

金沢大学

入学者選抜学力検査 模擬問題

(前期日程)

英 語

II

長文問題



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GREAT GRIT

1 Read the following passage and answer the questions.

The Future of Sustainable Cities

Over the past century, urbanization has transformed the world. Today, more than half of the global population lives in cities, and by 2050, this number is projected to reach nearly 70%. While urban areas offer economic opportunities, cultural diversity, and technological advancements, rapid expansion has also led to significant environmental challenges. Sustainable urban development is essential to ensure that cities remain livable while minimizing their ecological footprint¹.

A crucial aspect of sustainable urban development is the integration of green spaces. Parks, rooftop gardens, and urban forests help combat air pollution, regulate temperature, and provide habitats for wildlife. Studies have shown that cities with abundant green spaces experience lower levels of stress among residents and improved public health outcomes. For example, Singapore's commitment to becoming a "City in a Garden" has resulted in extensive green infrastructure, reducing urban heat islands and promoting biodiversity².

Another key component of sustainability is energy efficiency. Traditional energy sources such as coal and natural gas contribute to greenhouse gas emissions, exacerbating climate change. Many cities are now transitioning to renewable energy solutions like solar, wind, and hydroelectric power. In Copenhagen, for instance, a combination of wind farms and district heating systems has significantly reduced carbon emissions, positioning the city as a leader in environmental responsibility. Smart grids³, energy-efficient buildings, and LED lighting further enhance urban sustainability.

Transportation is another critical factor in sustainable city planning. Traffic congestion⁴ and vehicle emissions contribute to poor air quality and increased carbon footprints. To address these issues, cities worldwide are investing in public transportation systems, bicycle lanes, and pedestrian-friendly⁵ infrastructure. Tokyo, known for its efficient public transit network, has successfully reduced car dependency while promoting eco-friendly commuting options. Additionally, electric and hybrid vehicles are gaining popularity, further decreasing reliance on fossil fuels⁶.

Waste management presents another challenge in densely populated areas. Landfills contribute to pollution and require vast amounts of space, while improper waste disposal can lead to health hazards. Many cities have adopted recycling programs and waste-to-energy initiatives to minimize their environmental impact. San Francisco, for example, has achieved an impressive waste diversion rate by implementing strict recycling regulations and composting programs⁷. Encouraging residents to adopt zero-waste lifestyles further supports sustainability goals.

Water conservation is equally vital for sustainable urban living. Many regions face water scarcity due to climate change, population growth, and inefficient usage. Cities like Cape Town have implemented strict water conservation policies, including water reuse, rainwater harvesting⁸, and desalination plants⁹. Smart water management technologies, such as leak¹⁰ detection sensors and efficient irrigation¹¹ systems, play a crucial role in preserving this essential resource.

Sustainable architecture also plays a significant role in shaping eco-friendly cities. Green buildings incorporate energy-efficient designs, sustainable materials, and renewable energy sources. The Bosco Verticale in Milan, Italy, is a prime example of integrating nature with urban structures. These residential towers feature thousands of trees and plants, reducing air pollution and enhancing the overall aesthetic appeal of the cityscape. Implementing similar architectural innovations can greatly contribute to sustainability efforts.

Social sustainability is another important dimension of urban development. Affordable housing, inclusive communities, and accessible public services ensure that all residents benefit from city growth. In

Curitiba, Brazil, an innovative urban planning strategy prioritizes equitable development, providing efficient public transport, green spaces, and community centers. By fostering a sense of belonging and social equity, cities can enhance the well-being of their inhabitants.

Technology also plays a pivotal role in sustainable city initiatives. Smart cities leverage digital solutions to optimize resource use, improve efficiency, and enhance the quality of life for residents. For instance, Barcelona employs IoT (Internet of Things) sensors to monitor traffic flow, energy consumption, and air quality. This data-driven approach enables authorities to make informed decisions, reducing waste and improving urban management.

Despite these advancements, challenges remain. Financial constraints, political resistance, and rapid population growth can hinder sustainability efforts. However, collaboration between governments, businesses, and citizens is essential to overcoming these obstacles. International partnerships, knowledge-sharing platforms, and policy incentives can accelerate progress toward building sustainable cities.

As urbanization continues, the need for sustainable development becomes increasingly urgent. By prioritizing green infrastructure, renewable energy, efficient transportation, waste reduction, water conservation, eco-friendly architecture, social inclusion, and technological innovation, cities can achieve long-term sustainability. Future generations will depend on the choices made today to create resilient, environmentally responsible urban environments.

footprint¹ : a trace or evidence of something; the impact of a person or activity on the environment.

biodiversity² : the variety of life in the world or in a particular habitat or ecosystem

smart grids³ : modernized electrical grids that use information and communications technology to gather and act on information about the behavior of suppliers and consumers of electricity in order to improve the efficiency and reliability of electricity supply

congestion⁴ : the state of being overcrowded or blocked, especially with regard to traffic

pedestrian-friendly⁵ : designed or suitable for walking

fossil fuels⁶ : a natural fuel

composting programs⁷ : initiatives to collect and compost organic waste materials

rainwater harvesting⁸ : the collection and storage of rainwater for later use

desalination plants⁹ : facilities that remove salt and other minerals from seawater to make it potable

leak¹⁰ : to allow something to escape or pass

efficient irrigation systems¹¹ : irrigation systems that minimize water waste and maximize water delivery to crops

Question 1: For statements (A) to (E), circle T if the statement is true according to the content of the passage. Circle F if the statement is false according to the content of the passage.

- (A) Urbanization is expected to slow down significantly by 2050.
- (B) Singapore has reduced urban heat islands through green infrastructure.
- (C) Electric and hybrid vehicles have become less popular in recent years.
- (D) Waste management is a minor issue in sustainable urban development.
- (E) Smart water management technologies help conserve water resources.

Question 2: Based on the passage, answer questions (F) to (I) in one English sentence or clause.

- (F) Why are green spaces important in sustainable cities?
- (G) How has Copenhagen reduced its carbon emissions?
- (H) What measures has Cape Town taken to address water scarcity?
- (I) How do smart cities use technology to improve sustainability?

Question 3: The passage discusses several strategies for making cities more sustainable. Choose one strategy you find most important and explain why in 20-30 words.

2 Read the following passage and answer the questions.

The Amazing Printing Press

~How Books Changed the World

A long time ago, in the 1400s, a German man named Johannes Gutenberg invented something that changed the world forever: the printing press¹. This machine was like a super-fast way to make lots of copies of books and other written things. Before the printing press, books were written by hand. Imagine how long that took! It was like copying a whole book word for word, page by page. Because it took so much time and effort, books were very expensive and rare. Only rich people, like kings and nobles, and important religious places like churches, could afford to have them. Most regular people never even saw a book.

The people who wrote books by hand were called scribes. They were often monks who lived in monasteries. They would spend years carefully copying books, like the Bible or stories from long ago. It was very hard work. Not only was it time-consuming, but sometimes the scribes would make mistakes when they were copying. So, different copies of the same book might have small changes or errors. It was a slow and unreliable process. But Gutenberg's printing press changed all of that.

Gutenberg's machine used small metal pieces called "type." Each piece had a letter of the alphabet on it. The cool thing was that these pieces could be moved around and put together to make different words and sentences. Then, you could put ink on the letters and press them onto paper to print a page. After you printed one page, you could take the letters apart and rearrange them to print something else. This meant you could make many copies of a book much faster and cheaper than writing by hand.

This invention was a huge deal. It was like a giant leap forward in technology. It had a big impact² on society, culture, and politics. Because books were easier and cheaper to make, more people could get them. More people started learning to read. This was the start of a big change called the Renaissance. The Renaissance was a time when people became very interested in old Greek and Roman art, stories, and ideas. They started to think in new ways and make new discoveries. The printing press helped spread these new ideas quickly.

The printing press also helped scientists. Scientists could now share their ideas and discoveries with other scientists all over the world more easily. They didn't have to wait for someone to hand-copy their work. They could print many copies and send them to everyone. This helped science develop much faster. Scientists could also print pictures and diagrams³ to explain their ideas, which made it even easier for people to understand.

The printing press also played a big role in a big change in religion called the Protestant Reformation. A man named Martin Luther used the printing press to share his ideas about the church. He thought the church needed to make some important changes. Because his ideas were printed, lots of people could read them and agree with him. The printing press helped people think for themselves about religion.

Dr. Eleanor Vance, a historian who studies this time period, says that the printing press was incredibly important. She says it changed society in very big ways. It gave more power to regular people, helped people share ideas more easily, and helped create the modern world.

However, the printing press also caused some problems. Some people were worried about what would happen if too many books were printed. Governments and religious leaders tried to control what was printed. They didn't want people to question their authority. They made laws to stop some books from being printed.

Also, some people used the printing press to spread lies and trick people. This was the beginning of propaganda⁴, where people try to convince others to believe certain things, even if they are not true.

Even with these problems, the printing press was too powerful to stop. It helped more people learn to read and write. This was a huge change. When people could read, they could learn about new things, explore different ideas, and have more opportunities in life. The printing press also helped different countries develop their own unique stories and literature. Before, many books were written in Latin, which only educated people could understand. Now, writers could write in their own languages, making books available to everyone. The printing press also helped make spelling and grammar more consistent. Because books were printed the same way every time, people started to spell words the same way.

The printing press is still important today. Even though we have computers and the internet, the way we share information and communicate started with Gutenberg's amazing invention. The printing press shows us how powerful technology can be. It can change society in both good and bad ways. It also shows us how important it is for everyone to have access to information. From the first printed books to the internet, people have always tried to share knowledge and ideas. The printing press was a big and important step in this long journey. It reminds us of the lasting⁵ power of the written word.

printing press¹ : a machine that prints books and newspapers

impact² : an effect or influence

diagram³ : simple drawings that explain something

propaganda⁴ : information used to promote a particular idea

lasting⁵ : continuing for a long time

Question 1: For statements (A) to (E), circle T if the statement is true according to the content of the passage. Circle F if the statement is false according to the content of the passage.

- (A) The printing press was invented in the 1800s.
- (B) Before the printing press, books were mostly owned by rich people and religious organizations.
- (C) The printing press made it easier for scientists to share their discoveries.
- (D) After the printing press was invented, everyone immediately stopped writing in Latin.
- (E) The printing press only had positive effects on society, with no negative consequences.

Question 2: Based on the passage, answer questions (F) to (I) in one English sentence or clause.

- (F) What did Johannes Gutenberg's invention allow people to do?
- (G) How did the printing press change who had access to books?
- (H) Why were some powerful people worried about the printing press?
- (I) How did printing help make spelling more consistent?

Question 3: Explain whether you think the printing press had a more positive or negative impact on society. Give a reason for your opinion in 20-30 words in English.

3 Read the following passage and answer the questions.

Work Today and Tomorrow

~ *How Things Are Changing*

The way we work has changed a lot. It used to be that most people worked set hours¹, in an office, and had a boss telling them what to do. But now, things are different. Technology, people's lives, and what we think is important are all changing. This makes work exciting, but also brings some problems. What a job is, what skills you need, and how to balance work and life are all changing.

Think about how much technology we use every day. The internet, our phones, and computers make it easy to work from anywhere, anytime. We're not stuck in one place anymore. This is great! We can work from home, a coffee shop, or even on vacation. But it also means we need to be good at managing our time and working independently. No one is there to tell us what to do every minute. We have to be responsible for getting our work done.

Also, machines and computers are doing more jobs that people used to do. This is called automation. For example, robots can build cars on an assembly line, and computers can answer customer questions. This means some people might lose their jobs. But it also means new jobs are created, like people who design and build robots or computer programs. So, we need to learn new skills to stay competitive. Technology is changing not just how we work, but what jobs are even out there. We have to keep learning new things our whole lives. It's like going back to school again and again!

More people are also doing "gig work²" or freelancing³. They work on projects for different companies instead of having one steady job. For example, someone might design websites for a few different clients, or write articles for a magazine one month and a newspaper the next month. This can be more flexible. You can choose when you work and what projects you take on. But it also means less job security and fewer benefits. You don't have a regular paycheck⁴, and you might not get health insurance or paid time off. It can be hard to make sure these workers are treated fairly and get the things they need.

Besides technology, other things are changing too. People are living longer, so there are more older people working. This means different generations are working together, and managers need to understand how to work with everyone. For example, older workers might have a lot of experience, but younger workers might be more comfortable with new technology. It's important for everyone to respect each other and learn from each other. Also, workplaces are more diverse. People of different ages, genders, backgrounds, and ethnicities are working together. This is a good thing! Different perspectives can lead to better ideas and more creative solutions. But companies need to make sure everyone feels welcome and has a fair chance. They need to celebrate diversity and make sure everyone is treated equally. Companies that do this well are more likely to have talented workers and come up with new ideas.

What people value is also changing. Younger people want jobs that mean something to them, not just a paycheck. They want to feel like they're making a difference in the world. They also want to grow and learn new things. They want flexible hours and a good work environment. So, companies are changing how they hire and keep workers. They're trying to make work a good experience, offer training, and make people feel like they belong. Instead of bosses just telling people what to do, they're working together more. It's more like a team.

All these changes bring good things and bad things. Being able to work from anywhere is great. We can spend more time with our families and do things we enjoy. Companies can also have happier workers, be more productive, and save money on office space. They don't need a big office if everyone is working from different places. But technology can also take away jobs, and some people might not have the right skills. It's important to be prepared for these changes.

We need to find ways to help people learn new skills and make sure everyone has a chance to succeed. This is called reskilling⁵ and upskilling⁶. People need to be ready to learn new things throughout their lives. The world is changing so fast, we can't just rely on what we learned in school. We need to be lifelong learners⁷. They need to know what skills are in demand and be able to change as the job market changes.

Companies need to train their workers, create good work environments, and offer flexible hours. They also need to have systems in place to support people working from different locations. This might mean providing them with computers and internet access, or having regular online meetings to stay connected.

Governments need to help workers who lose their jobs. They need to invest in education so people can learn the skills they need for the jobs of the future. They also need to think about the ethics of artificial intelligence. For example, should robots be allowed to make decisions about people's lives? These are important questions we need to answer. Governments also need to make sure people have access to things like affordable childcare and help for older people.

The future of work depends on us. We need to make sure it's good for everyone. By being open to new ideas, working together, and caring about people's well-being, we can create a better future of work. Work can be more than just a way to make money. It can be something that gives us meaning, connects us to others, and helps us grow. The changing world of work is not just a problem, it's a chance to make things better for everyone. We need to keep talking about the future of work and make sure everyone is part of shaping it. It's our future, so we should all have a say in what it looks like.

set hours¹ : fixed working time

gig work² : short-term jobs

freelancing³ : working for different companies without a long-term contract

paycheck⁴ : the money you get for working

reskilling⁵ : learning new skills for a different job

upskilling⁶ : improving your skills for your current job

lifelong learner⁷ : a person who keeps learning new things

Question 1: For statements (A) to (E), write T if the statement is true according to the content of the passage. Write F if the statement is false according to the content of the passage.

- (A) Technology has made it possible for people to work from anywhere.
- (B) Automation only creates new jobs and does not replace old ones.
- (C) Freelancers always have job security and receive benefits like health insurance.
- (D) Different generations working together can lead to both challenges and opportunities.
- (E) Companies do not need to change their work environments to keep workers satisfied.

Question 2: Based on the passage, answer questions (F) to (I) in one English sentence or clause.

- (F) How has technology changed the way people work?
- (G) What is one advantage and one disadvantage of freelancing?
- (H) Why do companies need to ensure diversity in the workplace?
- (I) What role do governments play in preparing workers for the future?

Question 3: Explain whether you think the changes in the way we work are mostly positive or negative. Give a reason for your opinion in 20-30 words in English.