### 2024年度 奨学生入学試験

## 英 語

(試験時間 60分)

#### 注意事項

- 1 試験開始の合図があるまで、この問題冊子の中を見てはいけません。
- 2 この問題冊子は、29ページあります。
- 3 試験中に問題冊子の印刷不鮮明,ページの落丁・乱丁及び解答用紙の汚れ等に気 付いた場合は、手を挙げて監督者に知らせなさい。
- 4 解答用紙には解答欄以外に次の記入欄があるので、それぞれ正しく記入し、マー クしなさい。
  - 試験コード欄・座席番号欄

試験コード・座席番号(数字)を記入し、さらにその下のマーク欄にマークしな さい。正しくマークされていない場合は、採点できないことがあります。

② 氏名欄

氏名・フリガナを記入しなさい。

5 解答は,解答用紙の解答欄にマークしなさい。例えば, 10 と表示のある問 いに対して③と解答する場合は,次の(例)のように解答番号10の解答欄の③にマー クしなさい。



- 6 問題冊子の余白等は適宜利用してよいが、どのページも切り離してはいけません。
- 7 試験終了後,問題冊子は持ち帰りなさい。



### 第1問

A You look at the chart below in your science textbook while reading the following 4-day weather forecast.



## **4-DAY WEATHER FORECAST**

### November 1st

Heavy rain and strong winds are likely all day. Thunderstorms with hail are possible.

### November 2nd

Drizzle in the morning, changing to rain or sleet in the afternoon.

### November 3rd

Fair, occasionally cloudy and generally dry. Calm winds are expected all day.

### November 4th

Foggy early on, then cloudy, with a high chance of showers all day.

問 1 According to your textbook, the word "precipitation" means 1

- 0 any form of water that falls from the clouds to the ground
- 2 any visible mass of water droplets suspended in the air
- 3 slow-moving ice sheets found in high mountain valleys
- (a) the movement of air across the atmosphere

問 2 Of the four types of precipitation, 2 is the only one that is not frozen.

- 1 drizzle
- 2 freezing rain
- 3 hail
- 4 sleet

- 問3 You like outdoor activities and plan to go fishing in early November. Judging from the 4-day weather forecast, 3 is the best day to go fishing.
  - (1) November 1st
  - 2 November 2nd
  - 3 November 3rd
  - (a) November 4th

### (下書き用紙)

英語の試験問題は次に続く。

**B** You happen to click on a link to the advertisement shown below, which attracts your attention.

## **New Support Cushion DX**

A quick and easy solution to problems with your uncomfortable chairs or car seats. **New Support Cushion DX** guarantees maximum comfort, relaxation and coolness.





\*24-hour Express Delivery Service is available for an additional fee of \$5 per order. Orders must be placed by 3 p.m. Monday – Friday.

Item #	Product Name	Quantity	Price	Color	Size
29871	New Support Cushion DX	1+1	\$12	Gray, Blue, Black	Width 20" x Depth 20" x Height 5"

## **Special Features:**

- The silicone gel inside the cushion absorbs excess body heat to create a cooling sensation.
- A honeycomb structure allows air to flow through the cushion and release heat.
- The cushion retains its shape, supports your body, and prevents back pain.
- The cushion fits in a machine-washable and non-slip cloth cover.

- 問 1 You, your mother, and your two brothers all like this cushion, so you've decided to get one each. If you order using 24-hour Express Delivery Service, how much will you pay in total? 4
  - **(**) \$24
  - **2** \$29
  - **3** \$48
  - **(4)** \$53
- 問2 Based on the above information, which of the following is <u>not</u> true about this product? 5
  - ① The cushion comes with a cloth cover which can be washed at home.
  - 2 The cushion helps you stay cool, especially in the hot seasons.
  - 3 The cushion is not soft enough for those who have back pain.
  - 4 The cushion is square-shaped and available in three different colors.

## 第2問

A You are interested in bouldering (rock climbing without a rope). You have found a brochure for a bouldering gym.

# Indoor Bouldering Gym The Front Edge

Open seven days a week, from 10 a.m. to 9 p.m.

Bouldering is a popular hobby these days and it is an easy activity to get started with, as it can be done alone and does not require expensive equipment. The Front Edge welcomes climbers of all skill levels — from beginners to experts. Be safe, have fun, and reach for the top of the walls!

### FACILITY RULES:

- 1. The climbing area is for members aged 15 and older.
- 2. All members must participate in a safety orientation once a year, before renewing their membership.
- 3. Wear a helmet at all times in the climbing area. Helmets are provided at the front desk at no charge.
- 4. After climbing, be sure to step down, not jump down, from the climbing wall.
- 5. Please do not climb, walk, stand, or sit underneath other climbers.
- 6. Leave the climbing area upon completion of your climb. Stay outside the climbing area until you're ready to climb.

### WARNING

Bouldering on any climbing wall may result in a fall. Falling from any height may result in serious injury.

### **Members' Quotes**

- When I joined The Front Edge in 2022, I had no past experience of climbing and thought it would be impossible to climb on a vertical wall. I'm thankful to the supportive staff members who were always with me to teach me the basics of climbing. I decided to join the gym because it's just across the street from my workplace. It's hard to believe there is such a spacious gym in the middle of the central business district. (Barbara)
- The Front Edge is on the basement floor of a high-rise office building and only a short walk away from the busiest area of the city. I've been coming to the gym almost every day since it opened in 1998, and I can climb most of the walls with confidence. I usually don't need help from the staff, but I appreciate their presence and attention to each member. (Jordan)

問1 Which two things are you allowed to do at the gym?

6

- A : Enter the climbing area with your 12-year-old brother
- ${\rm B}\,$  : Jump down from the climbing wall
- ${\rm C}\,$  : Remain in the climbing area after you finish climbing
- $\mathsf{D}$  : Renew your membership after receiving a safety orientation
- $E\,$  : Use the helmet provided for free by the gym
- 1 A and B
- 2 A and C
- 3 B and E
- (and D)
- 5 D and E

問 2 From the brochure, you learned that 7

- ① advanced climbers are not required to wear a helmet because they rarely fall
- advanced climbers don't really welcome new members who have no experience

③ beginners and advanced climbers need the staff's assistance to different degrees

beginners are encouraged to climb on weekdays when the gym is not crowded

- 問3 Judging from FACILITY RULES and WARNING, the gym wants you to
  8.
  - believe that your safety is guaranteed because no climbers get injured indoors
  - 2 get used to accidental falls because it's part of the climbing experience
  - 3 know that bouldering can be dangerous and follow the safety measures as instructed
  - (4) try falling from a low height a few times to learn how painful a fall can be

問4 One <u>fact</u> stated by a member of the gym is that 9 .

- 1 it's impossible to climb a vertical wall
- 2 more climbers come to the gym during the winter
- 3 the climbing area is for members aged 15 or older
- (a) the gym opened in the late 1990s
- 問5 One advantage of the gym that both Barbara and Jordan mention is
  10 .
  - 1 its cozy atmosphere
  - ② its urban location
  - (3) the staff's professional appearance
  - (a) the staff's excellent teaching skills

### (下書き用紙)

英語の試験問題は次に続く。

**B** You are reading the following article in your school's newsletter. The article was written by your classmate Emma, an exchange student from Canada.

15

According to a recent survey, 75% of respondents in India are willing to trust AI (artificial intelligence) systems, and this percentage is higher than that of any other country surveyed. India is followed by two other BRICS countries: South Africa and China. The survey shows that China leads South Africa by 10%.

Today, a growing number of individuals and businesses use conversational and generative AI systems, most notably ChatGPT. These are believed to have a lot of advantages, including the following:

- **Content creation becomes faster and easier:** Generative AI systems are able to write long-form texts, compose music, and create images and videos automatically and almost instantly. Also, the quality of their work is improving significantly all the time.
- **Labor costs can be reduced:** Thanks to advanced AI systems, companies can operate with a minimal workforce and thus cut down on personnel costs in many of their departments.

On the other hand, there are some controversial issues regarding this cuttingedge technology. Firstly, AI tends to provide incorrect, inappropriate or irrelevant answers to certain types of questions, which is why some people don't trust AI. Secondly, new content created by AI-based applications may violate the copyrights or trademarks of organizations or individuals. This is because the work of many creators or artists is included, often without permission, in the data sets on which AI is trained. Additionally, certain occupations, such as writers, graphic designers, video editors and programmers, are threatened by AI systems and may be replaced by them in the near future.

Generative AI affects people in many different fields. Students are no exception, and school teachers are wondering to what extent students should be allowed to use AI tools for their schoolwork. Personally, I appreciate AI's suggestions when generating new ideas, but I'm not entirely dependent on AI because I don't want to give up exercising my own brain and developing my own creativity. I need to think long and hard while working on a paper or a project, but I believe that's part of my learning experience.

- 問1 According to the first paragraph of Emma's article, which of the following shows the countries' rankings <u>from highest to lowest</u>? [11]
  - 1 China India South Africa
  - 2 China South Africa India
  - 3 India China South Africa
  - India South Africa China
  - 5 South Africa China India
  - 6 South Africa India China
- 問 2 Which of the following statements best reflects one of the advantages of AI systems listed in the second paragraph? 12
  - O 'Advanced AI systems help companies expand their businesses overseas.'
  - 2 'AI systems seem to be more productive than human creators or artists.'
  - 3 'Basic versions of AI systems are available to the public for free.'
  - 4 'The latest AI systems make it possible to produce human-like voices.'
- 問 3 Which of the following is <u>not</u> mentioned as an issue regarding AI? [13]
  - ① A possibility of human workers being replaced by AI
  - 2 Disclosure of personal or sensitive information
  - 3 Potential violation of intellectual property rights
  - (4) The quality of AI's output being inconsistent

- 問 4 Which of the following best summarizes Emma's attitude toward AI?
  14
  - ① She is entirely dependent on AI tools when writing a paper.
  - 2 She thinks it's impossible to compete with advanced AI tools.
  - 3 She uses AI tools selectively and prefers learning on her own.
  - A She uses AI tools when she is tired from exercising her brain.



- ① Generative AI—a revolutionary technology developed by BRICS countries
- ② Generative AI—a technology that could do more harm than good to students
- ③ Generative AI—what this innovative technology can do and what to watch out for
- Generative AI—why creators and artists oppose the emerging technology

### (下書き用紙)

英語の試験問題は次に続く。

## 第3問

You are reading a social media post by a food writer about nutritional balance and healthy eating.

Hi, I'm Jack, and I'm passionate about cooking and healthy eating. Unsurprisingly, the composition of your plate plays a crucial role in forming a balanced diet. By understanding the recommended ratio of carbohydrates, proteins and vegetables, you can create a well-rounded meal that truly nourishes your body.

Carbohydrates are an essential energy source and should make up a quarter of your plate. It is better to eat complex carbohydrates such as whole grains, legumes and starchy vegetables rather than simple carbohydrates like baked goods, cereal and yogurts. Protein is vital for building muscle, so make sure this second quarter of your plate is made up of lean proteins such as poultry, fish, eggs, beans and tofu. Vegetables are packed with vitamins, minerals and dietary fiber. Fill half of your plate with colorful vegetables like broccoli and cabbage, and fruits like bananas and kiwis.

It is also important to choose healthy fats over unhealthy fats. Avocados, nuts and olive oil provide essential fatty acids and promote a healthy heart. Avoid saturated and trans fats found in processed foods, as they can increase the risk of heart disease.

So, now that you know the potential of cooking, you too can create truly nourishing meals that keep you healthy.

問1 According to Jack, why should we avoid saturated fats?

- 16
- **(**) Because they cause a buildup of fatty acids.
- 2 Because they increase your risk of heart disease.
- 3 Because they promote greater heart health.
- **(a)** Because they weaken your immune system.

問 2 If you follow Jack's advice, what should the composition of your plate look like? 17



- (A) 25%: broccoli, cabbage, apples and bananas
  - (B) 25%: poultry, fish, eggs, beans and tofu
  - (C) On the side: whole grains, legumes and starchy vegetables
- (A) 25%: poultry, fish, eggs, beans and tofu
  - (B) 25%: whole grains, legumes and starchy vegetables
  - (C) On the side: avocados, nuts and olive oil
- (A) 25%: poultry, fish, eggs, beans and tofu
  - (B) 25%: whole grains, legumes and starchy vegetables
  - (C) On the side: baked goods, cereal and yogurts
- (A) 25%: poultry, fish, eggs, beans and tofu
  - (B) 25%: whole grains, legumes and starchy vegetables
  - (C) On the side: broccoli, cabbage, apples and bananas

## 第4問

You are a college student reading an article written by Kelly, who studies economics at the same college as you.

## **Investing Money**

Have you ever thought about investing money but gotten lost in complex vocabulary and theories? We've all been there, so here is an easy to understand, step-by-step guide to being a better investor.

First, you should think about whether you're a defensive or an enterprising investor. A defensive investor wants to sit back and watch their profits grow without much work, while an enterprising investor wants to take action, regularly reviewing and changing their investments. Both styles can gain rewards. It just depends on how much time you want to spend.

After you've found your style, you should decide how much money you want to invest each month and share that between reliable and speculative investments. Reliable investments are safer and should make up 90% of your investments. They are made up of safe, but not very profitable, bonds<sup>\*1</sup> and slightly riskier stocks. Bonds are issued by the government, hence their reliability, while stocks are issued by companies, but even the most successful companies are at the whims of the market<sup>\*2</sup>.

It is advised to split your reliable investments 50:50 between bonds and stocks, but we often have to rebalance, or change that ratio. When the economy is doing well, we can lean 75:25 towards bonds because a strong economy equals greater profits. However, if the economy is struggling, and stocks are cheaper, we should lean 75:25 towards stocks. It's important to always keep at least a 75:25 ratio in either bonds or stocks for stability.

The final 10% of your investments, not used for reliable investing, is for speculative investments and should go into new markets. A good example of these would be cryptocurrencies, which are high risk, high reward investments.

So, there you have it. You know where to begin with investing. Just remember, regardless of your style, the final step is dedicating time to reviewing and rebalancing when markets change.

Kelly Sheen (September, 2022)

<sup>\*1</sup> bonds:公債

<sup>&</sup>lt;sup>\* 2</sup> at the whims of the market: 市場に左右されて

問 1 Put the following steps (①~④) into the correct order that they are recommended.

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- (1) Choosing reliable and speculative investments
- 2 Deciding how much money and how often to invest
- 3 Deciding which type of investor you are
- A Reviewing and rebalancing your investments

問 2 Based on the article, you learned that Kelly 22

- believes a defensive investor can earn more profit than an enterprising investor
- 2 believes it is best for everyone to focus on finding new markets to invest in
- 3 recommends buying stocks when the economy is struggling
- 4 recommends investing 90% of your total savings in the stock market
- 問 3 If you're following the advice in the article, you should 23
  - 1 avoid being a defensive investor if you want to make money
  - 2 rebalance your investments when markets change
  - 3 regularly change the ratio of reliable to speculative investments
  - Wait until the economy is doing well before investing

### 第5問

In your English class, you were asked to find an inspirational story and present it to the class. You have chosen the following story and have made a draft of your presentation notes.

Hadi Albarado grew up with her father, Peter, in a small town in Kazakhstan. They did not have much money growing up, but she never wanted to let people know that. The image she presented to people became very important to her. Unfortunately, during her adolescence, her skin became marked with acne and marks. She knew it took just seven seconds to make a first impression when meeting someone new, and that is why she couldn't like her own skin, which was in poor condition. From videos she had seen, she came to idolize Liana Stanwyck, a popular actress from Russia, for her ability to capture a room's attention with her dazzling smile. Hadi felt she might be able to do the same, but she lacked selfbelief.

In order to find a way to feel confident in her own skin, Hadi tried countless cosmetics that promised miracles but delivered only disappointment. She decided to take matters into her own hands. With the little money her father could support her with, she embarked on a journey of creativity, transforming her humble kitchen into a laboratory. She experimented with various natural ingredients and concoctions<sup>\*</sup>, tirelessly researching the properties of herbs, oils and other elements known for their skincare benefits. Through trial and error, she began formulating her own cosmetics, free from harsh chemicals and artificial additives.

Days turned into weeks, and weeks into months, as Hadi carefully crafted her skincare recipes. Finally, she struck gold. Her home-made creations worked wonders on her own skin, revealing a newfound radiance she had longed for. Filled with excitement and hope, she shared her creations with her closest friend, Natalia. To her delight, Natalia was amazed by her own results. Word spread like wildfire, and soon people from all corners of the town sought her natural skincare remedies. Encouraged by the positive feedback, Hadi made a life-changing decision.

With the unwavering support of Peter and Natalia, Hadi decided to turn her creative passion into a business. Above all, Hadi knew that the first impression customers had of her product would be everything. She carefully crafted the perfect packaging that would present the image she wanted: something sleek, clean and free from unnecessary blemishes, just like her skin. She grew an online following and took part in small-scale, grassroots marketing until she had enough of a customer base to open a pop-up shop.

The day arrived for Hadi to unveil her business to the world. Excitement tingled in the air as customers gathered outside her pop-up shop in a local cosmetics store. As the doors swung open, she imagined herself, like Liana Stanwyck, about to unveil a new invention to the world. To her astonishment, her entire stock sold out within hours. The reception exceeded her wildest dreams, and it

was at that moment that she realized the true potential of her business. Social media platforms buzzed with testimonials and rave reviews, and before she knew it, orders poured in from around the country. Months turned into years and Hadi's business continued to expand across borders, becoming a global success reminiscent of her idol's.

Hadi's journey from a poor girl with poor skin to a skincare mogul serves as a reminder that our greatest breakthroughs often arise from our most challenging moments. Her story isn't over. After selling her skincare business to a company, she has become an inspirational speaker and, in her free time, an artist. Regardless of what Hadi does, rest assured that if you come across her work, it will only take seconds for it to capture your attention and leave a lasting impact, just like her.

Your presentation notes:

$\bigcirc$	Hadi's Story
$\bigcirc$	About Hadi
0	• She grew up in Kazakhstan.
0	• She started experimenting with skincare because 24 .
0	• She has always had a creative passion.
0	Other important people
0	• Liana Stanwyck: 25
0	• Natalia: Hadi's best friend and the first to be given her skincare product
0	Peter: Hadi's father who supported her spiritually and financially
0	Influential events in Hadi's journey
0	$\fbox{26} \rightarrow \fbox{27} \rightarrow \fbox{28} \rightarrow \fbox{29}$
0	What Hadi realized after her first pop-up shop
0	30
0	- 30
0	What we can learn from this story
0	• 31
0	• In addition to support from friends and family, the inspiration of your
$ \circ\rangle$	idols will take you far.

<sup>\*</sup> concoctions: 混ぜ合わせたもの

問 1 Choose the best option for 24 .

- 0 none of the cosmetics she tried solved her skin problems
- 2 she always had a lot of enthusiasm for cosmetics and make up
- 3 she was a business consultant and saw the opportunity to make money
- (a) she was tired of the high prices of cosmetics

問 2 Choose the best option for 25.

- ① A famous actress Hadi met once in person
- 2 A role model whom Hadi aspired to be like
- 3 The negative influence of Hadi's personal style
- (a) The inspiration to choose the skincare business
- 問 3 Choose <u>four</u> out of the five options (①~⑤) and rearrange them in the order they happened.

 $\fbox{26} \rightarrow \fbox{27} \rightarrow \fbox{28} \rightarrow \fbox{29}$ 

- ① Experimented in her kitchen
- 2 Ran out of stock on her first day
- ③ Sold her business to a company
- 4 Sought Peter's help
- 5 Tried every cosmetic she could

問 4 Choose the best option for 30

- 1 Her product hadn't made a good first impression.
- ② Her skincare business has great potential for success.
- 3 No matter how creative she may be in the packaging of her goods, it is of no use.
- Whatever the packaging of her products, if they are of good quality, they will be accepted by many people.
- 問 5 Choose the best option for 31 .
  - ① Confidence in your appearance is at the heart of success.
  - ② First impressions are important for people and products alike.
  - 3 Most great success stories begin with poverty.
  - The only way to guarantee the success of your business is to sell out every day without having too much stock.

## 第6問

You and your classmates are preparing for a group presentation and making a poster based on the following article.

### The Circular Economy – How a New Economic System Is Different from the Linear Economy –

The linear economy is an economic system which is known for its one-way flow of materials. In this type of economy, people take raw materials from the earth to make products. After using the products, they are thrown away as waste. The linear economy was a driving force behind the rapid economic growth of the 20th century, but today it is considered wasteful, inefficient and harmful to the environment. For example, huge amounts of single-use plastic items are consumed and disposed of improperly, which contributes to plastic pollution at sea. Plastic waste takes hundreds of years to break down and continues to threaten marine ecosystems. In addition, manufacturers demand a constant supply of raw materials to mass-produce industrial goods, which has caused the depletion<sup>\*1</sup> of natural resources.

As an alternative to the linear economy, a circular economy would aim to achieve economic growth without causing damage to the environment. In a circular economy, products and materials circulate in two separate cycles: the biological cycle and the technical cycle. The biological cycle involves biological or organic materials, such as wood, plants, cotton and other biodegradable materials. After products made of these materials are consumed over multiple lifetimes, the remaining nutrients are returned to the earth to enrich the soil and restore biodiversity. On the other hand, the technical cycle involves technical or synthetic materials, such as metal, plastic and glass. Products made of these materials are kept in circulation for as long as possible through repair, reuse, remanufacturing and recycling.

A circular economy is based on two fundamental principles. First, potential sources of waste and pollution are eliminated at the very first stage of the cycle. In a circular economy, products should be designed to be durable, repairable and recyclable so they can last a long time and generate zero or minimum amounts of waste. Product designers need to make sure that biodegradable materials can be separated from non-biodegradable materials to minimize the risk of environmental pollution. Secondly, a circular economy seeks to retain the maximum value of products at each point of their extended life. In the biological cycle, for example, an

old cotton T-shirt can be reused as a second-hand item. When it becomes worn out, it's shredded<sup>\*2</sup> into cotton fibers which will be re-processed into cushionfilling, shopping bags and so on. Similar flows of materials can be found in the technical cycle. Electronic devices can be repaired if needed, so their lifespan can be extended. When they reach the end of their useful lives, devices are collected and disassembled by their manufacturers. Some of their parts can be reused for the same type of product, while others are recycled into new parts and then used for other purposes.

Today, many countries, especially those in the EU, are accelerating the transition to a circular economy to build a sustainable society. However, some industries still seem to be dependent on the conventional economic system and are not advancing as fast as they should to integrate circularity into their business operations. This is mainly because some elements of the circular economy, such as the longer lifespan and recyclability of products, are not compatible with their traditional business models. Although the shift to a circular economy requires drastic changes and poses new challenges, it will help companies reduce their production costs and improve their customer loyalty in the long run. It is hoped that more companies will embrace the new economic system and find a way to strike a balance between sustainability and profitability along their value chains.

Your presentation poster draft:

		Flow of Materials	Amounts of Waste Generated
Linear Economy		one-way	huge
Circular Economy	Biological Cycle Technical Cycle	cyclical	zero (or minimum)
Two princ	iples of the circula ar economy, we 3	and then, 34	].

\*1 depletion: 枯渇

\*<sup>2</sup> shred: 細かく切り刻む

① Mass production, mass consumption and mass disposal of industrial goods are characteristics of the linear economy.

32

- The linear economy is an economic system which is well-known for its efficient use of resources.
- 3 The linear economy turned out to be harmful to the environment in the early 20th century.
- (4) The one-way flow of materials in a linear economy can be stopped or reversed in some countries.

問 2 Choose the best options for 33 and 34 .

- ① dispose of used products regardless of their remaining value
- 2 eliminate human errors by fully automating production processes
- 3 keep products and materials in circulation as long as possible
- 4 remove sources of waste and pollution at the stage of product design
- 5 transform waste into durable, repairable and recyclable products
- 問3 According to the last paragraph, which of the following is most appropriate for 35 ?
  - () makes business sense in the long run
  - 2 requires long-term investment in factories
  - 3 will force companies to close some of their branches
  - (4) will help companies reduce their personnel costs

- 問 4 According to the article, which two of the following are true? (The order does not matter.) 36 37
  - In a circular economy, users and consumers are encouraged to make the most of already existing products.
  - 2 A circular economy aims to avoid damaging the environment while achieving economic growth.
  - ③ The linear economy aims to achieve economic growth without causing damage to the environment.
  - The linear economy is the main driving force behind the fourth industrial revolution taking place today.
  - 5 The two economic systems have some elements in common, such as the long lifespan of products.