

I 次の問において、下線部の発音がほかの3つと異なるものをア～エの中から1つずつ選び、記号で答えなさい。

問 1 ア flea イ thread ウ legal エ ingenious

問 2 ア engage イ anatomy ウ elastic エ brag

II 次の問において、第一アセント(第一強勢)の位置がほかの3つと異なるものをア～エの中から1つずつ選び、記号で答えなさい。

問 1 ア injury イ medical ウ imitate エ interfere

問 2 ア consequence イ acknowledge ウ gratitude エ artery

III 次の英文の空欄に入る適切な語を下記の中から一つずつ選び、形を変えずに書きなさい。

問1 The () ate a lot of leaves; it is preparing to become a butterfly.

問2 He used a bright light to () what could not be seen in the darkness.

問3 In order to save our planet, the government should give incentives to companies that use () energy such as solar energy and wind energy.

問4 One of the things that I never get used to in Japan is having to () myself into a crowded train every morning.

dormant	imitate	sustainable	squeeze	constant	emerge
territorial	reward	unveil	caterpillar	mite	remote

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IV DIRECTIONS: Read the passage and answer the following questions.

Filmmaker (1)Louie Schwartzberg has shot everything from TV commercials to documentaries, but he is best known for his time-lapse photography, a technique that captures images on film very slowly. When shown at regular speed, the viewer can see things the human eye cannot normally see. Schwartzberg's remarkable documentary - *Mysteries of the Unseen World* - illustrates his talent for capturing the wonders of nature using this technique.

National Geographic spoke with Louie Schwartzberg about (2)the challenges and rewards of his career in photography, the issues he feels most passionate about, and why he believes it's important that we all become more connected to nature.

How did you become interested in nature photography and film making?

I found my voice with photography as a student at UCLA [the University of California at Los Angeles]. We had anti-war protests going on right outside my classroom, so I picked up a camera and started to document that. And when I met my greatest teacher, then I fell in love with nature. He taught me everything about lighting, composition, color, and how to live a sustainable, creative life.

Can you explain a little more about your Moving Art project and what the mission is?

Basically, I've got a thousand hours of material that I've filmed over the years. The mission is to be able to share how cool nature is - there's amazing time-lapse, slow motion, and aerials. You may have heard of nature deficit disorder, where kids are suffering from the fact that they have very little contact with nature, but I think what we need to do is engage them where they are. [A]

You've been shooting time-lapse 24/7 for over three decades. What have you been shooting?

Flowers, primarily. They kind of seduce you with their beauty and you fall in love with them. That's why I made a film about pollination, which is so critical. A third of our food comes from (3). But to answer your question specifically, I've got two cameras going nonstop 24 hours a day, 7 days a week, because time is precious and I don't want to waste a single second.

[B]

What are some of the challenges that you deal with when you're time-lapse film making?

The biggest ones, I think, are mosquitoes. They come out at sunset, at early dawn, and at twilight... but besides the mosquitoes, when I'm on location, it's about survival. I've got to figure out food, water, transportation, and how to get back home when it gets dark. It's not just the technique, but I do it because I think time-lapse can transform your consciousness by helping you see things from a different point of view. That's when you change your perspective. And when you change your perspective, that's how you develop gratitude.

What's one of the most memorable experiences you've had in nature while doing your work?

I was recently in Panama shooting hummingbirds in slow motion. It's just amazing to see their world. They're very territorial with the way they kind of fight each other to get the flower. And nectar feeding bats in the Sonoran Desert - I got this incredible shot of a baby bat breastfeeding on the mother bat as the mom is feeding on a flower in the desert. Most people don't realize the entire Sonoran Desert would not exist without these nectar feeding bats. [C]

What environmental issues mean the most to you right now?

I think [bee] colony collapse disorder would be at the top. I've heard scientists say it could be way more serious than climate change. And there's a quote attributed to Einstein that if the bees ever disappeared, man would only have four years left to live. It doesn't really matter whether it's true or whether Einstein said it or not. The healthiest food we need to eat - fruits, nuts, seeds, and vegetables - would disappear without pollinating plants. It's pretty serious. [D]

What would you say is one of the most surprising things you learned in your career?

I keep getting the same things reinforced over and over. When I film things, I'm connecting with the universal rhythms of the universe, which is the deepest part of my soul. And it's this constant reminder that it's all connected. I also think we always have to be curious, and nature really inspires you to be an explorer. To be an explorer and to be a scientist is the same idea; it's all about curiosity. And I think the same thing is true being a filmmaker or an artist. We have different rules, but we're both trying to share the wonders of nature and the universe with people.

問1 Fill in the blanks with ONE word each to explain (1).

He is famous for his technique called time-lapse photography, which captures images that are usually too () for human eyes to detect. He uses this technique to change people's perspectives so that they will have more (g) in their lives.

問2 Find ONE word each from the passage to fill in the following blanks to explain (2).

Schwartzberg explains that () are one of the biggest challenges he faces when filming and that having to figure out such things as transportation, food and water for his () while shooting in nature is also challenging.

問3 Find the TWO-word phrase from the passage that fits (3).

問4 Where does the following sentence best fit? Choose one from [A] to [D].

The filming that I've done over the last 35 years has been edited into 12 hours of video.

問5 Which of the following is NOT true about Schwartzberg's beliefs?

- ㄐ It is important to engage children with nature.
- ㄏ A lot of important food would disappear if there were no bees.
- ㄎ Climate change is the most serious environmental issue.
- ㄏ What scientists and filmmakers have in common is curiosity.

VI DIRECTIONS: Read the passage and answer the following questions.

Are You Sleeping Enough?

1 We've all had restless nights when we couldn't get to sleep—and have suffered the next day as a result. Sleep experts say the average adult requires seven to nine hours of sleep per night; in fact, anything less could harm our health.

NO TIME TO SLEEP

2 (1) In spite of the importance of sleep, many people are not getting enough. For example, Americans sleep one hour less per night on average than they did 20 to 30 years ago. "The dependency on caffeine and the whole Starbucks culture is certainly one proof that our society is sleepier than ever before," says William Dement, a sleep researcher at Stanford University. Sleep is a biological need, much like food and water. If totally deprived of shut-eye, humans ultimately perish. (2), millions of people are increasingly skimping on their sleep.

3 Why has sleep deprivation become such a big problem? There are a couple of possible reasons. Researchers say that today's sleep deprivation is partly due to modern expectations. These days, consumers expect information, entertainment, and food to be available round-the-clock. One of the results of this 24/7 culture is that consumers stay awake longer and later than they used to. Consequently, workers who provide us with goods and services can't stop working when the sun goes down. In addition, the fast-paced and competitive world of business often rewards employees for arriving at work early and staying late. As a result, many employees are willing to skip sleep in order to impress the boss.

EFFECTS OF SLEEP DEPRIVATION

4 Sleep deprivation can have a significantly detrimental impact on our performance, however. According to Charles Czeisler of Harvard University, staying awake for 24 hours or sleeping only five hours a night for a week is like having a blood-alcohol level of 0.1 percent. That is well above the legal limit for safe driving in most countries. Most people probably wouldn't get drunk before going to work or taking an exam; but if they are sleeping an average of five hours a night, they may be working, studying, driving, and making decisions as though they are (3).

5 Sleep deprivation can result in poor grades or poor performance at work. But in some cases, it can have more dangerous effects. In February 2009, a commuter plane crashed on the way from Newark, New Jersey, to Buffalo, New York, killing all 49 people on board and one person on the ground. An investigation determined that the crash was most likely a result of fatigue. The copilot, and probably the pilot, had slept very little the day before the crash. Not surprisingly, sleep deprivation is linked to car accidents, too. The U.S. Institute of Medicine reports that almost 20 percent of car accidents happen because drivers are sleepy.

6 Sleep deprivation can be a particularly grave problem in the medical profession. In 2007, Czeisler researched the habits of 2,700 first-year medical residents. Most of these residents worked for extremely long periods, some working 30-hour-long shifts twice a week. Many admitted that fatigue had had severe consequences on their performance and treatment of patients. Twenty percent of residents acknowledged making fatigue-related mistakes that led to injury of a patient. Five percent confessed that lack of sleep caused them to make a mistake that resulted in a patient's death.

7 We all know that we need sleep, but sleep deprivation continues to be a widespread problem around the world. Studies show that one in five adults suffer from daytime sleepiness. Among those aged 18 to 34, 50 percent say that daytime sleepiness interferes with their daily work. To many, the ability to function without much sleep is something to brag about. However, sleep is crucial to our well-being and our performance. (4) It may be time to wake up and change our perspective on sleep.

問1 What are the reasons for (1) mentioned in the passage? Fill in the blanks with ONE word each.

People want goods and services to be (a) 24/7, and today's business world often rewards workers who sacrifice their time to () in order to work long hours.

問2 Choose one that best fits (2).

Therefore ↗ Nevertheless ↘ For instance ⇄ In short

問3 Find ONE word from the passage that best fits (3).

問4 What does the author mean by (4)? Fill in the blanks with ONE word each.

We should think again about the negative (e) of sleep deprivation and understand the (i) of getting enough sleep.

問5 Choose ALL the correct statements.

↗ Almost 20 percent of car accidents occur because of sleepy drivers.

↘ 5 percent of medial residents admitted that sleepiness led to the death of a patient.

↘ 20 percent of adults say they feel sleepy during the day.

⇄ 18 to 34 percent of adults say that sleep deprivation affects their work.

V DIRECTIONS: Read the passage and answer the following questions.

The following is an excerpt from a TED Talk given by filmmaker Louie Schwartzberg:

A What is the intersection between technology, art, and science? Curiosity and wonder, because it drives us to explore, because we are surrounded by things we can't see. And I love to use film to take us on a journey through portals of time and space, to make the invisible visible, because what that does, it expands our horizons, it transforms our perception, it opens our minds and it touches our heart. So here are some scenes from my 3D IMAX film, "Mysteries of the Unseen World."

B There is movement which is too slow for our eyes to detect, and time-lapse makes us discover and broaden our perspective of life. We can see how organisms emerge and grow, how a vine survives by creeping from the forest floor to look at the sunlight. And at the grand scale, time-lapse allows us to see our planet in motion. We can view not only the vast sweep of nature, but the restless movement of humanity. Each streaking dot represents a passenger plane, and by turning air traffic data into time-lapse imagery, we can see something that's above us constantly but invisible: (1)the vast network of air travel over the United States. We can do the same thing with ships at sea. We can turn data into a time-lapse view of a moving global economy. And decades of data gives us the view of our entire planet as a single organism sustained by current circulating through the oceans and by clouds swirling through the atmosphere, posting with lightning, crowned by the aurora borealis. It may be the ultimate time-lapse image: the anatomy of Earth brought to life.

C At the other extreme, there are things that move too fast for our eyes, but we have technology that can look into the world as well. With high speed cameras, we can do the opposite of time-lapse. We can shoot images that are thousands of times faster than our vision. And (2)we can see how nature's ingenious devices work, and perhaps we can even imitate them. When a dragonfly flutters by, you may not realize, but it's the greatest flyer in nature. It can hover, fly backwards, even upside down. And by tracking markers on an insect's wings, we can visualize the airflow that they produce. Nobody knew the secret, but high-speed shows that the dragonfly can move all four wings in different directions at the same time. And what we learn can lead us to new kinds of robotic flyers that can expand our vision of important and remote places.

D We're giants, and we're unaware of things that are too small for us to see. The electron microscope fires electrons which creates images which can magnify things by as much as a million times. This is the egg of a butterfly. And there are unseen creatures living all over your body, including mites that spend their entire lives dwelling on your eyelashes, crawling over your skin at night. Can you guess what this is? Shark skin. A caterpillar's mouth. The eye of a fruit fly. An egg shell. A flea. A snail's tongue. We think we know most of the animal kingdom, but there may be millions of tiny species waiting to be discovered.

E A spider also has great secrets, because spiders' silk thread is pound-for-pound stronger than steel but completely elastic. This journey will take us all the way down to the nano world. The silk is 100 times thinner than human hair. On there is bacteria, and near the bacteria, 10 times smaller, a virus. Inside of that, 10 times smaller, three strands of DNA, and nearing the limit of our most powerful microscopes, single carbon atoms.

F With the tip of a powerful microscope, we can actually move items and begin to create amazing nano devices. Some could one day patrol our body for all kinds of diseases and clean out clogged arteries along the way. Tiny chemical machines of the future can one day, perhaps, repair DNA. We are on the threshold of extraordinary advances, born of our drive to unveil the mysteries of life.

G So under an endless rain of cosmic dust, the air is full of pollen, micro-diamonds, and jewels from other planets, and supernova explosions. People go about their lives surrounded by the unseeable. Knowing that there's so much around us we can't see forever changes our understanding of the world, and by looking at unseen worlds, we recognize that we exist in the living universe, and this new perspective creates wonder and inspires us to become explorers in our own backyards.

問1 Regarding (1), find the FOUR-word phrase from the passage that best fits the following blank.

It is one example of the () that time-lapse enables us to see.

問2 The following is an example of (2). Find a word or a phrase from the passage to fill in the blanks.

What we learn from the movements of the (ONE word) can be applied for developing new types of (TWO-word phrase).

問3 Choose one paragraph (from A – G) for the following heading:

The Amazing Future of Medical Technologies

問4 Choose one correct statement.

ア Slow motion allows us to see how a vine creeps from the forest floor toward the sun.

イ High-speed cameras capture images of things that move very fast.

ウ Spiders' silk thread is extremely strong and elastic just like a pound of steel.

エ Thanks to Schwartzberg, humans now know most of the species in the animal kingdom.

VIII DIRECTIONS: Read the following article and answer the following questions.

By Daniel Stone, National Geographic News
PUBLISHED SEPTEMBER 8, 2012

(1) are getting new ideas from the albatross, long considered a master of efficient flight.

Through a method called dynamic soaring, the bird—with a wingspan of up to 12 feet (3.7 meters)—can glide thousands of miles without flapping.

Now, in a study that mixes biology with aeronautical engineering, researchers have come closer to figuring out how (2) the albatross ride the currents. And their findings may be used to innovate aircraft of the future.

German aerospace engineer Johannes Traugott and colleagues charted (3) the albatross's ingenious flight pattern.

The bird flies close to the surface, they found, then turns suddenly into the wind to gain altitude. Once reaching nearly 50 feet (15 meters) high, the albatross turns away from the wind—being pushed downwind—and glides effortlessly until it's time to climb again. [A]

The albatross has a special tendon in each shoulder that allows the bird to lock its wings in place—a quality it shares with fixed-wing aircraft. (4) Researchers see the similarity as far more than just coincidental.

"There are applications here for aircraft that need to stay in the air as long as possible, for extended flight where your objective is simply to stay airborne for as long as you can," said Traugott, of the Technical University of Munich.

It might be hard to imagine a commercial airliner that flies like an albatross, staying close to the ocean surface and making quick turns and sharp climbs. [B]

The idea of applying lessons from evolution to engineering is known as biomimicry, or biomimetics.

(5) Janine Benyus, president of the Biomimicry 3.8 institute—the number refers to the amount of years, in billions, that life has evolved on the planet—thinks the albatross's real talent is its ability to sense the tiniest changes in air pressure and wind direction. [C]

"In order to do something like that, we would need to have incredibly sensitive sensors on our future planes," said Benyus, author of *Biomimicry: Innovation Inspired by Nature*.

Airplane designers have already taken lessons from birds. In 2009 engineers at Stanford's Aircraft Aerodynamics and Design Group discovered that planes flying in a V-formation, as many species of (6) do, can harness aerodynamics and consume as much as 15 percent less fuel. [D]

Boeing, the powerhouse plane manufacturer that pieces together more than 600 vehicles each year, has a team that studies bird evolution. Researchers look for ways to apply natural lessons to airplane design. (7), by redesigning wings or developing more sensitive wind sensors based on unique ideas that nature provides to make future air travel cheaper, cleaner, or faster.

Earlier this year, Airbus—the France-based manufacturer of the A380, the world's largest passenger airliner—revealed its vision for the future, adapted freely from the animal kingdom.

To maximize efficiency, the company said, tomorrow's planes will be flatter and engineered to mimic the bone structures of the most efficient birds. That's not all. They will also include wingtips like an eagle's—which curl slightly, adding lift—and internal furniture covering like a lotus leaf, which repels water and washes away toxins, making the fabric easier to keep clean. And to make the entire plane glide with (8) friction: exterior paint as smooth as sharkskin.

問1 Find the TWO-word phrase from the passage that best fits (1) in the title.

問2 What is special about (2). Find the SIX-word phrase that best fits the following blank. It is famous for its ability to ().

問3 Fill in the blanks with ONE word each to explain (3).

It stays () to the surface and makes quick () and sharp climbs.

問4 Choose one that best explains (4).

↗ Both fixed-wing aircraft and the albatross use locked wings for a good reason.

↙ It is a coincidence that both fixed-wing aircraft and the albatross have high quality wings.

↘ Researchers coincidentally found the similarity between fixed-wing aircraft and the albatross.

⊖ The special characteristics of the albatross's wings cannot be applied for fixed-wing aircraft.

問5 Choose ALL the correct statements about (5).

↗ He is president of an institute that has been around for 3.8 years.

↙ He thinks the albatross is extremely good at sensing changes in air pressure and wind direction.

↘ He has developed airplanes that have wings as sensitive as the albatross's.

⊖ He published a book called *Biomimicry: Innovation Inspired by Nature*.

問6 Find ONE word from the passage that best fits (6).

問7 Choose one that best fits (7).

↗ At first ↙ On the contrary ↘ Furthermore ⊖ For instance

問8 Choose one that best fits (8).

↗ extreme ↙ constant ↘ reliable ⊖ minimum

問9 Where does the following sentence best fit in the passage? Choose one from [A] to [D].

A more immediate application of albatross efficiency might be for drones, or unmanned vehicles, that need to be constantly airborne to receive radio or telemetry signals.

問10 The following is a summary of the article. Fill in the blanks with ONE word each.

The albatross's unique technique for staying in the () without using much energy can be applied for developing new types of aircraft. Some aircraft companies have already adapted ideas they learned from the animal kingdom, and they have been making constant effort to (i) amazing technologies found in nature in order to create better vehicles.

VII DIRECTIONS: Read the passage and answer the following questions.

Arianna Huffington—How to Succeed? Get More Sleep.

1 (1) My big idea is a very, very small idea that can unlock billions of big ideas that are at the moment dormant inside us. And my little idea that will do that is sleep.

2 “... This is a room of type-A women. This is a room of sleep-deprived women. And I learned the hard way, the value of sleep. Two-and-a-half years ago, I fainted from exhaustion. I hit my head on my desk. I broke my cheekbone. I got five stitches on my right eye. And I began the journey of rediscovering the value of sleep. And in the course of that, I studied, I met with medical doctors, scientists, and I’m here to tell you that the way to a more productive, more inspired, more joyful life is getting enough sleep....

3 And we women are going to lead the way in this new revolution, this new feminist issue. We are literally going to sleep our way to the top, literally.

4 Because unfortunately for men, sleep deprivation has become a virility symbol. I was recently having dinner with a guy who bragged that he had only gotten four hours’ sleep the night before. And I felt like saying to him but I didn’t say it- I felt like saying, (2)“You know what? If you had gotten five, this dinner would have been a lot more interesting.”

5 There is now a kind of sleep deprivation one-upmanship. Especially here in Washington, if you try to make a breakfast date, and you say, “How about eight o’clock?” They’re likely to tell you, “Eight o’clock is too late for me, but that’s OK, you know, I can get a game of tennis in and do a few conference calls and meet you at eight.” And they think that means that they are so incredibly busy and productive, but the truth is they’re not, because we, at the moment, have had brilliant leaders in business, in finance, in politics, making terrible decisions. So a high I.Q. does not mean that you’re a good leader, because the essence of leadership is being able to see the tip of the iceberg before it hits the *Titanic*. And we’ve had far too many icebergs hitting our *Titanics*....

6 (3) In fact, I have a feeling that if Lehman Brothers was Lehman Brothers and Sisters, they might still be around. While all the brothers were busy just being hyper-connected 24/7, maybe a sister would have noticed the iceberg, because she would have woken up from a seven-and-a-half- or eight-hour sleep and have been able to see the big picture.

7 So as we are facing all the multiple crises in our world at the moment, what is good for us on a personal level, what’s going to bring more joy, gratitude, effectiveness in our daily lives and be the best for our own careers is also what is best for the world. So I urge you to shut your eyes and discover the great ideas that lie inside us, to shut your engines and discover the power of sleep.”

問1 What does Huffington mean by (1)? Find the EIGHT-word phrase from the passage that best fits the following blank.
If we get enough sleep, we will be able to ().

問2 Why did Huffington want to say (2)? Choose one.
ㄱ She thought the man was boring because he didn’t have enough virility.
ㄴ She didn’t enjoy the dinner because the man had only slept for five hours.
ㄷ She couldn’t trust the man because he lied about his sleeping hours.
ㄹ She was not impressed when the man bragged about how little sleep he had had.

問3 What point is Huffington trying to make by saying (3)? Fill in the blanks with ONE word each.
Compared to men, women are more likely to get enough sleep, and some major world crises could have been (a) if there had been more well-rested () in places of power, instead of sleep-deprived men.

問4 What does Huffington say about today’s leaders?
Many of them lack the ability to foresee (p) before they arise because sleep deprivation (p) them from seeing the whole picture.

担当：中島・阿部・菊池・中原

- I. 空所に入れるのに最も適切な語（句）を、下のア～エから一つずつ選び、記号で答えなさい。
問8から問12は、（ ）内に入る語（句）の組み合わせが正しいものを選びなさい。

- The man robbed () on her way home from the office.
ア her handbag イ her handbag of her
ウ her from her handbag エ her of her handbag
- These are the tools () he built his own house.
ア which イ that ウ with which エ with that
- You had better write it down () you forget it.
ア after イ before ウ whether エ while
- The shop clerk tried to () me to buy a more expensive computer.
ア suggest イ say ウ persuade エ talk
- The mountain () you climbed last summer is the second highest mountain in Japan.
ア what イ whom ウ which エ where
- He is not a scholar () a writer.
ア and イ also ウ but エ than
- () you learn the basic rules of the game, I'm sure you'll enjoy it a lot.
ア Although イ Otherwise ウ Once エ Therefore
- Although he proposed that another meeting () next week, everyone () that there was any need to have one.
ア be held / doubted イ be held / suspected
ウ will be held / doubted エ will be held / suspected
- Please () him to read only such books () will benefit him.
ア advise / which イ advise / as ウ owe / which エ owe / as
- The number of guided tours in () we could participate () much smaller than we had read in the guide book.
ア which / was イ which / were ウ that / was エ that / were
- Your computer () repairing. One thousand dollars will () all your expense for the repair.
ア cares / cost イ cares / cover ウ wants / cost エ wants / cover
- I () him how I look in the white dress. He said, "It () you very well. You look more beautiful in white."
ア said / suits イ said / fits ウ asked / suits エ asked / fits

- II. 次の各文の下線部で、誤った箇所がある場合にはア～エの中から記号で選び、正しい形を解答用紙に書きなさい。また誤りがない場合は、記号欄に「オ」と書きなさい。

(例) Mary ア)was reading イ)book when Tom ウ)came home エ)last night.

解答欄 記号 イ) → a book

- 彼は大変正直な男なので、誰もが彼を信頼している。さらには、彼はどこに行っても必ず接する人から尊敬される。
He is ア)such an honest man that everyone イ)trusts him. What is ウ)worse, エ)wherever he goes, he is respected by everyone he gets in contact with.
- 彼は「読書の精神に対する関係は食物の肉体に対する関係と同じだよ。この2冊は僕のお気に入り、読むと君のためになると思うよ。すぐに返してくれるなら借りてもいいよ」と言って私に本を2冊貸してくれたが、私はそのどちらも読んでいない。
He said, "Reading is to the mind ア)what food is to the body. These two books are my favorite and I'm sure that reading these will イ)do good to you. You may borrow these ウ)as long as you return them soon." He then lent me the two books, エ)neither of which I have read.

- ヘレンとトムはいわゆる環境保護主義者で、時間があるときにはいつでも環境にやさしい生活の仕方について話し合っている。ただ、なかなか実践するのは難しく、理論と実践は別だと感じ始めている。

Helen and Tom are ア)what we call environmentalists and they always イ)discuss about how to live an environmentally-friendly life ウ)whenever they have time. However, it is quite difficult to put what they talk about into action. They've started to feel that theory is one thing, and practice is エ)another.

- III. 日本語の意味を表すように、（ ）内に適当な英単語を1語ずつ入れなさい。

- 意味のわからない単語は辞書を引きなさい。
Look () in the dictionary the words () meanings you don't know.
- いつもながらのことだが、今朝の電車もひどく混んでいた。
() is always the case, the train was terribly () this morning.
- もう大学生になったのだから、もっと分別があってしかるべきです。
() that you've () up to be a college student, you should know better.
- どうして生命の危険をおかしてまで山登りをするのか。
() () () you go mountain climbing at the risk of your life?

IV. 日本語の意味になるように()内の語(句)を並び替えなさい。解答欄には()内のみ記入すること。
なお文頭の文字も小文字で書いている。

1. 疲労やら対人関係やらで、彼は病気になるってしまった。
(and personal / became / fatigue / problems, / what / relationship / he / with / sick).

2. 自分の持ち物は整頓するように気をつけなさい。
(things / it / order / that / good / see / are / in / your / to).

3. 火災報知器のアラームを聞くとすぐに彼は逃げ出した。
(ran away / he heard / sooner / the fire-bell / had / than / no / he).

4. その町へは近道すれば、車で10分で行けるでしょう。
(the town / a shortcut by / in / take / car / you / to / will) ten minutes.

V. 次の文を英語に直しなさい。ただし、指定された語句を順番を変えずに用い、語数を守ること。与えられた語は、文頭に来る語も小文字で表されている。また don't などの省略形は使用せず do not と書きなさい。ピリオドやカンマなどの符号は語数に含みません。

1. 絶え間ない努力をしたので、そのチームは優勝することができた。
[constant / the championship] 9 語

2. 私は Mary にメールを送りさえすればよいのです。
[an email] 12 語

3. よい席がとれるように早めに出かけるべきだ。
[earlier so / seats] 11 語

4. この歌を聞くとわれわれの高校時代を思い出す。
[of / high school days] 9 語

VI. 次の英文を読んで、下線部①～⑤の空欄に適切な英語を1語ずつ答えなさい。

Lucas and Aniyah are building a house in Central Park. It is small, even by Manhattan standards, but the two six-year-olds seem pleased with their handiwork. The house has a window (a hole torn in cardboard) and a flat-screen television (a black square of fabric). Lucas's father observes the project from a nearby bench. "It's amazing what you can do with boxes and junk," he says.

That could almost be the slogan of the child psychologists who helped organize the Central Park event, and who are seeking to counter the notion that education happens only when students are seated at their desks, writing furiously in their notebooks. Play, they argue, is a form of learning too.

But how clear are the research findings regarding play? Some experts argue that play is a human right and that adults should leave kids alone. Others accept that play allows children to blow off steam, but are doubtful of its cognitive value. A third group proposes a mix of free play, adult-guided play and traditional classroom instruction. Every discussion about play, however, eventually comes around to the ideas of the Russian psychologist Lev Vygotsky.

①Vygotsky viewed (p) as a critical part of childhood, arguing that it (a) a child to stand "a head taller than himself." His biggest theoretical contribution may have been the Zone of Proximal Development: the idea that children are capable of a range of achievement during each stage of their lives. In the right environment, and with the right guidance, children can perform at the top of that range.

②A recent research project, () (w) building blocks were given to three groups of children, shows how guided play can encourage child development. In one group, the blocks had already been assembled into an airport. ③The second group was given blocks, and adults (h) the children follow directions to build an airport. Children in the third group were given blocks and told to do (w) they wanted. The researchers then listened to the language children were using as they played. Those who were building an airport with an adult used the most imaginative and spatial language (such as "below," or "on top," "next to,"); the kids who were playing with the preassembled airport used the least.

Play isn't just about vocabulary. A 2007 study published in *Science* looked at how 4- and 5-year-olds who were attending a school that used a play-based, Vygotsky-inspired curriculum measured up to children in a more typical preschool. The students in the play-based school scored better on cognitive flexibility, self-control, and working memory, attributes that has been consistently linked to academic achievement. ④The results were () convincing that the experiment was stopped earlier than (p) so that children in the typical preschool could be switched to the play-based curriculum. The authors conclude: "Although play is often thought frivolous, it may be essential."

With evidence like that, you might think that the kind of guided play that Vygotsky favored would be widely promoted. In fact, according to those who support play, it's fast disappearing, as the idea of learning becomes identical with standardized tests. Required to spend more time in the classroom, children have fewer opportunities to interact and to learn on their own. Recess has, in many school districts, vanished from the schedule. After school, parents transport their kids from activity to activity, depriving them of unstructured time alone or with friends.

⑤This is regrettable, according to researchers, not just because play (r) stress and helps children develop social skills. () because it makes them sharper and better-behaved. So, ironically, by shortchanging them on play in favor of study, we may actually be inhibiting the development of young children like Lucas and Aniyah.

VII. 次の下線部①～④を英訳しなさい。ただし、下記に示されたそれぞれ与えられた語 (句) を順番に変えずに、全て用いること。

①労働環境の改善は、企業と政府の両者が解決に取り組みべき課題である。

2016 年 9 月、内閣官房に「働き方改革実現推進室」が設置された。働き方改革とは、「一億総活躍社会を実現するための改革」と言える。少子高齢化が進む中でも「50 年後も人口 1 億人を維持し、職場・家庭・地域で誰しもが活躍できる社会」を目指す改革だ。

統計によると、労働力の主力となる生産年齢人口 (15～64 歳) が総人口を上回るペースで減少している。②政府が「働き方改革」を推進し始めたのは、こういう理由からだ。「働き方改革」は、この課題を解決するべく、働く人々の置かれた個々の事情に応じ、多様な働き方を選択できる社会を実現し、働く人一人ひとりがより良い将来の展望を持てるようにすることを一つの目標としている。

実際に多くの企業が「働き方改革」に取り組み始めると同時に、さらなる効果を得ようと、人工知能やロボットの活用を検討しているようだ。RPA (ロボティック・プロセス・オートメーション) が浸透することで、③ロボットが人間から仕事を奪うかもしれないと多くの人々が誤解を抱くかもしれない。しかし、現段階のロボットは、あくまで人間の指示に従って作業を正確に実施できるアシスタントに過ぎない。④ロボットを使えば、多くの時間や労力が省けるが、やはり我々は意思決定を必要とされる。つまり、人間がロボットに仕事を奪われるということはないだろう。そして、働き方改革もより多くの効果を得られるだろう。

- ① [the improvement / the working / issue / should]
- ② [this / promote / the work-style reforms]
- ③ [may misunderstand / robots / deprive]
- ④ [robots will / us / trouble / required]

問題は以上です。

I	問1	イ	問2	ア
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II	問1	エ	問2	イ
----	----	---	----	---

III	問1	caterpillar	問2	unveil	問3	sustainable
	問4	squeeze				

2*8

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IV	問1	slow / ×slowly	gratitude	完答
	問2	mosquitoes	survival / life	完答
	問3	pollinating plants		
	問4	B		
	問5	ウ		

V	問1	restless movement of humanity / things we can't see		
	問2	dragonfly / wings	robotic flyers	完答
	問3	F		
	問4	イ		

VI	問1	available/ around	sleep	完答
	問2	イ		
	問3	drunk / ×intoxicated		
	問4	effect(s)	importance	完答 ×issue / ○idea / ○influence / ○impact
	問5	ア、イ、ウ	完答 順不同	

VII	問1	discover the great ideas that lie inside us		
	問2	エ		
	問3	avoided	women	完答
	問4	problems	prevents	完答 ×prevented / ×prevent

VIII	問1	airplane designers / future planes / tomorrow's planes		
	問2	glide thousands of miles without flapping / ×sense the tiniest changes in air		
	問3	close	turns / ×turn	完答
	問4	ア		
	問5	イ、エ	完答 順不同	
	問6	bird(s)		
	問7	エ		
	問8	エ		
	問9	B		
	問10	air / sky / wind	imitate / include investigate	完答 ×innovate / ×invent / ×imagine / ×improve / ×inspire

3*28

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2018年度 3年生 1学期 中間考査 英語表現Ⅱ 模範解答

I	1	エ	2	ウ	3	イ	4	ウ	5	ウ	6	ウ	7	ウ	各2点 24
	8	ア	9	イ	10	ア	11	エ	12	ウ					

II	1	記号	ウ	→	more	×better
	2	記号	オ	→		
	3	記号	イ	→	discuss / talk about	

III	1	up	whose
	2	As	crowded
	3	Now	grown
	4	What	makes

IV	1	What with fatigue and personal relationship problems, he became sick.
	2	See to it that your things are in good order. / ×good in order
	3	No sooner had he heard the fire-bell than he ran away.
	4	A shortcut by car will take you to the town in

V	1	Constant effort(s) [training/practice] enabled [allowed/caused/led/helped] the team to win <u>the championship</u> . [9語] The <u>constant</u> effort made the team win <u>the championship</u> . [9語]
	2	All I have to do is to send <u>an email</u> to Mary. [12語] The only thing I have to do is send Mary <u>an email</u> . [12語] Sending <u>an email</u> to Mary is all that I have to do. [12語] All I have to do is only send <u>an email</u> to Mary. [12語] What I only have to do is send <u>an email</u> to Mary. [12語]
	3	We [You] should start [leave/go] <u>earlier so</u> that we [you] can [may] get [take/have] good [better] <u>seats</u> . [11語] We should go out <u>earlier so</u> we can get good seats. [11語] We should go out <u>earlier so</u> as to get good <u>seats</u> . [11語] We ought to start <u>earlier so</u> as to get good <u>seats</u> . [11語] ○Let us～おまけ ○can/mayは省略可
	4	

VI	①	play [playing]	allowed [allows]	×assists
	②	in	which	×done with
	③	helped [had]	whatever [what]	
	④	so	planned [predicted/proposed]	×prepared
	⑤	reduces [releases/relieves]	but	

×removes

各3点

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VII	①	The improvement of [in] the <u>working</u> environment [condition] ×situation is the <u>issue</u> (which [that]) (both) <u>companies</u> [the <u>company</u>] and the <u>government</u> [governments] should (try to) solve [work on/deal with/take on/cope with/deal with to solve/address]. ○The <u>improvement</u> s of the <u>working</u> <u>improvement</u> <u>issue</u> should be solved by <u>companies</u> and the <u>government</u> . ○companiesの代わりにoffices/corporations/enterprises
	②	This is [was] (the reason) <u>why</u> the <u>government</u> (has) started [began / has begun] to promote the <u>work-style</u> reforms. ○This is the reason ～. × These are the reasons ～.
	③	Many [A lot of/Most] people <u>may misunderstand</u> that <u>robots</u> (may [will]) <u>deprive</u> human(s) [man/us /men/people] of (their) jobs [work].
	④	Robots will <u>save us</u> [enable/help/allow us to save] (a lot of) time and <u>trouble</u> , but (still) we are <u>required</u> to make decisions [make a decision]. ×save us from the trouble ～ ×the trouble of spending time and work / the trouble of time and labor ○our judgement is also required ×decide by ourselves/have our decision/decide our opinion/decide our mind(s)

各4点

16

太字は指定された語(句) 下線部はコア部分
→指定語句をそのまま&順番通り、かつ、コア部分が書けていて2点。その他に文法ミスが無ければ4点。
記号：()は省略可能、[]は置き換え可能、/ は答えの列挙

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