

第2講

内容一致英文完成

サンプル

演習問題 A

1 次の英文を読んで、(1)~(3)の空所に最も適切なものを、①~④から1つずつ選びなさい。(目安時間5分)

Venice is at risk of sinking. The worst-case scenario is that it could disappear beneath the waves by as early as 2100. Venice is an amazing city built on top of a lagoon in Venetian Bay, and many tourists every year enjoy walking there or traveling around it on boats called gondolas.

5 But now it is facing grave problems. The ground underneath the lagoon is sinking. When a spring tide, low pressure and a seasonal wind from the south happen at the same time, a high tidal wave floods the city, which is called an ‘acqua alta.’ In the worst event, which happened in 1966, the water rose to 194 cm above sea level. The second worst flood happened in November 2019, when the water reached about 187 cm above sea level. It made the headlines of newspapers all around the world. When people looked out of their windows, they were stunned to see the
10 famous Saint Mark’s Square covered in deep feet of water. Since 1923, when they started to record the water levels, there were 10 occasions where the water reached 150 cm or more above sea level.

One of the causes of Venice’s flooding is thought to be climate change. If drastic measures are not taken, this beautiful city will soon disappear under the Adriatic Sea. However, of course, the
15 government is not just watching and waiting for it to happen. A project, called the MOSE Project aims to build a 3-meter mobile sea wall. Also, they are trying to restrict the use of ground water. A college is even planning to raise the level of the soil beneath the lagoon by injecting water underground. But with global warming, the problems will continue. According to one report, if global temperatures rise 2°C above pre-industrial levels, Venice’s sea level could rise 32cm by
20 2100, but if it rises 4°C, what happened in 2019 will then be the normal situation. (約 320 語)

- (1) In the worst case that can happen to Venice, ().
- ① the city might completely sink under the sea in the beginning of 22nd century
 - ② it will have to build a platform on top of a lagoon in Venetian Bay
 - ③ the city will be flooded under water that will rise to 194cm at the highest
 - ④ it will have a flood called “acqua alta” and be completely covered in sea water
- (2) In the 2019 event, people looked out of their windows and were surprised because ().
- ① pictures of the flood in Venice appeared in the newspapers around the world
 - ② the water rose higher than it did in 1966
 - ③ the square was covered in sea water that rose to almost 190cm
 - ④ the situation was the worst ever since they started recording the water levels
- (3) One thing they are trying to do to save this city from completely sinking is ().
- ① to let people keep records while observing the city’s gradual sinking.
 - ② carrying out a project to build a high sea wall that can be moved to stop water
 - ③ following a college’s plan to restrict the use of water
 - ④ to try to return to the conditions of 1923

2 次の英文を読んで、(1)~(4)の空所に最も適切なものを、①~④から1つずつ選びなさい。(目安時間6分)

An ant-mimic jumper looks very much like an ant but is really a spider. It has eight legs, but it keeps its two front legs up like an ant's antennas and walks around smoothly just like an ant. It even looks like it has three-part body, with a head, a midsection and a rear like many insects.

This is thought to be Batesian mimicry, which keeps it safe from its predators. Ants are usually thought to be a threat to other animals partly because they attack their prey as a team, and have a poisonous substance called formic acid. Predators like big jumping spiders which usually eat smaller jumping spiders are known to avoid eating ant-mimic jumpers, which means the ant-mimic jumper has a better chance to be safe from its predators.

However, there are some predators that like to eat ants. Some jumping spiders especially eat ants. The males of the ant-mimic jumper species are known to be easier prey because they look like ants carrying food in their mouth, making it easier for a predator to attack. When an ant-mimic jumper encounters such a spider, it will cease looking like an ant. But since it must change its appearance, it has much less ability to jump and thus cannot escape quickly by jumping. This makes it very slow in escaping and less able to catch prey on its own. As a result, it is often observed eating the eggs of other spiders, or pollen or honey from flowers.

In Japan, people didn't use to think of ants as a great danger, but recently some alien species that arrived aboard foreign ships have been found such as red fire ants, which have very strong poisons and have made people keen on exterminating them. Some unfortunate ant-mimic jumpers look very much like them. Now some ant-mimic jumpers are chased around by both their predators and people. (約310語)

- (1) An ant-mimic jumper is different from other spiders because ().
- ① it has eight legs ② it has antennas like ants
③ it does not jump around ④ it has three separate body parts
- (2) Batesian mimicry is a case in which harmless animals or insects ().
- ① mimic another animal in order to make itself an easier prey
② mimic another animal to make its prey believe that it is safe
③ mimic the characteristics of a threatening species to avoid being eaten or attacked
④ act as a team to make it easier to attack other animals
- (3) There are also some drawbacks to the ant-mimic jumper's behavior such as ().
- ① attracting some spiders that like to eat ants
② being easily hunted when they are carrying food
③ having to try to escape by jumping quickly
④ eating mainly the eggs of other spiders or pollen or honey
- (4) Recently, ant-mimic jumpers have also been unlucky because ().
- ① people have begun to think of them as a great danger
② some kinds of poisonous ants have started to target them
③ they have been imported on some foreign ships
④ they are being exterminated by people by mistake

演習問題 B

1 次の英文を読んで、(1)～(7)の空所に最も適切なものを、①～④から1つずつ選びなさい。(目安時間10分)

One of the concerns people today have is how to live a healthy, happy, and balanced life amid various digital distractions. Just thirty years ago watching TV meant gathering around a box in a living room or bedroom. Nowadays everyone has a screen in their pocket that allows them to watch all sorts of video content, play games, take photos and videos, and perhaps the most 5 distracting of all, look at and participate in numerous social media platforms. At work, people are constantly interrupted by emails and messaging apps. Therefore, it is difficult to focus on creative and important work for long uninterrupted periods. In response to this, some are calling for a lifestyle that is slower, more thoughtful, and less dependent on devices.

Some have called this approach to life and work slow life, deep work, or deep life. The basic 10 principles of deep life are an organized and well-planned work and a personal life, a clear mission statement for what the person wants to achieve in life, and a lifestyle without obsessions or distractions such as eating too much, constantly scrolling through social media, and drinking too much alcohol. Deep life advocates believe that modern life with its devices and many distractions keeps people from doing important and creative work and activities that they want 15 to do. Instead, people get instant pleasure by looking at posts online, playing video games, online shopping and more. These things make people feel better for a moment, but they do not lead to accomplishments or happiness in the long run.

Despite 21st-century life having more distractions and easy ways for people to entertain themselves, the idea of a slower, thoughtful, deeper life is not new. Mathematician and philosopher 20 Kurt Godel (1906-1978), considered one of the greatest thinkers of the 20th century, was very intentional about how he lived his life. Godel practiced time management. He had a schedule or plan for each day, each week, and the next several months, and goals for the next year. One of his principles was that it is “better to plan less and actually carry it out.” In other words, it is important not to schedule too much and it is better to get a few things done well than to do a lot 25 of things incompletely.

Computer scientist and university professor Cal Newport is a modern-day proponent of deep work and deep life. Like Godel, he believes life should be planned by day, week, and month. He also adds the importance of having a value statement, which is something that you believe in that gives your life direction. However, big and important things cannot be achieved if your daily 30 life is disorganized. He recommends that everyone plan their days and weeks in a calendar, use a to-do list, and have a notebook to write ideas and thoughts that pop up.

Newport and others address issues unique to today’s technology-driven lifestyle. These include advice such as turning off most notifications, choosing a specific time of the day to check emails, and putting away devices an hour before bedtime. These are small habits that help create 35 discipline and help free up time for more important projects and goals. It is also important in the above-mentioned calendar to block off time to work on important things in a distraction-free environment. Evidence shows that multi-tasking or constantly switching tasks drains energy and makes it hard for people to do good work.

Another way of keeping small distractions and addictions such as gaming for hours or binge 40 eating under control is to tackle a big goal that requires a lot of time and dedication. For example, if one wants to run a marathon next spring then one needs to go for runs consistently

② 次の英文を読んで、(1)~(7)の空所に最も適切なものを、①~④から1つずつ選びなさい。(目安時間10分)

The proverb “you can’t teach an old dog new tricks” is used to say that people who are used to doing something in a particular way have a hard time changing their habits or picking up new ones. It used to be thought that as a person ages the ability of their brain to learn new things diminishes. While this may be true in certain aspects, research shows that older brains can learn new skills and may even have some advantages over younger brains.

First, let’s look at how the brain changes as it ages. The brain shrinks as one ages. In particular, the frontal lobes (located behind the forehead) and the hippocampus (deep in the center of the brain). The frontal lobes are responsible for controlling human behavior and emotions. The hippocampus plays a major role in learning and memory. Another factor that affects the aging brain is the decrease in neurochemicals, leading to less transmission within the brain. This slows down communication between neurons, slowing down thinking. Other changes with age include less blood flow and increased swelling.

Therefore, most experts believe that while older people may need more time in the beginning, after some time and a little more effort, they can learn just as effectively as younger people. Studies show that when people aged 58 to 86 take classes to learn something their abilities equal those aged around 30 years after just a month and a half of learning. Also, the reality is that children spend a lot of their time in and out of school learning. For adults over 40 years old, a survey has shown that half of them don’t learn something new every week. It is likely that if adults spent as much time learning as children, they would be just as capable of learning new things.

There are things that older brains do better than younger brains. As the brain ages, the speed at which it works does slow down. However, older people use more of their brains for a particular task. A lot of the advantages of older brains have increased with time. Older people have larger vocabularies for better communication. Older people are less likely to make *rash decisions on the spot. Taking their time to decide means gathering more information and making fewer mistakes, resulting to better problem-solving skills. Older people are also better at judging where something is and how it moves, which is called the visual-spatial skill. Their brains are less sensitive to negative things. The amygdala, the part of the brain responsible for memory and emotion, slows down. Older people also tend to worry less. Having spent more time doing basic math, older people tend to be better at it than younger people.

While the brain’s ability tends to decline with age, there are some people whose brains remain sharp and healthy until 80 to 90 years old. These people are called cognitive super agers. These super agers perform better on memory tests than other people their age. Scientists are still trying to understand why some people’s brains continue to work well even at old age. It is known that the brain shrinks as it ages. So perhaps, cognitive super agers started with bigger brains. The environment is another factor. People with high levels of education or mentally challenging jobs may end up with brains that stay healthier for longer. A healthy lifestyle may also play a big role. People who did not smoke and drink heavily, and stayed physically active were found to have a 60% lower risk of getting Alzheimer’s disease than those who did not follow such habits. Heart health is especially important, as a healthy heart means increased blood flow and thus more oxygen for the brain.

The reality is that learning is hard for anyone at any age. Older people may have the advantages of more experience, knowing themselves better, and a stronger motivation to want to

learn. Children and younger people often must learn things they may not be interested in.
45 Meanwhile, an older adult may be fulfilling a lifelong desire to learn the piano or a foreign language. Some of the difficulties in learning that older people may experience can be attributed to a lack of confidence. They may have less confidence in their memory and end up taking longer to complete simple tasks. Also, older people are often more nervous about taking tests than younger people. Confidence and practice may help to reduce these issues and show older learners
50 that they can learn just as well as younger people. (約 760 語)

[注] rash : 軽率な

- (1) It is correct to say that ().
- ① learning new things when older is challenging but possible
 - ② learning new things when older is rarely beneficial
 - ③ the brain becomes significantly less capable as one gets older
 - ④ the brain remains largely the same as a person ages
- (2) The aging brain ().
- ① releases more neurochemicals ② gets smaller
 - ③ needs more oxygen ④ becomes stiffer
- (3) The older brain learns just as well as the younger brain ().
- ① if medically treated ② if given medication
 - ③ if taught in a different way ④ if given more time
- (4) Older people may be better at ().
- ① calm, reasonable thinking
 - ② making decisions quickly
 - ③ remembering facts and numbers
 - ④ using less of their brains
- (5) One reason some older people may have very healthy brains is because ().
- ① they take lots of tests
 - ② they take the latest supplements
 - ③ they drink in moderation
 - ④ they continue to exercise
- (6) An advantage older people may have is ().
- ① more money to join activities
 - ② more desire to learn
 - ③ more regret about past failures
 - ④ better teachers
- (7) An appropriate title for this passage would be “()”.
- ① Ways for Older Brains to Keep Up with Younger Brains
 - ② Tips for Keeping the Brain Healthy
 - ③ The Challenges of the Aging Brain
 - ④ How the Older Brain Changes and Learns

㊦ 次の英文を読んで、(1)~(5)の空所に最も適切なものを、①~④から1つずつ選びなさい。(目安時間9分)

An encyclopedia is a collection of texts on many various subjects or many aspects of a single subject. They have been around for at least 2,000 years with ancient Roman scholar Marcus Terentius Varro's *Nine Books of Disciplines* being one of the most famous early examples. The nine disciplines or areas covered by the books were grammar, rhetoric, logic, arithmetic, geometry, astronomy, musical theory, medicine, and architecture. Varro's work was the model for Pliny the Elder's 37 chapters published in the first century that covered subjects such as natural history, architecture, and geography.

Until the Renaissance, all works were hand-copied. In the 15th century, the advent of printing made it possible for scholars to have their own copies of encyclopedias. One of the most popular early printed encyclopedias was the *Nuremberg Chronicle*, published in 1493. It was *compiled by doctor, humanist, and book-lover Hartmann Schedel and published by Nuremberg businessperson Sebald Schreyer. It is among the first documents to extensively use illustrations alongside text.

In the East, encyclopedias also have a long history. Early Chinese encyclopedias were often made by order of the emperor, such as the *Imperial Anthology* in AD 220. These early Chinese encyclopedias were collections of important literature and functioned as dictionaries. They were used by candidates studying to enter the civil service. They covered subjects such as government and economics, along with music, the law, and military matters. The 1000-volume *Four Great Books of Song* created in the 11th century, was one of the biggest projects of its time.

Other civilizations and regions also have their share of encyclopedias such as Suda, a 10th-century Byzantine work written in Greek containing 30,000 entries. It is a combination of a grammatical dictionary and a text about Byzantine history and life. In India, the *Siribhoovalaya*, compiled between the 9th and 15th centuries, was written completely in *numerals. It covers philosophy and a wide range of subjects such as mathematics, chemistry, astronomy, history, and even space travel. It is a huge work with 600,000 verses across 26 chapters. However, only three of the chapters have been translated.

The word *encyclopaedia* was created in the 16th century and is a combination of the Greek words *enkyklios* meaning "circular" or "all-round" and *paedia* referring to a set of texts containing knowledge and information. In the English language, the philosopher Sir Thomas Browne used the word *encyclopaedia* in 1646 in his book *Pseudodoxia Epidemica*. The purpose of this book was to challenge the many superstitions and errors found in science at the time.

The encyclopedia that is closest in form to the modern multivolume general-use encyclopedias, which was popular until the early 21st century, first came out in the 1700s. They covered a wide range of topics from the humanities to the hard sciences, went into their subjects in depth, and were systematically organized and easy to use. John Harris's *Lexicon Technicum* published in 1704 is famous as the first encyclopedia organized alphabetically. It was one of the first encyclopedias that went beyond definitions and discussed the arts and sciences. Other encyclopedias from this period include the Universal Dictionary of Arts and Sciences, the French-language *Encyclopédie* by Diderot and D'Alembert, and the still-in-existence *Encyclopedia Britannica*.

The late 20th century would see the advent of digital encyclopedias. In 1993 Microsoft launched Encarta, an encyclopedia that came on CD-ROM and had no book version. Digital encyclopedias had features such as built-in search, video and audio, and were easier to update than their physical counterparts.

With the Internet came online encyclopedias. The distinguishing feature and characteristic of

online encyclopedias is that they are free and crowd-sourced. Crowd-sourcing means that these
45 encyclopedias are not exclusively written by a team of writers and researchers in a single
organization, but rather anyone with internet access can write and edit entries. The first online
encyclopedia was Nupedia in 2000. However, it was not crowd-sourced and instead was run by a
committee that reviewed and decided what articles would be included. Nupedia lasted until 2003.
Wikipedia, now the *de facto online encyclopedia globally, came out in 2001. It's distinguishing
50 feature is that it is decentralized and made up of wikis, which are collaborative publications
created and edited through the web. Wikipedia, which is available in 326 languages is by far the
largest encyclopedia ever created.

The next step in the evolution of encyclopedias will likely involve artificial intelligence. AI
makes it easier and faster to update content, check for accuracy, and reduce bias. However,
55 concerns about how decisions are made and who is responsible for making those decisions will
likely emerge. AI is ideal in reducing workload, speeding up the pace of obtaining information,
and increasing quality of information. However, it may have issues or difficulties with new
topics. (約 780 語)

[注] compile : ~を編纂する numeral : 数字 de facto : 事実上

- (1) Pliny's encyclopedia ().
- ① was written by hundreds of people
 - ② was inspired by Chinese encyclopedias
 - ③ had almost 40 chapters
 - ④ contained pictures
- (2) In the 15th century encyclopedias came to ().
- ① be written in numbers
 - ② be made using the printing press
 - ③ be used only by the royal family
 - ④ have illustrations in place of text
- (3) The main purpose of early encyclopedias in China was ().
- ① to cover as many subjects as possible in an organized manner
 - ② to provide the common people with useful information
 - ③ to serve as a dictionary for a specific set of topics
 - ④ to assist the emperor in governing his country
- (4) Thomas Browne wrote his encyclopedia ().
- ① at the request of the emperor
 - ② to challenge wrongful thinking
 - ③ to make Byzantine history known
 - ④ for the benefit of scholars
- (5) A crowd-sourced encyclopedia such as Wikipedia has succeeded perhaps because ().
- ① it is controlled by a team of selected experts
 - ② it comes on a regularly updated CD-ROM
 - ③ it uses AI to gather information faster and eliminate bias
 - ④ it is written and edited by anyone