

PRACTICE TEST 10

SECTION 1

The Lies

You should spend about 20 minutes on Questions 1-13 which are based on Reading Passage below.



- A** Last year Sean A. Spence, a professor at the school of medicine at the University of Sheffield in England, performed brain scans that showed that a woman convicted of poisoning a child in her care appeared to be telling the truth when she denied committing the crime. This deception study, along with two others performed by the Sheffield group, was funded by Quickfire Media, a television production company working for the U.K.'s Channel 4, which broadcast videos of the researchers at work as part of a three-part series called "Lie Lab." The brain study of the woman later appeared in the journal *European Psychiatry*.
- B** Functional magnetic resonance imaging (fMRI) purports to detect mendacity by seeing inside the brain instead of tracking peripheral measures of anxiety—such as changes in pulse, blood pressure or respiration —measured by a polygraph. Besides drawing hundreds of thousands of viewers, fMRI has pulled in entrepreneurs. Two companies—Cephos in Pepperell, Mass., and No Lie MRI in Tarzana, Calif.—claim to predict with 90 percent or greater certitude whether you are telling the truth. No Lie MRI, whose name evokes the casual familiarity of a walk-in dental clinic in a strip mall, suggests that the technique may even be used for “risk reduction in dating” .
- C** Many neuroscientists and legal scholars doubt such claims—and some even question whether brain scans for lie detection will ever be ready for anything but more research on the nature of deception and the brain. An fMRI machine tracks blood flow to activated brain areas. The assumption in lie detection is that the

brain must exert extra effort when telling a lie and that the regions that do more work get more blood. Such areas light up in scans; during the lie studies, the illuminated regions are primarily involved in decision making.

D To assess how fMRI and other neuroscience findings affect the law, the Mac- Arthur Foundation put up \$10 million last year to pilot for three years the Law and Neuroscience Project. Part of the funding will attempt to set criteria for accurate and reliable lie detection using fMRI and other brain-scanning technology. “I think it’s not possible, given the current technology, to trust the results,” says Marcus Raichle, a neuroscientist at the Washington University School of Medicine in St. Louis who heads the project’s study group on lie detection. “But it’s not impossible to set up a research program to determine whether that’s possible.” A major review article last year in the American Journal of Law and Medicine by Henry T. Greely of Stanford University and Judy Illes, now at the University of British Columbia, explores the deficiencies of existing research and what may be needed to move the technology forward. The two scholars found that lie detection studies conducted so far (still less than 20 in all) failed to prove that fMRI is “effective as a lie detector in the real world at any accuracy level.”

E Most studies examined groups, not individuals. Subjects in these studies were healthy young adults—making it unclear how the results would apply to someone who takes a drug that affects blood pressure or has a blockage in an artery. And the two researchers questioned the specificity of the lit-up areas; they noted that the regions also correlate with a wide range of cognitive behaviors, including memory, self- monitoring and conscious self-awareness.



F The biggest challenge for which the Law and Neuroscience Project is already funding new research—is how to diminish the artificiality of the test protocol. Lying about whether a playing card is the seven of spades may not activate the same areas of the cortex as answering a question about whether you robbed the corner store. In fact, the most realistic studies to date may have come from the Lie Lab television programs. The two companies marketing the technology are not waiting for more data. Cephos is offering scans without charge to people who claim they were falsely accused if they meet certain criteria in an effort to get scans accepted by the courts. Allowing scans as legal evidence could open a potentially huge and lucrative market. “We may have to take many shots on goal before we actually see a courtroom,” says Cephos chief executive Steven Laken. He asserts that the technology has achieved 97 percent accuracy and that the more than 100 people scanned using the Cephos protocol have provided data

that have resolved many of the issues that Greely and Illes cited.

- G** But until formal clinical trials prove that the machines meet safety and effectiveness criteria, Greely and Illes have called for a ban on non-research uses. Trials envisaged for regulatory approval hint at the technical challenges. Actors, professional poker players and sociopaths would be compared against average Joes. The devout would go in the scanner after nonbelievers. Testing would take into account social setting. White lies—“no, dinner really was fantastic”—would have to be compared against untruths about sexual peccadilloes to ensure that the brain reacts identically.
- H** There potential for abuse prompts caution. “The danger is that people’s lives can be changed in bad ways because of mistakes in the technology,” Greely says. “The danger for the science is that it gets a black eye because of this very high profile use of neuroimaging that goes wrong.” Considering the long and controversial history of the polygraph, gradualism may be the wisest course to follow for a new diagnostic that probes an essential quality governing social interaction.

Questions 1-7

Use the information in the passage to match the people (listed A-D) with opinions or deeds below. Write the appropriate letters A-D in boxes 1-7 on your answer sheet.

NB you may use any letter more than once

- A Henry T. Greely & Judy Illes**
- B Steven Laken**
- C Henry T. Greely**
- D Marcus Raichle**

- 1** The possibility hidden in a mission impossible
- 2** The uncertain effectiveness of functional magnetic resonance imaging for detecting lies
- 3** The hazard lying behind the technology as a lie detector
- 4** The limited fields for the use of lie detection technology
- 5** Several successful cases of applying the results from the lie detection technology
- 6** Cons of the current research related to lie-detector tests
- 7** There should be some requested work to improve the techniques regarding lie detection

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	<i>if the statement is true</i>
FALSE	<i>if the statement is false</i>
NOT GIVEN	<i>if the information is not given in the passage</i>

- 8 The lie detection for a convicted woman was first conducted by researchers in Europe.
- 9 The legitimization of using scans in the court might mean a promising and profitable business.
- 10 There is always something wrong with neuroimaging.

Questions 11-13

Summary

Complete the following summary of the paragraphs of Reading Passage, using **No More than Three** words from the Reading Passage for each answer. Write your answers in boxes **11-13** on your answer sheet.

It is claimed that functional magnetic resonance imaging can check lies by observing the internal part of the brain rather than following up11..... to evaluate the anxiety as12.....does. Audiences as well as.....13..... are fascinated by this amazing lie-detection technology.

SECTION 2

Malaria Combat in Italy

A Mal-aria. Bad air. Even the word is Italian, and this horrible disease marked the life of those in the **peninsula** for thousands of years. Giuseppe Garibaldi's wife died of the disease, as did the country's first prime minister, Cavour, in 1861. Yet by 1962, Italy was officially declared malaria-free, and it has remained so ever since. Frank Snowden's study of this success story is a remarkable piece of historical work. Original, crystal-clear, analytical and passionate, Snowden (who has previously written about **cholera**) takes us to areas historians have rarely visited before.



B Everybody now knows that malaria is carried by mosquitoes. Malaria has always been the subject of research for **medical practitioners** from time immemorial. However, many ancient texts, especially medical literature, mention of various aspects of malaria and even of its possible link with mosquitoes and insects. Early man, confronting the **manifestations** of malaria, attributed the fevers to supernatural influences: evil spirits, angered **deities** , or the black magic of **sorcerers**. But in the 19th century, most experts believed that the disease was not produced by unclean air ("miasma" or "poisoning of the air"). Two Americans, Josiah Clark Nott and Lewis Daniel Beauperthy, echoed Crawford's ideas. Nott in his essay "Yellow Fever Contrasted with Bilious Fever," published in 1850, dismissed the miasma theory as worthless, arguing that microscopic insects somehow transmitted by mosquitoes caused both malaria and yellow fever. Others made a link between **swamps** , water and malaria, but did not make the further leap towards insects. The consequences of these theories were that little was done to combat the disease before the end of the century. Things became so bad that 11m Italians (from a total population of 25m) were "permanently at risk". In malarial zones the life expectancy of land workers was a terrifying 22.5 years. Those who escaped death were weakened or suffered from splenomegaly - a "painful enlargement of the spleen" and "a lifeless stare". The economic impact of the disease was immense. Epidemics were blamed on southern Italians, given the

widespread belief that malaria was hereditary. In the 1880s, such theories began to collapse as the dreaded mosquito was identified as the real **culprit** .

- C Italian scientists, drawing on the pioneering work of French doctor Alphonse Laveran, were able to predict the cycles of fever but it was in Rome that further key discoveries were made. Giovanni Battista Grassi, a naturalist, found that a particular type of mosquito was the carrier of malaria. By experimenting on healthy volunteers (mosquitoes were released into rooms where they drank the blood of the human guinea pigs), Grassi was able to make the direct link between the insects (all females of a certain kind) and the disease. Soon, doctors and scientists made another startling discovery: the mosquitoes themselves were also infected and not mere carriers. Every year, during the mosquito season, malarial blood was moved around the population by the insects.



Definitive proof of these new theories was obtained after an extraordinary series of experiments in Italy, where healthy people were introduced into malarial zones but kept free of mosquito bites - and remained well. The new Italian state had the necessary information to tackle the disease.

- D A complicated approach was adopted, which made use of **quinine** - a drug obtained from tree bark which had long been used to combat fever, but was now seen as a crucial part of the war on malaria. Italy introduced a quinine law and a quinine tax in 1904, and the drug was administered to large numbers of rural workers. Despite its often terrible side-effects (the headaches produced were known as the "quinine-buzz") the drug was successful in limiting the spread of the disease, and in breaking cycles of infection. In addition, Italy set up rural health centres and invested heavily in education programmes. Malaria, as Snowden shows, was not just a medical problem, but a social and regional issue, and could only be defeated through multi-layered strategies. Politics was itself transformed by the anti- malarial campaigns.
- E It was originally decided to give quinine to all those in certain regions - even healthy people; peasants were often suspicious of medicine being forced upon them. Doctors were sometimes met with hostility and refusal, and many were dubbed "poisoners". Despite these problems, the strategy was hugely successful. Deaths from malaria fell by some 80% in the first decade of the 20th century and some areas escaped altogether from the scourge of the disease.

F Shamefully, the Italian malaria expert Alberto Missiroli had a role to play in the disaster: he did not distribute quinine, despite being well aware of the epidemic to come. Snowden claims that Missiroli was already preparing a new strategy - with the support of the US Rockefeller Foundation - using a new pesticide, DDT. Missiroli allowed the epidemic to spread, in order to create the ideal conditions for a massive, and **lucrative**, human experiment. Fifty-five thousand cases of malaria were recorded in the province of Littoria alone in 1944. It is estimated that more than a third of those in the affected area contracted the disease. Thousands, nobody knows how many, died.

G With the war over, the US government and the Rockefeller Foundation were free to experiment. DDT was sprayed from the air and 3m Italians had their bodies covered with the chemical. The effects were dramatic, and nobody really cared about the toxic **effects** of the chemical. By 1962, malaria was more or less gone from the whole peninsula. The last cases were noted in a poor region of Sicily. One of the final victims to die of the disease in Italy was the popular cyclist, Fausto Coppi. He had contracted malaria in Africa in 1960, and the failure of doctors in the north of Italy to spot the disease was a sign of the times. A few decades earlier, they would have immediately noticed the tell-tale signs; it was later claimed that a small dose of quinine would have saved his life.



H As there are still more than 1m deaths every year from malaria worldwide, Snowden's book also has contemporary relevance. This is a disease that affects every level of the societies where it is rampant. As Snowden writes: "In Italy malaria **undermined** agricultural productivity, **decimated** the army, destroyed communities and left families impoverished." The economic miracle of the 50s and 60s which made Italy into a modern industrial nation would not have been possible without the eradication of malaria. Moreover, this book convincingly argues that the disease was "an integral part of the big picture of modern Italian history". This magnificent study, beautifully written and impeccably documented, deserves an audience beyond specialists in history, or in Italy. It also provides us with "a message of hope for a world struggling with the great present-day medical emergency".

Questions 14-17

Complete the following summary of the paragraphs of Reading Passage
Using ***no more than two*** words from the Reading Passage for each answer.
Write your answers in boxes 14-17 on your answer sheet.

Theories for malaria origin have always been the issue of research for medical practitioners from the ancient time. Although the link between malaria and mosquito was established lately, it has been recorded in words that14..... , including mosquito, may play the major culprits. In the 19th century, most experts rejected the idea of the miasma theory which related malaria to15..... Even another widespread theory arose that southern Italians were blamed, to whom malaria was16..... In southern Italy, situation became so severe that near half the Italians population was thought to be "permanently at risk". In malarial areas the17..... of rural workers was surprisingly shorter. In the 1880s, such theories began to withdraw as the mosquito was identified as the true cause.

Questions 18-21

Do the following statements agree with the claims of the writer in Reading Passage?
in boxes 18-21 on your answer sheet write

<i>YES</i>	<i>if the statement agrees with the claims of the writer</i>
<i>NO</i>	<i>if the statement contradicts the claims of the writer</i>
<i>NOT GIVEN</i>	<i>if it is impossible to say what the writer thinks about this</i>

- 18 The volunteers in Grassi experiments were from all parts over the Italy.
- 19 Healthy people could remain safe in the malaria- infectious zone if they did not have mosquito bites.
- 20 Quinine is an effective drug which had long been used to combat malaria.
- 21 Eradicating malaria was a goal combined both medical and political significance.

Questions 22-27

Reading Passage 2 has 8 paragraphs, **A-H**.

Which paragraph contains the following information?

Write the correct letter A-H in boxes, 22-27 on your answer sheet.

- 22 A breakthrough was found that mosquito was the carrier of malaria
- 23 A scientist intentionally failed to restrict the epidemic area.
- 24 This successful story still holds true for today's readers worldwide.
- 25 One of the final cases reported to die of malaria in Italy
- 26 the negative symptoms of the a highly effective drug
- 27 A list of speculative hypothesis were cited.

SECTION 3

Travel Accounts

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 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.

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,



Gopuram temple, 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.

E If Muslim and Chinese peoples dominated travel and 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 writings 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 writings were the Japanese reformer Fukuzawa Yukichi and the Chinese revolutionary Sun Yat-sen.

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 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.



Questions 28-35

Complete the table below.

Write **NO MORE THAN TWO WORDS** from Reading Passage 3 for each answer.

Write your answer in boxes 28-35 on your answer sheet.

TIME	DESTINATION	TRAVELER	PURPOSE
Classical era	Egypt and Anatolia	Herodotus	obtain information on 28
1 st century BC	Central Asia	Zhang Qian	To seek 29
Roman Empire	Mediterranean	Ptolemy, Strabo, Pliny the Elder	To gather 30.....
Post-classical era	Eastern Hemisphere	Muslims	For business and 31.....
5 th to 9 th centuries CE	India	Asian Buddhists	To study with 32.....and for spiritual enlightenment
Early modern era	Distant places of the globe	The Europeans	To meet the public's expectation for the outside
19 th century	Asia, Africa	Colonial administrator	To provide information on the 33.....they conquer
By the mid-century of the 1800s	Europe and United States	Sun Yat-sen, Fukuzawa Yukichi	To learn 34.....for the reorganization of their societies
20 th century	Mass tourism	People from 35countries	For entertainment

Questions 36-40

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

Write the correct letter in box 36-40 on your answer sheet.

- 36 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
- 37 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.
- 38 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.
- 39 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.
- 40 What stimulated the market for traveling in the 20th century?
- A the wealthy
 - B travel books
 - C delicious food
 - D mass transport

Answers