

2022年度

一般選抜C日程

コミュニケーション英語Ⅰ・Ⅱ
英語表現Ⅰ

[60 分]

I 次の A と B の対話において、空欄に入れるのに最も適切なものをそれぞれ下の①～④のうちから一つずつ選びなさい。

1 . A: Would you like to go now, or later?

B: ()

- ① That would be nice.
- ② I'm going to do it later.
- ③ That's a great idea.
- ④ I'm ready now.

2 . A: There aren't enough seats for every student.

B: ()

- ① I'll get some extra chairs.
- ② I'll meet them every day.
- ③ Yes, they aren't enough.
- ④ No, they are enough.

3 . A: How often do you visit your grandfather?

B: ()

- ① Usually, by bus.
- ② Every few days.
- ③ In my hometown.
- ④ Across the street.

4 . A: Why don't we have a chat over coffee?

B: ()

- ① You're welcome.
- ② Because I love coffee.
- ③ Sounds great.
- ④ Just over there.

5 . A: How is everything with you?

B: ()

- ① You'll do everything well.
- ② I'll do it well.
- ③ All right.
- ④ With pleasure.

6 . A: We had a good dinner. How much is the bill?

B: ()

- ① Oh, it's on me today.
- ② Oh, it's strange to say that.
- ③ I'm sorry to hear that.
- ④ It was good for that.

7 . A: I don't think I can carry the heavy box.

B: ()

- ① I think I did.
- ② I don't think someone else did.
- ③ It was great help.
- ④ Here, let me help.

8 . A: How did you get so wet?

B: ()

- ① It is going to rain tomorrow.
- ② I forgot my umbrella.
- ③ It was fine yesterday.
- ④ I got to the cafeteria.

9 . A: Why has the class been canceled?

B: ()

- ① The lecturer is sick.
- ② On English literature.
- ③ The students will be late.
- ④ In Classroom 3 on the third floor.

10. A: You're needed in the office.

B: ()

- ① I'll have to work in the office.
- ② I won't need anything.
- ③ I'll need more.
- ④ I'll be right there.

Ⅱ 次の英文の空欄に入れるのに最も適切な語（句）を、それぞれ下の①～④のうちから一つずつ選びなさい。

11. You might lose your job () you change your behavior toward your manager.
① but ② which ③ if ④ unless
12. Mariko and I visited the famous village () Shakespeare was born.
① which ② in which ③ of which ④ when
13. The turtle was taken () the students in the class.
① care by ② care of ③ care for by ④ care of by
14. If I had not read the article in the paper, I () here now.
① might not be ② might have been ③ might not have been ④ may be
15. I regret leaving the window () that night.
① unlocked ② was unlocked ③ is unlocking ④ unlocking
16. I must finish the report today. I wish I could get my husband () my computer.
① repair ② repaired ③ to repair ④ to be repaired
17. He asked me to submit this report () the end of this month.
① until ② to ③ in ④ by
18. My new book on Japanese culture () next month.
① is going to publish ② will publish
③ is going to be published ④ will be publish
19. If I were rich, I () probably be studying art in France now.
① can ② will ③ may ④ would

問題削除

- (B) 次の英文を読み、設問に対する答えとして最も適切なものをそれぞれ下の①～④のうちから一つずつ選びなさい。

AI creates false documents that fake out hackers

Hackers constantly improve at penetrating cyberdefenses to steal valuable documents. So some researchers propose using an artificial-intelligence algorithm to hopelessly confuse them, once they break in, by hiding the real deal amid a mountain of convincing fakes.

The algorithm, called Word Embedding-based Fake Online Repository Generation Engine (WE-FORGE), generates decoys of patents under development. But someday it could “create a lot of fake versions of every document that a company feels it needs to guard,” says its developer, Dartmouth College cybersecurity researcher V. S. Subrahmanian.

If hackers were after, say, the formula for a new drug, they would have to find the relevant needle in a haystack of fakes. This could mean checking each formula in detail—and perhaps investing in a few dead-end recipes. “The name of the game here is, ‘Make it harder,’” Subrahmanian explains. “Inflict pain on those stealing from you.”

Subrahmanian says he tackled this project after reading that companies are unaware of new kinds of cyberattacks for an average of 312 days after they begin. “The bad guy has almost a year to decamp with all our documents, all our intellectual property,” he says. “Even if you’re a Pfizer, that’s enough time to steal almost everything. It’s not just the crown jewels—it’s the crown jewels, and the jewels of the maid, and the watch of the secretary!”

Counterfeit documents produced by WE-FORGE could also act as hidden “trip wires,” says Rachel Tobac, CEO of cybersecurity consultancy SocialProof Security. For example, an enticing file might alert security when accessed. Companies have typically used human-created fakes for this strategy. “But now if this AI is able to do that for us, then we can create a lot of new documents that are believable for an attacker—without having to do more work,” says Tobac, who was not involved in the project.

The system produces convincing decoys by searching through a document for keywords. For each one it finds, it calculates a list of related concepts and replaces the original term with one chosen at random. The process can produce dozens of documents that contain no proprietary information but still look plausible. Subrahmanian and his team asked computer science and chemistry graduate students to evaluate real and fake patents from their respective fields, and the humans found the WE-FORGE-generated documents highly believable. The results appeared in the Association for Computing Machinery’s Transactions on Management Information Systems.

WE-FORGE might eventually expand its scope, but Subrahmanian notes that a document recommending a course of action, for instance, would be much more complex than a technical formula. Still, both he and Tobac think this research will attract commercial interest. “I could definitely see an organization leveraging this type of product,” Tobac says. “If this ... creates believable decoys without releasing sensitive details within those decoys, then I think you’ve got a huge win there.”

44. Why does WE-FORGE generate decoys of patents under development?
- ① To create a lot of different versions of documents for future use.
 - ② To hide valuable documents in a haystack of counterfeits.
 - ③ To improve the ability to break the cyberdefences of other companies.
 - ④ To use an artificial-intelligence algorithm to analyze data correctly.
45. What made Subrahmanian start working on WE-FORGE?
- ① He realized that not only documents but also office supplies were stolen.
 - ② He thought that it was necessary to make documents easier to understand.
 - ③ He learned that companies didn't notice being hacked for almost a year.
 - ④ He realized that stealing documents took a lot of time and energy.
46. What is an example of a "trip wire"?
- ① Counterfeit documents give bad guys a chance to escape with all intellectual documents.
 - ② Companies use only human-created fakes for this strategy.
 - ③ The AI creates a lot of true documents for an attacker easily and quickly.
 - ④ If any entrapping documents are accessed, the system sends a security alert.
47. How does WE-FORGE make plausible decoys?
- ① It produces a lot of documents with proprietary information.
 - ② The system explores keywords through a document.
 - ③ The team calculates a list of concepts at random.
 - ④ The programmer gives detailed instructions to the AI.