

# 2021 年度 全学統一入学試験

## 英 語

### 【 注 意 事 項 】

- (1) 試験監督の指示があるまでは、問題冊子を開いてはいけません。
- (2) 解答時間は 60 分です。
- (3) この問題冊子は 14 ページ、問題は【I】から【IV】までです。
- (4) 解答用紙は 1 枚です。
- (5) 乱丁・落丁、印刷不鮮明などがある場合、手を挙げて試験監督に申し出なさい。
- (6) 解答用紙には、必ず受験番号・氏名を正確に記入し、受験番号マーク欄にも受験番号を正確にマークしなさい。
- (7) 解答はすべて別紙の解答用紙の所定欄にマークしなさい。
- (8) 試験開始から終了までの間は、試験教室から退出できません。
- (9) 問題冊子および解答用紙は室外に持ち出してはいけません。

【I】 次の英文の  ～  に入る最も適切なものを、それぞれ①～④の中から選び、番号をマークしなさい。

問1 There are many challenging parts to the astronaut training. The candidates must successfully  them all.

- ① compete                      ② complete                      ③ deplete                      ④ impede

問2 Very few artists in the Netherlands studied Japanese art in the 19th century. In Paris, , it was very popular.

- ① as well                      ② by contrast                      ③ consequently                      ④ in addition

問3 A: You've been a great help. Thank you.

B: You're welcome. Don't  to contact me if you need any more information.

- ① hesitate                      ② prevent                      ③ refrain                      ④ try

問4 Online classes present a potential problem to students without unlimited internet access. Their data allowance can .

- ① fill up                      ② get rid of                      ③ make up                      ④ run out

問5 The act of sweating itself won't cause you to lose weight. Sweating has absolutely  to do with fat burning.

- ① anything                      ② everything                      ③ nothing                      ④ something

問6 The continental United States is  four time zones. Alaska and Hawaii have their own time zones.

- ① divided into                      ② segregated with                      ③ separated with                      ④ similar across



問14 This is the 250th anniversary of the birth of Beethoven,  music is probably the best-known in the symphonic world.

- ① which                      ② who is                      ③ those who                      ④ whose

問15 There  an industrial park here. It was turned into a theme park twenty years ago.

- ① used to be                      ② used to being                      ③ was used to                      ④ was used being

問16 A: I hear Danny was in an accident.

B: He should  than to talk on the phone while cycling.

- ① be more    ② have more  
③ have known better    ④ have had been better

問題は次のページに続きます。

【Ⅱ】 次の会話文を読み、後の問い（問1～5）に答え、 ～  に入る番号をマークしなさい。

Bob: Oh, hi! Lovely day isn't it?

Carol: Yes. I'm so glad the rain finally stopped. Is that your dog? It seems to be enjoying the fine weather.

Bob: Yes, I think Jimbo has been a bit frustrated being cooped up inside for the last few days. He's really happy to be out in nature now.

Carol: (*laughs*) I guess you're new to the area, right?

Bob: Yeah, but how did you know?

Carol: It was the "nature" part that gave it away.

Bob: What? Why? Look we're surrounded by grass and trees. What do you mean?

Carol: I know. It looks wonderful now. But if you'd been here just a few years ago you would have been in the middle of a factory that was putting lots of pollution into the environment.

Bob: You're joking! I don't believe it!

Carol: No. Straight up, honest truth. Up until four years ago there was a chemical plant on this site. They actually got shut down because they were breaking so many environmental rules.

Bob: But... Is it safe? I don't like .

Carol: There's nothing to worry about now. When the plant was closed the whole community got together and raised a lot of money to clean the area up and "re-green" it. I think we did a pretty good job.

Bob: I have to agree with you there. I moved here six months ago and I thought this place was just a natural park. I mean, some of these trees have to be much more than four years old.

Carol: They are. We had some brought in from sustainable old-growth forests.

Bob: I'm noticing your use of "we".  by any chance?

Carol: Okay. You got me! I actually manage the maintenance of this whole area and did a lot of the planning to set it up.

Bob: Wow! That's amazing. It's great to have place like this so close to my home. Is there anything I can do to help out?

Carol: Here's my card. It has the URL to our website, where you can make financial donations or volunteer your time to help with the upkeep.

Bob: Thanks. I'll definitely do both.

問 1 Where are the speakers?

- ① At a former industrial plant
- ② In an old forest
- ③ At a gardening center
- ④ In Carol's backyard

問 2 What do we know about Bob?

- ① He is a long-time resident in this neighborhood.
- ② He used to work at the chemical plant.
- ③ He appreciates the community's efforts.
- ④ He has been involved in the local environmental movement.

問 3 Which of the following best fits in part  ?

- ① too much government control of industry
- ② the idea of me or Jimbo being exposed to toxic materials
- ③ the idea of business being less important than the environment
- ④ environmentalists trying to control us

問 4 What is the concept of the work done in this area?

- ① Encouraging new businesses to move there
- ② To preserve natural spaces for the public
- ③ Reversing the effects of environmental damage
- ④ To provide employment for industrial workers

問 5 Which of the following best fits in part  ?

- ① Don't you think my dog is really cute,
- ② Did you work for the chemical factory,
- ③ Do you think there's any danger from the chemicals,
- ④ Were you involved in this,

【Ⅲ】 次の2019年6月17日付の記事を読み、後の問い（問1～6）に答え、～に入る番号をマークしなさい。

When Chinese tech companies started rushing to open unmanned convenience stores a couple of years ago, some experienced bricks-and-mortar players\* said the trend would soon hit a dead end. They were right: Across China, shops once considered the future of retail have been shutting their doors for good.

In May, on Huaqiang North Road in the heart of Shenzhen's electronics shop district, a Buy-Fresh Go store that had been held up by the media as a model of automated retail closed after only about a year. The store had been stripped of all its high-tech equipment and an ad seeking a new tenant was placed at the entrance.

In Shenzhen's neighboring city of Guangzhou, i-Store, the first local unmanned convenience chain, has also been closing stores one after another. It had three left at the end of March, down from a peak of nine, according to a local newspaper.

Last December, JD.com, China's second-largest online retailer, announced it would suspend its smart shelf business — small unmanned shops the size of train station kiosks. In July 2018, JD.com unveiled a plan to open 5,000 of them in office buildings and other places in major cities by the end of the year, only to withdraw the plan six months later.

What went wrong? The difficulty of selling fresh groceries in stores without staff is one major obstacle. Industry experts say a convenience store in a major Chinese city like Beijing needs to generate at least 5,000 to 6,000 yuan\* in sales per day to remain viable. A significant chunk of those sales come from boxed lunches, ready-made fresh meals, desserts and other products with limited shelf lives.

In Japan and China alike, the gross margin on processed food, which lasts longer, is about 25%, while that on fast food and fresh groceries stands at 40% to 50%. In other words, .

Many of the companies that attempted to run unmanned convenience stores appear to have lacked such knowledge. If a store only carries long-lasting products like drinks and snacks, it looks more like a big vending machine in the eyes of consumers. Although the new concept of unmanned convenience stores attracted shoppers early on, the novelty has worn off.

Another issue is that the unmanned store operators, it seems, have not made the most of their data. Convenience stores have arguably been more successful in Japan than anywhere else because of the way they use their data. Head offices focus on analyzing the information to understand what sells, plan the development of new products and ensure factories make them efficiently. They also build logistics networks that enable just-in-time deliveries. The Chinese IT companies that entered the market used technology to remove the need for workers but may have overlooked other parts of the equation.

(注) bricks-and-mortar players 「従来型の店舗」  
yuan 「元 (中国の通貨単位)」

(Adapted from “China’s unmanned store boom ends as quickly as it began”

<<https://asia.nikkei.com/Spotlight/Most-read-in-2019/China-s-unmanned-store-boom-ends-as-quickly-as-it-began>>)

問1 What did some experienced traditional retailers think when the unmanned convenience store boom began?

- ① Their business would be negatively affected.
- ② Unmanned stores would be good for their business.
- ③ The future of retail would be unmanned stores.
- ④ Unmanned convenience stores would not last long.

問2 What happened to a Buy-Fresh Go store on Huaqiang North Road?

- ① It remained a model of automated retail for more than a year.
- ② Its high-tech equipment was replaced with more advanced technology.
- ③ An help-wanted ad was put up at the entrance of the store.
- ④ It went out of business against the media’s expectations.

問3 Which statement is true?

- ① Two-thirds of i-Store shops in Guangzhou closed by the end of March.
- ② Three of nine i-Store shops moved out of Guangzhou at the end of March.
- ③ Unmanned convenience stores were successful only when they were small.
- ④ JD.com gave up opening 5,000 unmanned shops in July 2018.

問 4 Which best fits in the blank  ?

- ① the longer shelf lives the food at a convenience store has, the more profitable the business becomes
- ② the higher the ratio of fresh food at a convenience store is, the more stable the business becomes
- ③ the less fast food and fresh groceries a convenience store sells, the more space it can save
- ④ the longer a convenience store stay open, the more fast food and fresh groceries it can sell

問 5 Why does the author think convenience stores have been more successful in Japan than anywhere else?

- ① Because owners of stores have more experience.
- ② Because there are more factories to make products.
- ③ Because their head offices make the most of their data.
- ④ Because Japan has the highest road quality.

問 6 What is the conclusion of this article?

- ① Automated convenience stores will have no chance of success.
- ② Running unmanned convenience stores takes more than technology.
- ③ IT companies should not deprive workers of employment.
- ④ IT companies should treat people and technology equally.

問題は次のページに続きます。

【IV】 次の文章を読み、後の問い（問1～6）に答え、 ～  に入る番号をマークしなさい。

Scientists have turned albatrosses\* into ocean spies by placing special radar tracking devices on them. The seabirds, which spend weeks at a time over the open ocean, collected information on boats fishing illegally.

Albatrosses are the world's largest seabirds. Their spread wings can measure up to 3.5 meters from tip to tip. They're famous for spending long periods of time — sometimes years — over the open ocean, searching for food. With their incredible eyesight, albatrosses can spot fish while soaring high in the sky. They can locate fishing boats from 30 kilometers away.

Though fish and fish scraps attract albatrosses to fishing boats, fishing boats are generally bad news for albatrosses. Albatrosses often get caught on the hooks of the “long lines” that some fishing boats use. An even bigger problem is overfishing. In recent years, it's become much harder for albatrosses to find enough food because humans have taken so many fish from the sea.

In November, 2018, scientists from the French National Center for Scientific Research attached small solar-powered trackers to the backs of 169 albatrosses. Some were adults, others were younger birds. Because of their size, the small extra weight didn't bother the albatrosses.

Albatrosses were the perfect choice for an experiment aimed at tracking boats fishing illegally. “They are large birds, they travel over huge distances and they are very attracted by fishing boats,” said lead scientist Henri Weimerskirch. Capable of following fishing boats into remote regions out of reach of monitoring machines like ships, aircrafts and even certain satellites, they could offer a convenient and cost-effective way to track illegal activity at sea.

Boats have a strong radar signal which identifies them. By law, this Automatic Identification System (AIS) must be turned on. But boats that are fishing illegally often turn their AIS off, so they can't be identified. But boats also have a short-distance radar that's used to avoid running into other boats, and it's almost always on.

The trackers worn by the albatrosses collected both the AIS and the short-distance radar signals. A GPS unit recorded the albatross's location, and another antenna sent the information back to the researchers.

The albatrosses wore the trackers for six months. During that time, they covered over 47 million square kilometers of ocean. In all, the birds found 353 different boats. The scientists were surprised to find that 28% of the ships had their AIS turned off. That suggests that nearly a third of the boats were doing something they shouldn't have been doing. The results were slightly better in waters that were carefully controlled. But in international waters, which aren't controlled by any single country, the rate was far worse — about 37% of the boats had their AIS turned off.

The experiment shows that it's possible to use albatrosses to keep an eye on illegal fishing. The birds did a job that would have been impossible using boats, planes, or even drones. But future

programs based on this idea will need to be run carefully to make sure that albatrosses don't become targets for fishing boats. The scientists are now working on even tinier trackers, which could allow smaller birds to do similar work to protect ocean life.

(注) albatross 「アホウドリ」

(Adapted from “Albatrosses Help Locate Illegal Fishing Boats”

<<https://newsforkids.net/articles/2020/02/06/albatrosses-help-locate-illegal-fishing-boats/>>)

問1 Which description is true of albatrosses? 

28
----

- ① No other birds are as big as albatrosses.
- ② It takes long time for albatrosses to learn to fly.
- ③ Albatrosses have excellent long-distance vision.
- ④ Albatrosses can fly faster than fishing boats.

問2 What problem do fishing boats pose for albatrosses? 

29
----

- ① They use hooks and long lines to catch albatrosses.
- ② Excessive fishing has left little for albatrosses to eat.
- ③ They try to catch albatrosses along with fish from the sea.
- ④ They send out signals that get in the way of albatrosses.

問3 Which is one of the features that make albatrosses the perfect choice for the experiment?

30
----

- ① They are large enough to attach small solar-powered trackers to.
- ② They travel in huge groups and are easy to follow.
- ③ They are so friendly that they won't attack fishing boats.
- ④ They can be remotely controlled like ships and aircrafts.

問 4 Which would suggest that a boat was fishing illegally?

- ① It was fishing in waters which aren't controlled by any single country.
- ② It had AIS turned on and its short-distance radar signal turned off.
- ③ It was fishing with AIS off and its short-distance radar signal on.
- ④ It had neither AIS nor its short-distance radar signal turned on.

問 5 What do the researchers of this study suspect?

- ① The albatrosses could travel as far as 47 million kilometers.
- ② There were as many as 353 illegal fishing boats at sea.
- ③ Illegal fishing was carefully controlled in international waters.
- ④ Close to a third of the boats were fishing illegally.

問 6 What is the significance of this experiment?

- ① It shows that albatrosses can be trained to patrol illegal fishing.
- ② It has proved that albatrosses can take over a job of the drones.
- ③ It shows that albatrosses can help monitor illegal fishing.
- ④ It has proved that albatrosses are as useful as smaller birds.



