point north. They spin on an axis that is aligned with the earth's polarity. He even likened the polarity of the magnet to the polarity of the earth and built an entire magnetic philosophy on this analogy. In his explanation, magnetism was the soul of the earth. Thus a perfectly spherical lodestone, when aligned with the earth's poles, would wobble all by itself in 24 hours. Further, he also believed that suns and other stars wobble just like the earth does around a crystal core, and speculated that the moon might also be a magnet caused to orbit by its magnetic attraction to the earth. This was perhaps the first proposal that a force might cause a heavenly orbit.

G.

His research method was revolutionary in that he used experiments rather than pure logic and reasoning like the ancient Greek philosophers did. It was a new attitude toward scientific investigation. Until then, scientific experiments were not in fashion. It was because of this scientific attitude, together with his contribution to our knowledge of magnetism, that a unit of magneto motive force, also known as magnetic potential, was named Gilbert in his honor. His approach of careful observation and experimentation rather than the authoritative opinion or deductive philosophy of others had laid the very foundation for modern science.

Questions 11-13

Choose THREE letters A-F. Write your answers in boxes 11-13 on your answer sheet.

Which THREE of the following are parts of Gilbert's discovery?

A. Metal can be transformed into another.

B. Garlic can remove magnetism.

C. Metals can be magnetized.

D. Stars are at different distances from the earth.

E. The earth wobbles on its axis.

F. There are two charges of electricity.