Extra Reading 1: Searching for New Medicines

Over time, new diseases develop that cannot be cured with the medicines we have. Also, many medicines that once cured common diseases sometimes lose their power to cure. For these reasons, modern drug companies are constantly looking for new medicines to help doctors cure both new and common diseases. One place that drug companies are looking is in the rainforests of the world. Scientists believe that new plants from the rainforests or simple medicines from rainforest peoples might be sources for future miracle drugs.

Four hundred years ago, just such a miracle drug was found to cure malaria. In 1633, a fortunate event occurred. A Spanish priest was sent as a missionary to Peru. He wanted to minister to the native Indians there and convert them to his religion. While he was teaching, however, he learned something. The village healer—the only medical practitioner the people had ever known—was making a powder from the bark of the cinchona tree. He used this powder to cure malaria. The priest brought some of this miracle powder home to Europe, where malaria was a serious disease at the time. Europeans began using the bark to cure malaria. Soon Europeans implemented overseas searches for sources of the tree bark. After many years, scientists identified the ingredient in the tree bark that cured malaria. It was quinine. By 1827, quinine was commercially produced and became the primary treatment for malaria throughout the world. By the 1960s, however, quinine's ability to kill the malaria parasite had declined because the parasite was becoming resistant to it.

About this time, another fortunate event occurred. Scientists in China were digging up ancient cities. One city was a place where people had resided 2,000 years earlier. The scientists discovered that the ancient people had used a plant, called wormwood, to cure fevers. Scientists collected living samples of the plant to test. They found that wormwood contained artemisinin. This chemical killed malaria parasites. Today, artemisinin is used in various mixtures with other drugs (Artemisinin Combination Therapy, or ACT) to treat people who have malaria.

Aspirin is another ancient medicine. Its history dates back over 2,000 years, when ancient Greek physicians made a tea from willow bark to ease pain and lower fever. People continued to use willow bark as a home remedy for centuries. Modern scientists identified salicylic acid as the special ingredient in the bark that eased pain and fever. Soon, drug companies were making aspirin tablets containing salicylic acid.

Today, aspirin is one of the most widely used drugs in the world. Around 100 billion aspirin tablets are produced each year.

Not all medical histories are centuries old. The story of taxol is an example of how miracle drugs are still being found in the world's forests. In 1966, scientists discovered a powerful chemical in the bark of the Pacific yew tree. This chemical could stop cell growth. They believed it would be useful in treating the unnatural cell growth of cancer. Soon, taxol was being used in intensive treatments for certain kinds of cancer.

Scientists think that many medicines may still be hidden in the rainforests of the world. As a result, over 100 companies that manufacture drugs are searching for new rainforest plants and testing them for possible medical use.

Unfortunately, access to these rainforest plants is rapidly disappearing. Logging companies are cutting down the rainforest trees and selling the wood. Commercial developers are laboring hard to clear the land for houses, farms, towns, and roads. Clearly, the priorities of the scientists conflict with the priorities of the business people. The scientists want time to find plants that might cures diseases. The businesspeople want to make money from the plants that grow there.

Experts believe that about 50,000 species of plants, animals, and insects disappear every year because rainforests are being destroyed. Scientists fear that when rainforest species disappear, many possible cures for diseases will disappear with them. They also fear that when rainforests disappear, the villages of native people who reside there will also disappear. When the people leave, their healers also leave. These practitioners are the only individuals who know the secrets of healing sick people with forest plants.

In fact, most modern drugs made from plants came from simple cures that village healers created from nearby plants. As a result, modern drug companies are sending scientists, accompanied by local translators, to work cooperatively with these village healers to learn their secrets before those secrets are lost forever. Drug companies are also sending teams of workers into the rainforests to gather plants to test. If company scientists find a useful cure in a plant they test, they will identify the chemicals in the plant. Then, the company can manufacture a medicine that is chemically identical. Before rainforests disappear completely, scientists want to gather as many medical secrets as possible. Soon, however, it may be too late to learn the rainforest's secrets.

Question 1-8

Complete the sentences below. Choose *NO MORE THAN TWO WORDS* from the passage for each answer.

1. Contemporary enterprises are implementing searches for drugs in the __rainforests_____.
2. In 1633, Indians residing in Peru treated malaria with a __powder_____ made from tree bark.
3. Scientists discovered that __quinine_____ in the tree bark could treat malaria.
4. The discovery of __artemisinin_____ inside wormwood occurred in the 1960s.
5. Aspirin tablets included __salicylic acid_____ which could reduce pain and fever.
6. Some specific types of cancer could be treated using ___taxol_____.
7. Rainforest plants have been cut down and sold by _logging companies_____.
8. __Company scientists_____ are being sent into the jungle to conduct experiments on the trees.

Question 9-13

Do the following statements agree with the information in Extra Reading 1?

TRUE	if the statement agrees with the information
FALSE	if the statement contradicts the information
NOT GIVEN	if there is no information on this

9. Europeans had access to quinine over 2,000 years ago. F
10. Taxol is now used in the intensive treatment of malaria. NG
11. The destruction of the rainforests has led to the extinction of numerous living organisms. T
12. As rainforests disappear, the number of people living there will increase. F
13. Translators accompany scientists into the rainforests to help scientists learn secrets from village healers. T

Extra Reading 2: What's in a Name?

A. One of the most important tasks in marketing a new product is giving it a name. In terms of marketing, the quality of a product is not as important as the quality of the name it is given. This is because marketing is not about the product; it is about selling the product. Marketers use strategies such as attractive packaging, catchy slogans, and other gimmicks to convince consumers to buy their product. The most powerful marketing strategy, however, is giving a product a powerful name.

B. To be powerful, the name must be easy to remember. In the early days of computers, there were several competing brands on the market, including Apple II, Commodore Pet, IMSAI 8080, MITS Altair 8800, and Radio Shack TRS-80. In those days, most buyers knew very little about computers, so they were not able to judge the quality of one over the other. As a result, they rejected the computers with complex names. Instead, they chose the brands that invoked familiar ideas. They chose, of course, the Apple II.

C. The name must also be easy to pronounce. If customers can't pronounce the name of a product, they won't buy it. A short name is easier to remember and to pronounce. According to research done by Strategic Name Development consultants, the best names have three or fewer syllables, such as Turns (antacid tablets), Xerox (copiers), or Cheerios (cereal). Many well-known names are longer, of course, such as Energizer (batteries) and Coca Cola (soft drinks), so length is not the only factor.

D. A product name should be unique. It shouldn't sound like the name of any other product, especially a competing product. Shoppers tend to confuse Breyer's Ice Cream with Dreyer's Ice Cream and Rolex (watches) with Rolodex (desk indexes), for example.

E. In addition, an effective name should hint at what the product is used for. For example, Sleepeez is a sleeping medication and Windex is a window cleaner. A name should also be appropriate for the type of product it represents. Names of medicines should sound medical, names of foods should sound tasty, and names of domestic cleaning products should sound hard-working.

F. An effective name also includes words, or parts of words, that are positive and inviting. Sometimes, the product name sounds like another descriptive word that has a positive meaning. The pain reliever Aleve, for example, sounds like "relieve." Band-Aid (a small plastic bandage) includes the word "aid."

Frequently, names of products aimed at high-income consumers implicitly advertise luxury. Consider the names of these cruise ship companies: Crystal, Princess, Royal Caribbean, and Celebrity.

G. The letters within names are important, too. A survey administered by the above consultants asked English speakers about their reactions to various letters of the alphabet. The results showed that people associate the letters C, S, and B with something traditional, but associate the letters Q, V, X, and Z with something innovative. Additionally, people in the survey associated certain letters with one sex or the other. They considered the letters F, L, V, and W feminine, but the letters M, X, and Z masculine. It is not clear how those surveyed might react to the automobile names Volvo, Mazda, or Lexus.

H. Marketers must also consider how a product name will translate in other languages if the product is exported. When the Chevrolet Nova automobile was exported to Argentina in the 1970s, some people predicted that it would sell so poorly because in Spanish the two words "Nova" mean "It doesn't go." Fortunately, "nova" (a bright star) is the same word in both Spanish and English.

I. Finally, a name must not generate negative associations in the minds of consumers. Many words have an implicit message as well as an explicit meaning. Why, for example, has no car manufacturer named a car the Elephant? Elephants are big, strong, and dependable, but they are also slow-moving, fat, and eat a lot. There used to be a weight-loss product called Aids. It disappeared once AIDS became a serious illness worldwide.

J. Corporations put forth great effort to find the right name for a new product. They often hire consultants who specialize in creating product names. Working with the principles above, they create several possible names. Then, they channel the names through one or more focus groups. These groups are made up of individuals drawn from the sector of the population that is most likely to buy the target product, such as, dog owners, frequent travelers, or senior citizens. When a focus group meets, they freely discuss what they like or don't like about the possible names.

K. Once the right name is chosen, advertisements are widely published to introduce the new product to the buying public. Only time will tell if the important marketing decisions made earlier will be effective in selling the product.

Question 1-4

Main Reading 2 has eleven paragraphs, *A-K*.

Which paragraph contains the following information?

NB *You may use any letter more than once.*

1. examples of names which are often rejected in marketing I
2. a mention of the correlation between letters and genders G
3. a description of the naming process J
4. a reference to the purpose of products read through their names. E
5. a mention of the efficacy of rhyme in marketing F
6. a reason why customers refuse to buy products with complicated name B

Question 7-13

Complete the summary below. Choose *ONE WORD ONLY* from the passage for each answer.

The principles of product naming

Naming a product plays an important role in marketing. In order to effectively give a name to a product, companies should apply a number of principles. First, a name should be generated from simple 7__ideas_____ which customers have no trouble remembering. Second, the name should have less than four 8__syllables_____, which would make it easier to pronounce. In addition, the companies should not imitate their rivals' product names because they would confuse 9__shoppers_____. An effective name also tells customers the aim of the 10__product_____. Positive 11___words_____ or individual 12__letters_____ could entice consumers to purchase products as well. Finally, a name should not invoke any unpleasant 13__associations_____ in the customers' minds.

Question 14-16

Do the following statements agree with the information in Extra Reading 2?

YES	**if the statement agrees with the claims of the writer**
NO	**if the statement contradicts the claims of the writer**
NOT GIVEN	**if it is impossible to say what the writer thinks about this.**

14. Early computer buyers chose a brand name that invoked high-tech innovation. NG
15. The names of domestic cleaning products should sound hard-working. Y
16. A survey administered by naming consultants showed that only product names spelled with an X are considered innovative. N

Extra Reading 3: Symbolic Clothing

Question 1-7

Extra Reading 3 has seven paragraphs, *A-G*.

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

List of Headings

i. The purposes of military uniforms

ii. Two different outfits for one leader

iii. A simple thing used to discriminate between leaders and their citizens

iv. A tassel in different places

v. Benefits of a wedding dress

vi. Traditional attire for graduates

vii. Other pieces of clothing that represent power

viii. A ceremony that changes civil status

ix. The meaning of clothes.

1. Paragraph **A** **ix**
2. Paragraph **B** **iii**
3. Paragraph **C** **vii**
4. Paragraph **D** **vi**
5. Paragraph **E** **viii**
6. Paragraph **F** **ii**
7. Paragraph **G** **i**

A. Symbolic clothing can symbolize many things, including authority, nationality and change of status. Often the original significance of the clothing has been forgotten or has changed over time, yet societies continue to respect the symbolism. Other clothing, such as the white wedding dress, became symbolic somewhat recently, yet is still considered traditional. The objects and clothing that become important symbols in a culture are determined by the special meaning that people give them.

B. Hundreds of years ago, umbrellas were symbols of power and authority. Kings, sheikhs, popes, and other rulers believed that owning these sunshades added to their importance. The more umbrellas a ruler had, the more he impressed others; and the bigger his umbrellas, the more power the owner appeared to have. It seems odd to us today that such an everyday object could have once been used to differentiate rulers from ordinary people. Yet at that time, an umbrella was an unambiguous symbol of power. Similarly, contemporary cultures today employ many common things, including clothing, as symbols of social status.

C. In the civil courts of law in many countries, judges wear long robes, usually black, that cover their ordinary clothing. The robes identify the judges' role in the courtroom and symbolize their authority to administer justice. The gavel that judges rap to convene court and maintain order is another such symbol of authority. In Britain and in most Commonwealth nations, judges and certain court officials also wear white wigs that symbolize their roles. Similarly, the ceremonial clothing of European kings and queens is symbolic of their royal authority. Nowadays they wear the long, fur-trimmed capes only on special occasions, with jeweled crowns on their heads and jeweled staffs, called scepters, held in their hands.

D. The academic cap and gown is another example of symbolic clothing. Hundreds of years ago, students at European universities were required to wear long, black robes. Today academic robes are worn only for graduation ceremonies along with a close-fitting black cap topped by a flat, black square. A tassel, which is a bundle of long silk strings tied together, hangs from a button in the center of the square. By convention, students begin the graduation ceremony with the tassel hanging from the right side of the square. Once a university administrator declares that the students have officially graduated, they

move their tassels to the left side of the square to indicate their new change of status. Graduating students also wear short drapes of cloth over their gowns, whereby their field of academic specialization is indicated via color. An orange cloth symbolizes engineering, for example, and green symbolizes medicine.

E. A wedding, too, is a change-of-status ceremony. Traditional attire is an integral part of the ritual. In a conventional Western wedding, the bride wears a long, white dress. She also wears a white veil on her head and carries a bouquet of flowers. Her clothing and various accessories (which may be hidden) constitute traditional good-luck items that a bride should carry: "something old, something new, something borrowed, something blue, and a lucky penny in her shoe." An important part of the ceremony is the exchange of wedding rings. These circles of gold or silver have no ending, and symbolize the lifetime relationship the bride and groom are about to begin. The symbolism of the Western white wedding dress is so strong that brides from many non-Western cultures have chosen to include such a dress in their weddings. An Asian bride, for example, might wear a red gown during a traditional wedding ceremony and then change into a white wedding dress.

F. Unlike judges or royalty, who wear symbolic clothing only for certain occasions, religious leaders tend to wear clothing that identifies their religious roles at all times. In many religions, there are two kinds of religious clothing. Religious leaders wear one kind of clothing on a daily basis as they perform non-ceremonial tasks. The other kind is what they wear while participating in religious ceremonies. Often this attire is a long robe of a certain color, perhaps decorated with religious symbols. In some religions, the leaders must wear head coverings, while in others they are forbidden to cover their heads.

G. Military personnel, too, wear uniforms at all times, but different types. One type is for everyday wear, and another is the formal uniform worn for military ceremonies. A third type is worn in battle. Military uniforms serve several symbolic functions. First, the various decorations on a uniform jacket and hat are indexes of someone's position in the military. Second, uniforms encourage members of a group to acquire a sense of unity and pride. Finally, in the context of a battle, uniforms become symbols of the nation the soldiers are defending.

Question 8-13

Complete the sentences below. Choose *NO MORE THAN TWO WORDS* for each answer.

8. The symbolism of some ceremonial clothing, such as the __wedding dress_____, is somewhat recent.
9. Hundreds of years ago, the _umbrellas_____ that kings, sheikhs, and popes acquired became indexes of their high positions in society.
10. The __gavel_____ that judges use to convene sessions in a civil court of law is a symbol of their authority.
11. In some __cultures_____, the Western wedding dress is becoming an integral part of non-Western wedding ceremonies.
12. A long robe of a religious leader is embellished with _religious symbols_____.
13. In the context of a battle, __military uniforms_____ are symbols of ranking.

Extra Reading 4: I Love Me

Narcissus was the name of a god in an ancient Greek story. According to the story, he was very much in love with his own good looks. He drowned in a pool of water when he leaned over too far to admire his handsome reflection. There is a mental illness named for Narcissus. It is called "narcissistic personality disorder." People with this disorder have great love for themselves, and this coincides with a strong need to be admired by others.

Most people who have a narcissistic personality are very ordinary people. However, they think of themselves as being very important and special. As a result, they often try to exploit others. They expect other people to give them constant attention and to obey their commands. In a restaurant, for example, a narcissist might expect to be seated immediately. He might demand a better table, a special salad, or a sharper knife. Narcissists demand attention from everyone, including their family, friends, colleagues, and even strangers. On the other hand, they can demonstrate great charm. They smile and flirt. They gossip and tell jokes. They generate excitement with their lively chatter. They like to talk about themselves and often dominate the conversation with stories about their exploits. In these stories they tend to greatly exaggerate their talents and personal achievements. In fact, when narcissists describe their achievements, they are likely to be lying. Lying is typical behavior for a narcissist, who often tries to impress people with false claims about things he owns or people he knows. (a) He brags that his golf clubs are identical to the ones used by Tiger Woods. He claims to be friends with the mayor and the police chief and the bank president. (b)

However, psychiatrists suggest that this behavior results not from self-love, but actually from fear of failure and the subsequent shame it would bring. (c) Some say that narcissism results if parents do not comfort young children when they have been disappointed or have failed at something. (d) The children view this as punishment and try to avoid future failure. As a result, they never learn to deal with disappointment or failure. Other therapists have a slightly different theory. They believe that a narcissistic personality arises when parents try to protect children from disappointment and failure by

satisfying all of their demands. This generates in the children a lifelong pattern of expecting that they will always get what they want.

Oddly, the narcissistic traits that we find so annoying in ordinary people are the same traits that attract us to many entertainers and professional athletes. A recent study found that celebrities as a group are more narcissistic than other people. However, it is not fame that makes celebrities narcissistic; it is the other way around. They were first narcissistic and were then drawn to careers that would earn them admiration from others. The applause of their fans is a positive message that they are loved and admired. But they may also exploit the media to get attention. For example, they wear show-off clothes and date gorgeous partners. They marry and divorce so again and again. They buy expensive cars and drive too fast. Whatever they do, the media report it because the uninhibited behavior and dynamic personalities of the celebrities make them seem exciting.

All of us have some narcissism, and that's good. Self-love is what motivates people to nourish and protect their bodies, to improve their minds, to learn new skills, and to discover the world in which they live. It is what gives people the self-confidence to share a relationship with others and the ambition to reach for success. However, the self-love of those with a serious narcissistic behavior disorder is so excessive that it overshadows everything else in their lives.

Question 1-6

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

1. Narcissus died because of

   A. the beauty of his wife.

   B. the mental illness of his soldiers.

   C. the admiration of ancient Greek civilian.

   D. his self-love behavior. x

2. What is the writer suggesting about narcissistic personality disorder in the second paragraph?

   A. Narcissism is associated with empathy for others.

   B. Sometimes narcissists love people around them too much that could make them uncomfortable.

   C. Narcissism is a normally distributed personality trait. x

   D. Narcissists often are humble about their achievements.

3. Look at the four letters (a, b, c, and d) that indicate where the following sentence could be added to the passage in paragraph 4.

   This kind of talk seems to reflect great self-confidence and self-esteem.

   A. Option (a)

   B. Option (b) x

   C. Option (c)

   D. Option (d)

4. The word “therapists” in paragraph 5 is closest in meaning to

   A. optometrists

   B. ophthalmologists

   C. psychiatrists x

   D. specialists

5. What is the writer's main idea in the third paragraph?

A. Too warm or too cold parenting could result in narcissism. x

B. Narcissistic behaviors are common among children.

C. Narcissism is often based on a fear of failure or weakness.

D. Children are often afraid of failure because of their narcissistic parents.

6. Why is narcissism common among celebrities?

A. because they are famous.

B. because their parents were nurturing.

C. because they were born narcissistic, which drives them to be famous. x

D. appearing in mass media to boost their profile.

Question 7-10

Do the following statements agree with the information in Extra Reading 4?

YES	**if the statement agrees with the claims of the writer**
NO	**if the statement contradicts the claims of the writer**
NOT GIVEN	**if it is impossible to say what the writer thinks about this.**

7. A narcissist might try to exploit people because he believes he is very important. Y
8. A narcissist is aware of other people's failures and demonstrates great concern. N
9. Psychiatrists believe that children play a role in generating narcissism in their parents. NG
10. Professional athletes become narcissistic as a result of their careers. N

Question 11-13

Complete the sentences below. Choose *ONLY ONE WORD* for each answer.

11. Narcissists often lie about their _achievements_____ and dominate conversations with stories about themselves.
12. Psychiatrists believe that narcissistic behavior coincides with __self-love_____.
13. Celebrities get attention from the media because their __behavior_____ makes them seem uninhibited.

Extra Reading 5: Forensic Science

Sherlock Holmes, a fictional detective of a century ago, was one of the first to use forensic science—the scientific analysis of physical evidence to solve crimes. Holding a big magnifying glass, Holmes inspected crime scenes for footprints, broken glass, hair—anything that might help identify the person who committed the crime. In today's world, Holmes might be a CSI, or crime scene investigator.

Today, when a crime is reported, a murder for instance, the police immediately send a medical examiner (ME) and a CSI team to the crime site. The ME and CSIs will be part of a panel of technical experts in the investigation. At the crime scene, the ME examines the body of the victim and looks for wounds or marks that might be related to the crime. The ME also takes many photographs of the body. The body is subsequently taken away for a detailed examination that will establish the cause and time of the victim's death. Meanwhile, CSIs first take hundreds of photographs of the crime site. Next they check the site for fingerprints. Most fingerprints form when sweat or another oily substance on a fingertip leaves an invisible imprint on a glass, tabletop, or other object. CSIs dust a black powder on objects at the crime site to make these prints visible. The CSIs then look for drops of blood, strands of hair, pieces of ripped cloth, or other evidence that might link someone to the crime site.

"Every contact leaves a trace," according to an authority in forensics. This means that whenever a crime involves physical contact, the criminal either leaves something at the site, takes something from the site, or both. This might be any number of substances, including hair, animal fur, sand, grass, and fibers from clothing or carpeting. Such trace evidence is usually difficult to detect, so, like Sherlock Holmes, CSIs rely on handheld magnifying glasses to examine the crime scene. CSIs might even vacuum the entire area to collect tiny samples. They carefully label each piece of evidence as they collect it. The collected evidence is then sent to a forensics laboratory. There, forensic scientists will analyze it to establish how and when the murder took place, where it took place, and who did it. Sometimes the evidence will even show why it took place, that is, the motive for the killing.

Among all the evidence found at the site, fingerprints are conclusive in linking a specific person to the crime scene. This is because no two people have the same fingerprints. Fingerprints from a crime scene are analyzed by computer to determine if they match the prints of a known criminal or crime suspect.

DNA is another conclusive means of identification because each person's DNA is unique. DNA is contained in cells of the body, so that evidence of hair, blood, tears, sweat, or other bodily fluids found at a crime scene can be used to link a specific person to the crime. Like fingerprints, DNA samples are analyzed by computer to determine if they match the DNA of a known criminal or a suspect.

Voices, too, are unique. Samples of voices from security camera tapes, telephone answering machines, or other recording devices can be scanned electronically. A printout of the scan will show patterns of highs and lows, rhythm, and volume that can be compared to patterns of a suspect's voice. However, authorities have contrary opinions about using voiceprints for identification. Some argue that voices can change over time as people age or suffer illnesses, so old voiceprints are not always reliable.

In the laboratory, forensic scientists use an electron microscope to scan samples of the substances that were collected at the crime scene. Then they enlarge the samples (up to 150,000x) on a visual display unit. This allows them to easily compare those samples with samples found at another location or on a suspect's clothing.

Forensic laboratories have on file the shoe print patterns of thousands of kinds of shoes. These can be compared to shoe-prints found at a crime scene to establish the size and kind of shoes worn by a suspect. If the shoe-print was made in a soft material, like mud, the lab may be able to tell the height and weight of the person by the depth of each step and the distance between steps.

After all of the evidence has been analyzed, the police chief consults with panel members. Based on the evidence, they determine if it is logical to accuse and arrest a crime suspect. If it is, members of the panel may later be asked to present their forensic evidence in a court of law as proof of a suspect's guilt.

Question 1-7

Complete the diagram below.

Choose *ONLY ONE WORD* from the passage for each answer.

Forensic Investigation Process

The medical examiner takes a lot of 1__photographs_____ .

↓

The CSI team then dust objects for 2__fingerprints_____.

↓

They look for drops of 3___blood_____ or strands of hair.

↓

The 4__evidence_____ will then be labeled.

↓

The 5__forensic_____ lab will receive the evidence.

↓

The police consults with members of a 6___panel_____

↓

Evidence will be presented in a 7__court_____ setting.

Question 8-13

Do the following statements agree with the information in Extra Reading 5?

TRUE	**if the statement agrees with the information**
FALSE	**if the statement contradicts the information**
NOT GIVEN	**if there is no information on this.**

8. Holmes inspected a crime site for anything related to the crime, for instance footprints, broken glass, or hair. T
9. Forensic laboratories establish when and where a murder took place by taking hundreds of photographs. F
10. To identify footprints, forensic laboratories consult files of footprints of known criminals. NG
11. CSIs use handheld magnifying glasses to detect trace evidence at crime scenes. T
12. DNA analysis can conclusively establish the motive for a crime. F
13. Samples of a suspect's voice can be compared to voice samples from surveillance tapes or telephone answering machines. T

Extra Reading 6: Franchising

Question 1-7

Extra Reading 6 has seven paragraphs, *A-G*.

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

List of Headings

i. Back up from the parent company

ii. Different kinds of franchisees

iii. A risky system for both parties

iv. The expansion of the franchise model

v. A new system threatening individual ownership

vi. Other benefits to owning a franchise

vii. The significance of 7-eleven

viii. What is a franchise?

ix. An idea to copy the new McDonald model

1. Paragraph **A** **v**
2. Paragraph **B** **viii**
3. Paragraph **C** **ii**
4. Paragraph **D** **i**
5. Paragraph **E** **vi**
6. Paragraph **F** **iii**
7. Paragraph **G** **iv**

A. At one time, all small retail businesses, such as clothing stores, restaurants, shoe stores, and grocery stores, were owned by individuals. They often gave the stores their own names: Lucy's Dress Shop, Fred's Coffee Shop, Johnson Family Grocery. For some people, owning a business fulfilled a lifelong dream of independent ownership. For others, it continued a family business that dated back several generations. These businesses used to line the streets of cities and small towns everywhere. Today, by contrast, the small independent shops are almost all gone, and chain stores like The Gap, Starbuck's, and 7-Eleven have moved in to replace them. Most small independent businesses couldn't compete with the giant chains and eventually failed. However, many owners didn't abandon retail sales altogether. They became small business owners once again through franchises. The franchise system is a contemporary business model that has increasingly prevailed the small business sector of retail trade over the last hundred years.

B. A franchise is a legal and commercial agreement between an individual and a parent company. It gives the person permission to own one of the company's franchise outlets, to use the company name, and to sell the products or services of the company. A person must apply for a franchise; however, not all applicants are approved. Some may be rejected because of poor financial histories, for example. If approved, the new business owner (the franchisee) must pay a large start-up fee to the company (the franchiser) and agree to follow its regulations. These regulations require complete uniformity in all of its franchises. This means that the franchiser establishes the rules for the appearance of the store, both inside and outside. It means the franchisee can sell only the products or services of the parent company. It means that a "large coffee" must be the same size in every company franchise. It means that all restaurants in a franchise system must put the same number of pickles on their burgers, and use identical napkins, paper cups, and food wrappers. It also means that the franchisee is graded regularly on its performance by the parent company.

C. Not all chain stores are franchises. Some are owned and operated by the parent company. A franchise is owned by the franchisee. Restaurants are the most common franchises. On any city block you are likely to see at least one franchise restaurant, and often three or four. In some shopping malls, the entire complement of stores is made up of franchises. Almost any kind of business can be

franchised, including dental offices, hardware stores, hotels, gas stations, pet hospitals, tax consultants, fitness centers, cleaning services, movie theaters, and child care centers.

D. Despite the restrictions, there are many advantages to owning a franchise. The most important advantage is the support and assistance of the franchiser. For example, the franchiser can help a new owner find a good location, help plan an efficient use of floor space, and help decide on the amount of goods needed to start up the business. The franchiser also provides detailed training for the owner and his staff in all areas of the business. Once established, the franchisee benefits from ongoing research and development by the company to keep the business up-to-date and competitive. Company consultants and a network of small fellow business owners offer opportunities to discuss business problems. All these support services provide small franchisees with the tools of big business, albeit not for free.

E. Owning a franchise also helps to run a business that bears the name of a well-known corporation with an acknowledged reputation for good service. Customers are inclined to shop at stores with familiar names, and more shoppers mean more sales. Also, individual franchises benefit from the output of expensive advertisements paid for by the company, which might overlap with local advertising by franchisees. When this happens, there is an extra benefit. Finally, the franchisee is not an employee of the company. He is a business owner, motivated to work hard to make his business successful.

F. The major disadvantage of the franchise model is the close economic relationship among the many franchisees and the parent company. For instance, if one franchisee in the system is found guilty of cheating customers, it reflects poorly on the other franchisees in the system. As a result, too all the stores may lose customers. Similarly, if the company makes poor business decisions, the entire chain of franchises may be affected. Finally, the business owner must share his profits with the parent company to pay for the many support services that the company provides.

G. The success of the franchise system has led to a great expansion in the number of small businesses all over the world. Tried first in the U.S., the franchise model has spread rapidly to other countries. It has revolutionized retail business in many places, improved the economic status of individuals, and strengthened local economies.

Question 8-13

Complete the sentences below. Choose *NO MORE THAN TWO WORDS* from the passage for each answer.

8. Franchising is a contemporary _business model_____ that has dominated the small business sector for a few decades.
9. A franchisee's business is often graded by the __parent_____ company.
10. In some shopping centers, the __entire complement_____ of stores consists of franchises.
11. __Franchisees_____ may be provided services by companies, albeit not for free.
12. There is a business __advantage_____ to owning a franchise that bears the name of a company with an acknowledged reputation for good service.
13. The number of small businesses has expanded all over the world because of the success of the ___franchise model_____.

Extra Reading 7: Exploring the Deep Ocean

A. Alvin can dive to ocean depths of 14,764 feet—nearly three miles down. Alvin can rest on the ocean bottom or hover at middle depths for up to ten hours, taking photographs and performing underwater experiments. Alvin is amazing. Many of the 150 to 200 dives Alvin makes annually result in underwater discoveries of unusual sights never before seen.

B. Alvin is not a man. Alvin is a deep-sea submersible craft capable of carrying up to three occupants. It is owned and operated by the Woods Hole Oceanographic Institution on the east coast of the United States. Alvin was built in 1964, but it has been upgraded and reconstructed many times since then. Alvin's titanium hull, or outside shell, is built to withstand the immense pressure of the deep ocean. Alvin weighs 37,400 pounds and is 23 feet 4 inches long. It has a 6-mile range and a top cruising speed of 2 knots. Five hydraulic thrusters propel the craft, and lead-acid batteries power the electrical system. Inside is an infinite variety of the latest electronic equipment, including a gyrocompass, a magnetometer, and a computer.

C. Alvin allows researchers to conduct underwater biological, chemical, and geological studies. Special lamps shine light into the black water so observers can see the wonders of the underwater environment. Cameras are mounted on the outside to take underwater photographs, and two external "arms" enable researchers to collect underwater samples.

D. Alvin contributed to an amazing discovery. On that day, Alvin was transporting scientists on a routine study. The craft was one and a half miles below the surface of the sea near the coast of the Galapagos Islands. As they looked through the three 1240 inch portholes, the scientists were temporarily stunned to see a strange underwater landscape littered with what looked like chimneys. The chimneys were discharging clouds of black smoke into the surrounding water. Clustered around the chimneys were odd creatures that lived totally cut off from the world of sunlight. The scientists were looking at hydrothermal vents and the strange sea creatures that exist near them—an entire system of life based not on sunlight, but on energy from the earth itself.

E. An unusual kind of animal life lives around these vents. Among the chemicals pouring out of the vents is hydrogen sulfide, a gas that is poisonous to most land-based life. However, bacteria in the seawater near the vents feed on this gas and other dissolved chemicals and minerals pouring from the vents. Then tiny animals feed on the bacteria, and these tiny animals in turn become food for still larger animals. Giant red and white tube worms eight feet tall cluster near the vents and dominate the scene. Tiny shrimps and white crabs feed on the worms while giant clams rest in the sand. In an environment that seems incompatible with life, these organisms are thriving.

F. Since the first vent was discovered in 1977, hundreds of other vents have been located in oceans around the world. Some of the sites are inaccessible, so scientists have not been able to study them all. However, scientists are planning to trace the development of vents by revisiting some they studied earlier. They want to find out how long vents remain active and if the odd creatures change over time.

Question 1-6

Extra Reading 7 has six paragraphs, *A-F*.

Which paragraph contains the following information?

NB *You may use any letter more than once.*

1. a mention of creatures that reside deep in the sea E
2. a reference to Alvin's application in scientific explorations. D
3. a possible outcome for the research community F
4. a reason why Alvin is chosen for scientific projects C
5. a reference to a great capability of Alvin A
6. a description of Alvin's physical features B

Question 7-9

Complete the sentences below. Choose *ONE WORD ONLY* from the passage for each answer.

7. Alvin is a ship which temporarily helped __researchers_____ conduct underwater studies.
8. Alvin's occupants have an infinite variety of electronic ___equipment_____ available.
9. Scientists plan to revisit some of the __vents_____ in order to trace their development.

Question 11-13

Do the following statements agree with the information in Extra Reading 7?

TRUE	**if the statement agrees with the information**
FALSE	**if the statement contradicts information**
NOT GIVEN	**if there is no information on this.**

10. Alvin makes between 150-200 dives annually. T
11. Alvin contributed to the discovery of the Galapagos Islands in 1977. NG
12. Near vents, giant tube worms, shrimps, and crabs exist in an environment that seems incompatible with life. T
13. Scientists will terminate their study of vents because some vents are inaccessible. F

Extra Reading 8: Bionic People

In 2001, Jesse Sullivan was 54 years old and working as a lineman for an electrical power company. Somehow, he made an error and contacted with a live wire on the ground that gave him a 7,200-volt shock of electricity. His arms were destroyed. After recovering from the accident, Jesse got a set of artificial arms. He controlled them by moving his back muscles and pressing tabs with his neck. He learned quickly and did well, so his doctors at the Rehabilitation Institute of Chicago advocated using him as a research subject. He would continue to use a conventional artificial right arm, but his new left arm would be a 12-pound Neuro-Controlled Bionic Arm. Instead of using his body to move it, he would use his brain.

Jesse underwent surgery to prepare for this. The objective was to isolate the healthy nerves that once controlled movement in Jesse's left arm. These nerves were reattached to muscles in Jesse's chest. Eventually the re-routed nerves would grow into the chest muscles. Finally, electrodes were attached to Jesse's chest and connected to his artificial arm. Now, when Jesse tenses these chest muscles, it creates a tiny electrical signal. (a) The signal activates a computer in the left arm that does what Jesse's brain tells it to do. (b) The movement is as voluntary and as immediate as it would be in a healthy arm.

The brain not only gives signals to the missing arm, it receives them as well. (c) Eventually he will be able to feel what the bionic hand is touching and to discriminate between sensations of heat and cold. (d)

This bionic arm is suspended from a plastic framework that fits around Jesse's upper body. It has six motors and consists of parts from around the world. The hand was made in China, the wrist in Germany, and the shoulder in Scotland. The six motors move the bionic arm's shoulder, elbow, and hand in unison[1]. Jesse uses his arm to help him put on socks, shave, eat, and do other personal and household chores just by thinking about them.

In 2004, Claudia Mitchell became the second person to use a thought-controlled artificial arm. That year the 24-year-old woman lost her right arm in a motorcycle accident. While she was recovering from

[1] together; as one

her accident, she worried about her future. She was very brave. She did not want the accident to ruin her life. She saw no alternatives until she read a magazine article about Jesse Sullivan and his bionic arm. The article gave her the encouragement to try to get her own bionic arm.

She said to herself, "I've got to have one of those." Her doctors evaluated her and agreed to make her into a bionic woman. After surgery, Claudia was fitted with a 10-pound artificial arm that she controls with her brain. She has mastered the use of her new arm and is looking forward to entering college soon.

Today a disproportionate amount of research into brain-controlled artificial arms is focused on implanting sensors in the brain to link the brain to the arm. Dr. Todd Kuiken, who heads so the neural engineering program at the Chicago Institute, rejects this approach. He says of the technique used with Jesse and Claudia, "The exciting thing about this technique is we are not implanting anything into (the) body."

Question 1-4

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

1. The reason Jesse Sullivan had bionic arms is

   A. he fell off a building.

   B. he failed to fix an electrical system.

   C. he touched a high voltage wire. x

   D. he had a motorcycle accident.

2. The word "conventional" in paragraph 2 is closest in meaning to

   A. strong

   B. high-tech

   C. traditional x

   D. iron

3. What is the writer's suggestion about Jesse's new artificial arm in the third paragraph?

   A. It would be difficult to move.

   B. It was the first bionic arm controlled by the brain. x

   C. It could negatively affect the nerves.

   D. It could provide heat while cooking.

4. Look at the four letters (a, b, c, and d) and decide where the following sentence could be added to the passage in paragraph 4.

   When a doctor touches Jesse's chest in various spots, it feels to Jesse as if the doctor is touching his thumb, for instance, even though his hand and arm are missing.

   A. Option (a)

   B. Option (b)

   C. Option (c) x

   D. Option (d)

Question 5-10

Do the following statements agree with the information in Extra Reading 8?

TRUE **if the statement agrees with the information**

FALSE **if the statement contradicts information**

NOT GIVEN **if there is no information on this.**

5. Jesse's doctors made an error and charged him a sum of six million dollars. NG
6. The objective of Jesse's surgery was to isolate the healthy nerves that once controlled the left arm and reattach them to the new neuro-controlled bionic arm. F
7. Claudia worried that her accident might impose restrictions on her life or confine her to her house. T
8. She saw an alternative when she read about Jesse in a magazine article. T
9. The article gave Claudia the incentive to meet Jesse Sullivan. F
10. A disproportionate amount of research is focused on bionic arms. T

Question 11-13

Complete the summary using the list of words, *A-J* below.

Some 30 years after TV's bionic man, a real bionic man has been created—and for a sum nearly as great. Jesse can't run 60 miles an hour, but he does have a bionic arm to replace one he lost in an ___i_____. This new arm is not science fiction. It is the world's first thought-controlled ___c_____ arm. Knowing about Jesse's story, a woman asked to have an arm which she could use her __d_____ to control after a traffic accident. These two examples open a new possibility in the industry.

a. electricity	d. brain	g. implanting
b. heat	e. neurotic	h. hour
c. artificial	f. body	i. accident