

英 語

(医学部)

— 2月2日 —

解答はすべて解答用紙に記入して提出しなさい。

1

次の英文を読み、問1、問2、問4、問6、問7、問9は問い合わせに答え、問3、問5、問8は文を完成させなさい。

答えは最も適切なものを、それぞれA～Eの中から一つ選びなさい。問10は指示に従ってTかFを選びなさい。

When most people imagine the process of cooking, they usually think of preparing ingredients and applying high levels of heat to food. However, since the middle of the 20th century, traditional methods of cooking have been challenged in some very thought-provoking and scientific ways. One of these ways is “sous vide,” a revolutionary cooking technique that has been gaining respect in the culinary world.

Sous vide, French for “under vacuum,” means that the food is heated in a special plastic bag after the air is taken out. The method is widely employed by restaurant chefs around the world who use a temperature-regulated water bath to cook the food at a non-boiling temperature for hours. The vacuum-sealed plastic bag ensures that the food stays moist and juicy in the middle and does not burn or become overcooked on the outside. In traditional cooking techniques that use direct heat, it is very possible for ingredients to be overcooked, resulting in dried-out or burned food. Sous vide differs from other methods of cooking because it does not apply direct heat to food; the plastic covering even insulates food from the water bath. Many portions of the same meal, each in their separate bags, can be prepared all at once and kept in a refrigerator or frozen for later use.

Sous vide depends on properly and evenly heating the food so that the cell walls of the food's molecules do not burst. Since certain food cooked at low temperature has the potential to cause food poisoning, it is very important that the person operating a sous vide machine observes good food safety practices. As with traditional cooking techniques, this method sterilizes the food, destroying any harmful bacteria that may exist and cause illness. However, if a stable temperature is not maintained, it is very possible that food-borne illnesses may result from bacteria and germs that exist naturally. Food must be cooked at a minimum of 47 degrees Celsius for a set length of time to properly sterilize and kill harmful bacteria. Sous vide cooking time is dependent on a variety of factors such as the type of food, its size, and density. [1], cooking a steak using this method can take from two to 72 hours, whereas vegetables can take from 10 minutes to several hours to cook, depending on their thickness and size.

Sous vide is receiving attention as a standard method in large-scale restaurant operations. One particular large American restaurant chain used to advertise that all its food was cooked on site. In 2015, however, the chain had an issue with ingredients that were improperly cooked, and several customers got food poisoning. [2] the public outcry, the company changed the way they prepare food by cooking all meats sous vide in an off-site kitchen and then simply reheating them in the restaurant. In the past, having food shipped in from industrial kitchens was often seen as negative. Thanks to the sous vide method, both food quality and safety have been enhanced.

Sous vide has been growing in popularity in the home, as well. Home-use machines were first introduced in America in the 1970s but did not sell well, since they retailed for thousands of dollars. As costs have dropped, consumers have increasingly been using sous vide machines in their own kitchens to achieve restaurant-like results. In fact, the machines are now available for less than \$200. These kitchen appliances allow smaller batches of food to be cooked at home for more reasonable prices.

Head chefs of restaurant chains across the globe are choosing sous vide because they trust the science behind the cooking. They have spent years perfecting recipes and can serve pre-cooked sous vide packets that only need

to be reheated and garnished. Now, top restaurants, fast food chains, and even regular cooks at home can use sous vide techniques to create dishes in an efficient, easy, and consistent manner. This method has been one of the leading innovations in modern cooking and continues to gain in popularity.

問1 Which of the following best replaces [1] in the third paragraph?

ア. On the contrary イ. In addition ウ. At first エ. For example

問2 Which of the following best replaces [2] in the fourth paragraph?

ア. Due to イ. In place of ウ. Not to mention エ. At the cost of

問3 In the third paragraph, practices is closest in meaning to _____.

ア. exercises イ. procedures ウ. notices エ. warnings

問4 According to the first paragraph, in what ways have traditional methods of cooking been challenged?

ア. Chefs are adopting newer ways of cooking.
イ. Chefs are cooking a wider range of ingredients.
ウ. Chefs are applying higher cooking temperatures.
エ. Chefs are cooking for shorter periods of time.

問5 According to the second paragraph, in the process of sous vide cooking, food is _____.

ア. stored in a special type of plastic bag to heat the air inside
イ. put into a special type of plastic bag after it is heated inside
ウ. removed from a special type of plastic bag and heated with air
エ. heated in a special type of plastic bag after the air is removed

問6 According to the third paragraph, which of the following is NOT true?

ア. Sous vide cooking time depends on the type of food.
イ. Sous vide cooking must be done at or above 47 degrees Celsius.
ウ. Sous vide cooking has a tendency to cause illnesses.
エ. Sous vide cooking kills harmful bacteria in foods.

問7 According to the fourth paragraph, which of the following is true about the American restaurant chain?

ア. It maintained a negative image of the food industry.
イ. It returned to traditional routines in order to guarantee food safety.
ウ. It gave up the "cooked on site" method and started using an off-site kitchen.
エ. It improperly reheated sous vide food at an off-site kitchen.

問8 According to the fifth paragraph, home sous vide cooking devices were not widely used in the 1970s because

- ア. they were not available at affordable prices
- イ. they were too dangerous for home kitchens
- ウ. they took too long to prepare food
- エ. they made food less moist than restaurant food

問9 Which would be the best title for the passage?

- ア. The Modern History of Cooking Techniques
- イ. Popular Ingredients in American Food
- ウ. An Alternative Cooking Technique
- エ. Choosing Equipment for Home Cooking

問10 According to the passage, mark "T" if the statement is true, and mark "F" if the statement is false.

- 1. Only a small number of sous vide portions can be prepared simultaneously.
- 2. Nowadays, sous vide food is prepared exclusively in factory kitchens.
- 3. If food is overcooked, the cell walls of the food molecules are likely to burst.
- 4. All foods prepared with the sous vide method are packed on site at restaurants.
- 5. Sous vide is likely to be used in more kitchens in the future.

2

次の1~10の英文の空所に入る最も適切な語(句)を、それぞれA~Eの中から一つ選びなさい。

1. Many people say that there is no chance () any contests, but my mother won a brand new car today!
ア. from winning イ. of winning ウ. to be won エ. for being won
2. If I were the king of this country, I () every Monday a national holiday.
ア. am declaring イ. will declare ウ. have declared エ. would declare
3. That guest speaker doesn't like () interrupted during her talk.
ア. be イ. being ウ. been エ. to being
4. When she saw celebrities sitting next to her in a café, she couldn't help () at them.
ア. staring イ. stared ウ. having staring エ. had stared
5. By the end of this century, scientists may () discovered a cure for the common cold.
ア. been イ. be ウ. have エ. have been
6. I haven't been to Okinawa. () my brother.
ア. Neither has イ. Either has ウ. Has neither エ. Has either
7. If I had left earlier, I () the rain.
ア. had avoided イ. could have avoided ウ. can avoid エ. will avoid
8. Meredith decided to interview Dr. Townsend, () she had read in many magazines.
ア. with who イ. to whom ウ. at who エ. about whom
9. Colin noticed a () between taking a day off after a race and running the next day.
ア. differ イ. different ウ. difference エ. differently
10. At the laundromat, Jared opened the washing machine and realized he () washed his shoes by mistake.
ア. has イ. was ウ. is エ. had

3

次の1～10の英文を読み、下線部の意味に最も近い語を、それぞれA～Eの中から一つ選びなさい。

1. The professor put her research subjects through many trials before reaching a conclusion.

ア. courts イ. tests ウ. hearings エ. hypotheses

2. The political transition destabilized the economy of the country.

ア. strength イ. party ウ. change エ. climate

3. The old car is still precious to him because it brings back a lot of memories.

ア. valuable イ. expensive ウ. miserable エ. memorable

4. Many critics praised the actor for his magnificent performance in the film.

ア. superb イ. mysterious ウ. complimentary エ. angry

5. The computer store has a clear refund policy for defective goods.

ア. faulty イ. private ウ. used エ. electronic

6. The council was broadly supportive of the new agenda for statewide education.

ア. increasingly イ. generally ウ. wisely エ. bluntly

7. This distinctive style of music has been traced back to the fifteenth century.

ア. originated in イ. predated ウ. exemplified エ. thrived in

8. She was in charge of supervising the entire procedure of the company acquisition.

ア. funding イ. designing ウ. underlining エ. overseeing

9. He shoved the books away and opened his laptop computer.

ア. gave イ. threw ウ. pushed エ. hid

10. Immediately after the team assembled, it started to iron out some of the major problems.

ア. resolve イ. cause ウ. ignore エ. justify

4

次の2つの会話文を読み、6はその意味・内容に合うように文を完成させ、1～5、7、8は問い合わせに答えなさい。答えは最も適切なものを、それぞれA～Eの中から一つ選びなさい。

Carl: Hey, Bob, do you have a moment?

Bob: Sure. What's up?

Carl: I couldn't help but notice that you've been practicing the guitar. I hear it sometimes through the wall.

Bob: Oh, sorry about that. Is it too loud?

Carl: No, it's no problem at all. You don't play late at night and, to be honest, you sound pretty good! It's so much better than the construction noise I always hear near our building. How long have you been playing?

Bob: Thanks a lot! I've actually been playing for about 10 years. It keeps me calm if I've had a rough day or I just need to let off some steam. Actually, I listen to a lot of music, too. Sometimes I try to play along with a CD.

Carl: I envy you. I've always wanted to play a musical instrument, and I even bought a guitar. As a matter of fact, would you be interested in a new student?

Bob: Sure! I've actually taught guitar to a few people before. Let me know your schedule, and I can come next door.

Carl: Sounds great! Thanks!

1. How can Carl hear Bob's guitar?

- ア. Bob is playing his music CD.
- イ. Carl's apartment is near Bob's.
- ウ. Carl hears lots of construction.
- エ. Bob's students are usually noisy.

2. Why is Carl envious of Bob?

- ア. Bob can play the guitar loudly.
- イ. Bob is a good guitar teacher.
- ウ. Bob can play a musical instrument.
- エ. Bob doesn't work at night.

3. What does Bob mean by let off some steam?

- ア. relieve stress
- イ. become angry
- ウ. get some sleep
- エ. lower the temperature

4. What will most likely happen in the near future?

- ア. Bob will teach Carl how to play the guitar.
- イ. Carl will do some sound proofing on the building.
- ウ. Carl will move to the apartment next door.
- エ. Bob will listen to Carl through the wall.

Marc: Hi, Gabriela. You look like you're deep in thought. What are you up to?

Gabriela: Hi, Marc. I'm trying to decide where to go on vacation during our break. I've narrowed it down to the U.S., but it's such a big country. You're American. Any suggestions?

Marc: Well, of course, we have to start teaching again in a month. How long do you want to travel for?

Gabriela: Eight days at the most, not including the arrival and departure days. I love nature, and I know America has a lot of beautiful scenery. I hope to get in some hiking while I'm there. I went to Boston once for an academic conference but almost never left the hotel it was held in.

Marc: With only eight days, you'll need to narrow your focus. You might consider California, where I'm from. I've seen a lot of the state; it has incredibly beautiful mountains, beaches, forests, and deserts. You can easily fill up eight days just staying in California.

Gabriela: Yeah, actually I've been leaning toward California. It's pretty high on my list. It's so big, though. Where would I start?

Marc: You could fly directly into San Francisco. It's a big city, but also close to many natural areas. For example, Yosemite National Park is only a few hours' drive, and Muir Woods is just across the Golden Gate Bridge. You can also drive down Highway 1 to Los Angeles. The views of the Pacific Ocean are breathtaking.

Gabriela: Sounds nice, but I'll have to dust off my driver's license if I do that! I haven't been behind the wheel in a while.

Marc: You won't regret it if you do. California is an amazing place. Well, I have to head upstairs now. My history class starts in two minutes.

Gabriela: Okay, thanks a lot for the tips!

5. What does Gabriela most likely mean when she says, I haven't been behind the wheel in a while?

ア. She hasn't learned how to drive.	イ. She hasn't gotten permission to drive.
ウ. She hasn't ridden in a car for some time.	エ. She hasn't driven a car recently.

6. Before talking with Marc, Gabriela had already _____.

ア. booked a hotel in San Francisco	イ. driven down Highway 1
ウ. decided not to hike in Yosemite	エ. thought of going to California

7. Where is this conversation most likely taking place?

ア. at a business office	イ. at a conference	ウ. at a school	エ. at a national park
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8. According to the conversation, which of the following statements is probably true?

ア. Gabriela has taken a vacation in California.
イ. Gabriela isn't fond of spending time outdoors.
ウ. Marc has traveled around California before.
エ. Marc is planning to go on a trip with Gabriela.

5

次の問1～4の英文を読み、話の流れに沿って意味が通るように並べ替えた場合、最も適切なものはどれか。それぞれア～エの中から一つ選びなさい。

問1 1. Once it starts moving, the wheels rotate together.

2. The rider maintains this forward motion by pedaling.

3. A bicycle relies chiefly on creating momentum.

4. Handlebars are then used to steer around obstacles.

ア. 2 → 3 → 1 → 4

ウ. 2 → 4 → 1 → 3

イ. 3 → 1 → 2 → 4

エ. 3 → 2 → 4 → 1

問2 1. Learning this prompted Sasha to teach her dog some tricks during her lunch breaks.

2. Most dog trainers think that border collies are an incredibly intelligent breed of dog.

3. Soon, Spot may bring her the newspaper every morning.

4. They can learn new commands very quickly and obey on the first command more than 95% of the time.

ア. 2 → 1 → 3 → 4

ウ. 2 → 4 → 1 → 3

イ. 4 → 2 → 3 → 1

エ. 4 → 3 → 2 → 1

問3 1. Iris recognition is another. This technology is already being introduced at immigration counters in some airports.

2. The biological information collected is kept in computers and used to check people's identities.

3. Biometrics is a technology used to read biological characteristics of people.

4. One example is fingerprint authentication for ATMs, personal computers, and smart phones.

ア. 2 → 3 → 1 → 4

ウ. 2 → 4 → 3 → 1

イ. 3 → 1 → 2 → 4

エ. 3 → 2 → 4 → 1

問4 1. As we all know, Americans migrated in a westward direction as America expanded.

2. Many of them settled on the way, rather than moving even further west.

3. These settlers eventually became known as Midwesterners.

4. The reason why a large region of the central United States is called the Midwest is quite simple.

ア. 1 → 2 → 3 → 4

ウ. 1 → 2 → 4 → 3

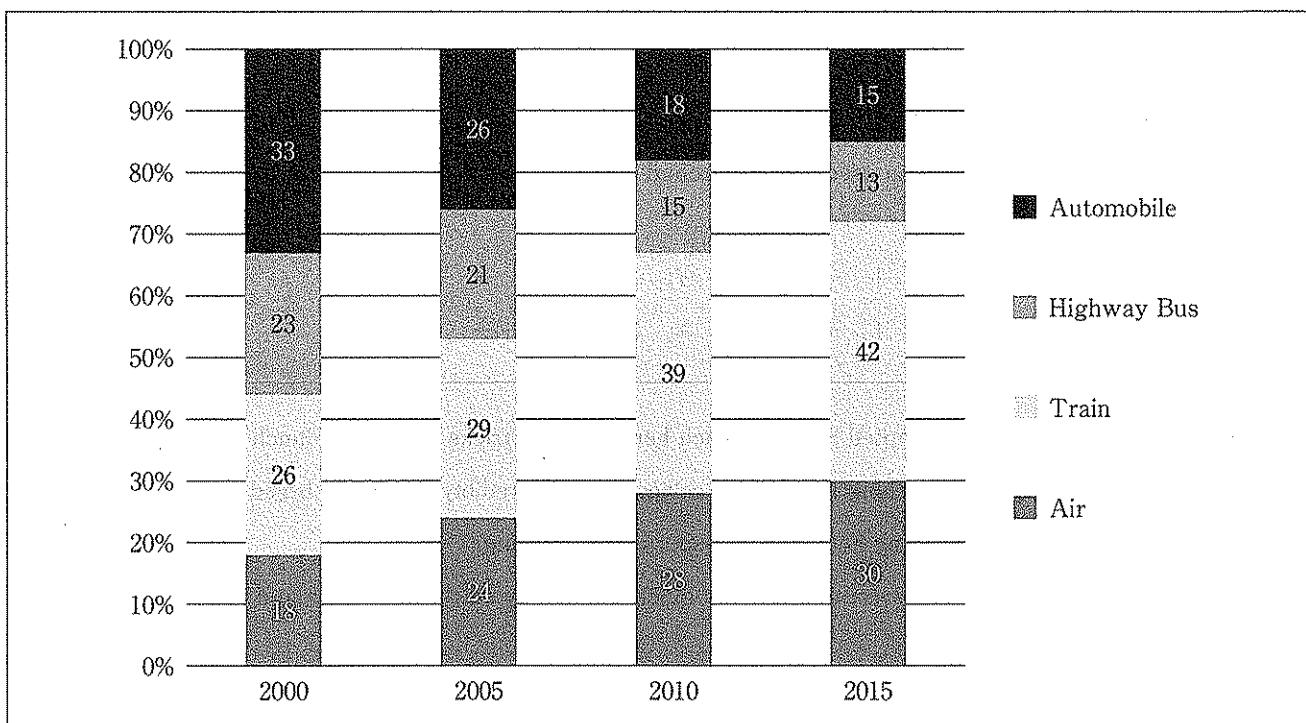
イ. 4 → 1 → 2 → 3

エ. 4 → 2 → 1 → 3

6

次のグラフを見て、英文の空所(1)～(4)に入る最も適切なものを、それぞれア～エの中から一つ選びなさい。

Relative Share of Transportation Modes for Trips Between City A and City B



―― 上記のグラフは架空のものです――

In order to observe trends in transportation usage, data was gathered every five years from 2000 to 2015 on how a study group of 5,000 commuters traveled between City A and City B. The above graph shows how, based on the numbers of trips, percentage shares of only the top four modes of transportation were calculated. Both (1) saw declines in their relative shares during the period studied. Following the completion of a government-funded project, travel by (2) saw the largest change in its relative share from 2005 to 2010. Although air travel increased during the 15-year period studied, it ranked (3) highest in the final year. The greatest change in percentage from the beginning of the period to the end was in the relative share of the automobile, which experienced a drop of exactly (4) percentage points.

(1) ア. automobile and highway bus	イ. train and air		
ウ. highway bus and air	エ. automobile and train		
(2) ア. air	イ. train	ウ. highway bus	エ. automobile
(3) ア. first	イ. second	ウ. third	エ. fourth
(4) ア. twelve	イ. fourteen	ウ. sixteen	エ. eighteen

7

次の英文を読み、下線部(1)と(2)を日本語に訳しなさい。

In the face of today's changing global economy, cryptocurrencies are seen as a new way to make financial transactions. Cryptocurrencies are funds that can be accessed and traded electronically. Traditional, physical currencies such as the U.S. dollar, Japanese yen, or British pound can be printed by their respective countries. These countries' governments can alter the value of their currency, a situation which can have a negative effect on (1) citizens. For example, the prices of goods and services could potentially be higher or lower, depending on the current state of the economy. Additionally, banks charge fees to access or send money. On the other hand, cryptocurrencies such as Bitcoin bypass banks and financial institutions allow their users to avoid banking fees. Users of alternative currencies hope for one global electronic currency that can be used in the same way as cash. (2)

8

次の下線部(1)と(2)を英語に訳しなさい。

Timber is a natural resource that provides people around the world with homes, furniture, and other wood-based products, including paper. Unfortunately, unsustainable logging in some parts of the world is reducing the size and health of forests. While there are many ways to combat deforestation, encouraging more efficient use of paper by businesses and private citizens is one easy way to do so. 例えば、印刷やコピーを両面にすることは簡単な (1)習慣だが、それで毎年何万もの木が切り倒されることを防ぐことができるかもしれない。 Single-use, disposable coffee cups also contribute to paper waste. In order to reduce the amount of waste from this source, small discounts are already being offered by some cafés to consumers who bring and use their own coffee cups. 少額の割引を提供する (2)ことはよい考えだが、紙コップの無駄を減らすにはもっと努力が必要だ。 For example, coffee shop customers could be required to pay a higher price if they wish to receive their coffee in a paper cup.

