

一教科入試
令和7年度 入学試験問題

英 語 (60分)

注 意

- 1 この問題用紙は、試験開始の合図で開くこと。
- 2 問題用紙と解答用紙に受験番号・氏名を記入すること。
- 3 答えはすべて解答用紙に記入すること。
- 4 印刷がわからない場合は申し出ること。
- 5 **大問4 7.は必答論述問題です。必ず解答すること。**
- 6 解答用紙は裏面もあります。
- 7 試験終了の合図でやめること。

受験番号		氏名	
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1 空所に入れるのに最も適切なものを選び、記号で答えなさい。

1. Emma majors in economics at college and learned that market price is determined by the relationship between supply and ().

ア capital イ demand ウ loss エ income

2. With the train station closed for repairs, people were forced to () use the bus.

ア temporarily イ formerly ウ curiously エ randomly

3. Last week, Jennifer's son left many toys on the floor in his room, so she taught him how to () them. Together, they put all of them in his closet.

ア seal イ renew ウ organize エ illustrate

4. Sophia could not stop coughing. She was () feeling sick, so her teacher told her to go home.

ア emotionally イ separately ウ pleasantly エ obviously

5. Lian decided not to buy a new smartphone () money. He will keep his old one for another year or two.

ア tired of イ for lack of ウ by means of エ ignorant of

- 2 次の日本語の意味を表すように、【 】内の語句を並べかえて空所を補い、英文を完成させなさい。解答は(a)(b)(c)に入れる記号のみを書くこと。ただし、文頭にくるべき語も小文字にしてあります。

1. 何人のお客様がパーティーにいらっしゃるのだろう。

()(a)()()(b)()()()(c) party.

【 ア come イ guests ウ how エ I オ many カ the キ to ク will ケ wonder 】

2. 他人の悪口を言う人を信用できますか。

()()()(a)()(b)()(c)()()?

【 ア can イ ill ウ of エ on オ others カ rely キ someone ク speaks ケ you コ who 】

3. また台風が接近しているので、外出を控えたほうがいいですよ。

You ()()(a)()(b)()(c)()() coming.

【 ア another イ because ウ better エ go オ had カ is キ not ク out ケ typhoon 】

4. そのだらしない生徒は二度と遅刻しないと約束した。

()(a)()(b)()()()(c) again.

【 ア be イ late ウ lazy エ never オ promised カ student キ that ク to 】

5. 教室の掃除を終えたら、図書館に行くのはどう。

()(a)()()(b)()(c)()() the classroom?

【 ア about イ cleaning ウ finished エ going to オ how カ the library キ up ク we've ケ when 】

6. 千里の道も一歩から。

()(a)()()(b)()(c)()().

【 ア a イ begins ウ even エ journey オ longest カ single キ step ク the ケ with 】

3 次の【A】【B】の英文を読み、以下の問いに答えなさい。

【A】

Kenta Hey, Risa. Are you going to the AI seminar next week?

Risa Oh, hey Kenta. No, I'm not. Actually, I've been feeling a bit uneasy about AI recently.

Kenta Really? But you love technology! What's got you worried about AI?

Risa Well, it's something I've been thinking about a lot. I read an article about how AI could potentially lead to massive job losses, and it made me question how much we should be relying on it.

Kenta Oh, come on! Do you really think AI is going to take over all our jobs? It's just making things more efficient.

Risa I get that it's efficient, but it's not just about jobs. There are also concerns about privacy and the misuse of AI in collecting personal data. It's not just about whether it's useful, but how it's being used.

Kenta Well, I think you're being a bit paranoid. AI is just a tool. It's how we use it that matters. Besides, it's going to drive innovation and create more job opportunities than it loses.

Risa That's true, but I still believe we need to approach it cautiously and think about the ethical implications. You have to (1). It's important to stay informed and consider both the benefits and the potential downsides.

Kenta I get where you're coming from, but I'm still going to the seminar. I think it's going to be really interesting.

Risa That's fine by me. I'm not against AI itself; I just want to make sure we're (2) and not rushing into things without thinking.

1. Which phrase best fits into (1)?

- ア dismiss the potential risks
- イ look at the big picture
- ウ trust the experts blindly
- エ ignore the advantages

2. Which phrase best fits into (2)?

- ア considering all perspectives
- イ taking a leap of faith
- ウ avoiding the topic entirely
- エ rejecting new technology

【 B 】

- Kenji Yuko, have you seen the news? Looks like we're expecting a tourist boom this summer in Japan!
- Yuko Yeah, I caught that too! It's wild how Japan's become a hotspot for travelers, isn't it? It's definitely good for our shops and hotels, but the crowds are going to be huge. What's your take on it? Do you think it's all positive?
- Kenji Well, it's a bit of a double-edged sword. I love that our culture's getting the spotlight, but the strain on our cities is a worry.
- Yuko I read some places are already at capacity with visitors. That's why I think it's up to the tourists to take responsibility. If they respect our culture and follow the rules, it won't be so bad.
- Kenji But the government needs to play a bigger role too. They should manage the flow of tourists to avoid overcrowding in popular areas like Shibuya.
- Yuko Sure, but if tourists are aware and considerate, they won't cause issues. Personal responsibility can make a huge difference.
- Kenji True, but can individual actions really make that much of a difference? The government has the power to educate tourists and spread awareness on a larger scale.
They need to do more by doing things like promoting off-season travel and helping tourists find lesser-known regions to balance the numbers throughout the year.
- Yuko But still, if tourists simply behave well, it won't be such a big issue. They need to be mindful—following the rules, respecting the local vibe, and not trashing the place.
- Kenji Of course that's true but there's no guarantee. Maybe educational programs for tourists about our customs could keep our cultural sites protected if promoted properly, but again that's up to the government.
- Yuko I guess that's true. I can see how a more organized approach could prevent hotspots from getting overwhelmed.
- Kenji Exactly. We need a combination of government intervention and personal responsibility. Japan needs the economic help that tourists bring, so it's very important for the government to keep it under control.
- Yuko You know what?! You're right. If the government takes the lead in educating and managing the flow of tourists, it can create a path to responsible tourism. That way, we can preserve our culture and still benefit economically.

1. Which solution to manage the tourist boom is not discussed in the conversation?
 - ア Encouraging tourists to explore less popular destinations to distribute visitor numbers evenly throughout Japan.
 - イ Introducing and applying guidelines for tourist behavior, making sure they follow local rules and customs to help manage the impact of tourism effectively.
 - ウ Putting into effect a compulsory registration system for tourists entering Japan to monitor and regulate the flow of visitors.
 - エ Promoting educational initiatives to improve tourists' understanding and respect for socially accepted customs in Japan.

2. Which answer best summarizes the conversation between Yuko and Kenji about tourism in Japan?
 - ア Yuko expresses concern about tourism's impact on local resources, while Kenji emphasizes the economic benefits without considering potential drawbacks.
 - イ Yuko first focused on tourists' personal responsibility but later agreed with Kenji on the need for both personal accountability and government intervention in managing tourism sustainably in Japan.
 - ウ Kenji outlines the economic benefits of tourism, while Yuko argues for stricter regulations to better manage visitor numbers.
 - エ Yuko and Kenji debate the positives of promoting off-season travel versus focusing on popular tourist destinations, but they do not reach a consensus on how to manage tourist numbers.

4 次の英文を読み、以下の問いに答えなさい。

Scientists blame ①greenhouse gases for being a major cause of climate change around the world. This is because greenhouse gases trap heat in the atmosphere and make the planet warmer. Higher temperatures have caused major environmental problems on Earth, scientific research shows. These problems include loss of sea ice, rising sea levels, loss of ocean life and more intense weather events. Such problems are predicted to worsen unless governments around the world take action to reduce greenhouse gases. Carbon dioxide is one of the major greenhouse gases. Most of this heat-trapping gas is produced through human activities related to burning fossil fuels for electricity, heat and transportation. Several major industries have attempted to (②) fossil fuels in favor of cleaner energy solutions.

Now, a team of researchers has announced a successful experiment that turned carbon dioxide into ③a useful liquid fuel. The research was led by scientists from Rice University in the United States and was supported by the U.S. Department of Energy. The findings were recently published in Nature Energy. The researchers created a device, called a *reactor, that converts carbon dioxide into a pure form of *formic acid. Formic acid is a substance found in ants and some other insects, as well as in many plants. [I] It is used as an antibacterial material and in the processing of some kinds of clothing.

④Haotian Wang led the research team. He is a biomolecular engineer at Rice University. He said in a statement that the results of the experiment were important because formic acid is a major *carrier of energy. So, the substance can provide a way to reuse carbon dioxide and prevent it from being released into the atmosphere. [II]. Other methods for turning carbon dioxide into formic acid require intense *purification processes, Wang said.

Such methods are very costly and require a lot of energy. [III] The Rice University team said it was able to reduce the number of steps used in the traditional process to create a low-cost, energy-saving method. The researchers reported the reactor device performed with a *conversion rate of 42 percent. [IV] This means that nearly half of the electrical energy can be stored in formic acid as liquid fuel. The team said the reactor “was able to create formic acid continuously for 100 hours with little *degradation” of the device’s parts.

Wang said the reactor could easily be changed to produce other high-value products, including alcohol-based fuels. The researchers noted that the technology could also be a big help in ⑤solving another major energy problem — how to store large amounts of power in small places. Wang said formic acid can be used as a better storage material for hydrogen, for example. Hydrogen is seen as a possible new energy source to power automobiles and trains. Hydrogen combines with oxygen to produce electrical power, and only releases water and steam into the atmosphere.

The researchers said their findings suggest formic acid “can hold nearly 1,000 times the energy as the same amount of hydrogen. Since hydrogen is difficult to shrink down and store, it currently presents “a big challenge for hydrogen *fuel-cell cars,” Wang said. He added that the team plans to keep working to improve the process. The team also aims to reduce the cost in hopes of bringing the technology to places around the world to help fight climate change.

“The big picture is that carbon dioxide reduction is very important for its effect on global warming,” Wang said. “If the electricity comes from renewable sources like the sun or wind, we can create a loop that turns carbon dioxide into something important without emitting more of it.”

(注) reactor 化学反応装置 formic acid ギ酸 carrier 輸送・貯蔵を行う化学物質
purification 浄化 conversion rate 変換率 degradation 劣化
fuel-cell 燃料電池

出典： Researchers Find Way to Turn Carbon Dioxide into Valuable Fuel

<https://learningenglish.voanews.com/a/researchers-find-way-to-turn-carbon-dioxide-into-valuable-fuel/5090884.html>

1. 本文の内容を踏まえ、下線部①の内容として最もふさわしくないものを以下のア～エから1つ選び、記号で答えなさい。
ア その一つは海水や海洋生物の減少や海面上昇など気候変動の原因として非難されている。
イ その一つは発電や暖房や輸送など人間活動を支えるために排出せざるをえず、悪化することもない。
ウ その一つは大気中の熱を閉じ込めて地球の温度を上げ地球に大きな環境問題を引き起こしている。
エ その一つは化石燃料を燃やすことにより生じるため世界各国政府が対策を取らないと増加していく。
2. 空所②に入るものとして最もふさわしいものを、以下のア～エから1つ選び、記号で答えなさい。
ア run out of イ build up ウ move away from エ continue to rely on
3. 下線部③が表すものとして最もふさわしいものを、以下のア～エから1つ選び、記号で答えなさい。
ア carbon dioxide イ hydrogen ウ alcohol-based fuels エ formic acid
4. 以下の英文が入るところとして最もふさわしいものを本文中のⅠ～Ⅳから1つ選び、記号で答えなさい。
“It’s a fuel-cell fuel that can generate electricity and emit carbon dioxide, which you can grab and recycle again,” Wang said.

5. 下線部④について、Haotian Wang氏の成果として、最もふさわしいものを以下のア～エから1つ選び、記号で答えなさい。
- ア 二酸化炭素を純粋なギ酸に変換する化学反応装置を世界で初めて開発した。
 - イ アリや植物に含まれるギ酸を高濃度で精製することで抗菌剤や衣類の材料を発明した。
 - ウ 二酸化炭素をギ酸に変換するための莫大なコストとエネルギーの問題を克服することに成功した。
 - エ その化学反応装置は100時間ですべての二酸化炭素をギ酸に確実に変換することができた。
6. 下線部⑤について、その内容として最もふさわしいものを以下のア～エから1つ選び、記号で答えなさい。
- ア ギ酸は同量の水素の1000倍のエネルギーを保有することができ、同時に水素を貯蔵する効果的な材料であるため、液体水素燃料電池車の課題を解決する可能性がある。
 - イ ギ酸は地球温暖化の主な原因である二酸化炭素を放出しない燃料電池電量であるため、気温上昇など環境問題をもたらす温室効果ガスの減少に貢献する。
 - ウ 燃料電池は水素と酸素を結合することで発生する電力を利用するもので、大気中には水と蒸気しか放出しないためクリーンエネルギーとして注目されている。
 - エ このギ酸を精製する化学装置があれば二酸化炭素を削減する必要はなくなり、太陽熱や風力などの再生可能エネルギーなどコストの問題も解決することができる。

必答論述問題

7. 地球環境を守るためにはこのような発想の転換も求められる。本文を参考にして今後環境を守るために必要な解決策を具体的に1つ挙げ、自分の考えを300～350字の日本語で述べなさい。ただし、句読点も文字数に入ります。また、以下の内容を踏まえて答えること。

①なぜその解決策が有効だと考えるのか。

②中学校・高校生活でどのようなことに気をつけて学ぶべきか。

- 5 以下の内容について、あなたの意見を英語で書きなさい。語数の目安は80語～100語とします。

It is often said that computer games are bad for children. Do you agree with this opinion?

[illegible]

5	