令和3年度

医 学 科

外 国 語(英語)

注意事項

- 1. 問題は1頁から11頁に掲載されています。
- 2. 解答に用いる言語(日本語あるいは英語)は各設問の指示に従って選びなさい。 ただし、記号で答えるように求められている場合は記号で答えなさい。
- 3. 解答は解答用紙に記入しなさい。

<パート1> (配点率 40%)

次の英文を読んで、設問に日本語あるいは記号で答えなさい。

Earth Day: Greta Thunberg calls for 'new path' after pandemic

By Jonathan Watts

Greta Thunberg has urged people around the world to take a new path after the coronavirus pandemic, which she said proved "our society is not sustainable."

The Swedish climate activist said the strong global response to *Covid-19 demonstrated how quickly change could happen when humanity came together and acted on the advice of scientists.

She said the same principles should be applied to the climate crisis.

"Whether we like it or not, the world has changed. It looks completely different now from how it did a few months ago. It may never look the same again. We have to choose a new way forward," she told a YouTube audience in a virtual meeting to mark the 50th anniversary of Earth Day.

"If the coronavirus crisis has shown us one thing, it is that our society is not sustainable. If one single virus can destroy economies in a couple of weeks, it shows we are not thinking long-term and taking risks into account."

The teenage campaigner, who ⁽¹⁾initiated the global school strike movement, was filmed at the Nobel Prize Museum in Stockholm in digital conversation with Johan Rockström, the earth systems scientist and director of the Potsdam Institute.

He said there was a strong correlation between the pandemic and the environmental crisis: deforestation and the wildlife trade heighten the likelihood of viruses leaping the species boundary; air pollution increases human *vulnerability by weakening *respiratory systems; and the expansion of air travel allows epidemics to spread more quickly. "The scientific evidence shows they are

 interconnected and part of the same planetary crisis," he said. "We are living beyond the carrying capacity of the planet so we are putting human health and the health of nature at risk."

The lockdown has ^②reduced emissions and hurt the oil industry, which is the biggest source of the greenhouse gases that are heating the planet to dangerous levels. But the two speakers stressed the virus should not be seen as an environmental *panacea because it has brought immense human suffering, provided only temporary *respite and distracted from campaigns, research and international meetings that aimed to find a smoother transition to a clean economy.

The key lesson from the pandemic, they said, was the need for governments to pay more ⁽³⁾heed to scientific warnings.

"We have underestimated the shocks. We need to build more shock absorbers into the system," Rockström said. "Around the world, people are recognising the uncertainty and are being cautious. Also regarding the climate, we cannot know for certain how far we can push up global warming. So I hope that we come out of the pandemic with the recognition that science shows: it's not worth taking the risk... I believe that something new is coming from the ashes of the corona crisis. We'll rise out of this, but not by bouncing back to the old world."

He said there was more support now for green new deals in Europe and South Korea and for China to go beyond the economy when setting priorities.

Neither speaker mentioned the US president, Donald Trump, Brazil's president, Jair Bolsonaro, or other leaders who have either dismissed the risk of the pandemic or used it to relax environmental protections and health standards in the name of economic recovery. But Thunberg *alluded to these dangers.

"During a crisis like this there is a big risk that people try to use this emergency to push their own agenda or their own interests. We need to make sure that doesn't happen," she said. "I cannot stress enough how important it is

 that we are active democratic citizens so a crisis like this doesn't slide in the wrong direction."

Elsewhere, the UN secretary general, António Guterres, marked Earth Day by declaring the pandemic to be the biggest threat the world had faced since the second world war, though he said the environmental emergency was deeper.

He said post-pandemic recovery should focus on six goals: the creation of clean, green jobs; taxpayer support for sustainable growth; an economic shift from grey concrete to green nature; investment in the future rather than the past with an end to fossil fuel *subsidies; the incorporation of climate risk into the financial system, and international cooperation.

A new opinion poll suggests there is strong support for this view. Sixty-six percent of Britons believe the climate is as serious a long-term crisis as Covid-19 and 58% agree it should be prioritised in the economic recovery. The survey of 14 countries by Mori found even higher levels of support in China, Germany, France, India, Italy and Japan. Even in the least enthusiastic nations—the US and Australia—a majority supported green priorities in stimulus programmes.

Public opinion has shifted dramatically in the past two years as a result of increasingly grim climate studies and *high-profile campaigns by groups such as FridaysForFuture and Extinction Rebellion. Big strikes and marches have been ⁽⁴⁾postponed but Thunberg vowed they will be back once it is safe to return to the streets.

"We have to adapt. That is what you have to do in a crisis," she said.

"People are thinking we will get out of this and then we will push even harder."

Source (with changes)

The Guardian, 22 April 2020

Notes

Covid-19:新型コロナウイルス感染症

vulnerability: 脆弱性

respiratory systems:呼吸器系

panacea: 万能薬

respite:猶予

alluded to:ほのめかす

subsidies:助成金

high-profile:注目を集めている

設問 1 次の語は、本文の文脈ではそれぞれどのような意味で使われているか、最 も近いものを選んで記号で答えなさい。

1.	in	it	ia	te	

- (a) began
- (b) promoted
- (c) prevented
- (d) completed

2. reduced

- (a) decided
- (b) detected
- (C) decreased
- (d) destroyed

3. heed

- (a) tax
- (b) reward
- (C) respect
- (d) attention

4. postponed

- (a) delayed
- (b) declared
- (C) continued
- (d) conducted

- 設問 2 パンデミックと環境危機との間にはどのような相関関係があると Rockström は考えているか、本文の内容にしたがって説明しなさい。
- 設問 3 下線部①はどのようなことを指しているか、本文の内容にしたがって説明 しなさい。
- 設問 4 本文の内容と合致するものを3つ選んで記号で答えなさい。
 - (a) Thunberg and Rockström are Swedish climate activists.
 - (b) Guterres considers the pandemic as the biggest threat in history.
 - (C) Rockström expects the world will be different after the corona crisis.
 - (d) The world has changed due to the coronavirus pandemic, and this was what we expected.
 - (e) More people in Britain support the view that the climate is a serious long-term crisis than Japanese people.
 - (f) Both Thunberg and Rockström emphasised that the pandemic should not be considered a powerful remedy for the environmental crisis.
 - (g) According to Thunberg, the world's strong reaction to the virus crisis showed that change could happen quickly, and this should also be true of the environmental crisis.

<パート2> (配点率30%)

Read the passage, then follow the instructions below.

Virtual reality: Expanding use in mental health treatment

You may be (①) with virtual reality technology from the VR goggles that are increasingly popular for entertainment and games — a headset display, stereo sound and head motion tracking provide an immersive virtual reality experience.

Virtual reality technology is also used in simulators for training and it is (②) being used to help people with mental illness. While it has been used for some time treating people with *phobias, advances in technology and greater availability are facilitating expanded use in mental health (③).

Exposure therapy is a type of behavior therapy used to treat anxiety and other disorders. It (④) exposing a person to the feared object or situation in a safe environment in order to overcome their anxiety and/or distress. This can involve directly facing the feared object or situation, vividly imagining it or experiencing through virtual reality technology.

Virtual reality therapy has been used to help people with a (⑤) of fears and phobias. The Duke University Virtual Reality Treatment Program (⑥) therapy for anxiety disorders related to fear of heights, elevators, thunderstorms, public speaking and flying. (⑦) are placed in a computer-generated three-dimensional world that gives them a sense of presence in the virtual environment. The experience is guided by a therapist who can interact with them throughout the therapy. Treatment typically involves six to twelve (⑧).

Virtual reality therapy has several (⑨) over recreating experiences in real life, including the ability to control the environment, to schedule treatment, to repeat scenarios and to adjust scenarios to improve treatment. Also, it may have insurance benefits as some insurance will not cover the extended time

 needed for exposure therapy in person—virtual reality therapy often requires much less time.

Research supports the effectiveness of virtual reality exposure therapy and it is generally accepted by patients. A meta-analysis (①) in 2015 concluded that the benefits carry over to real life, and that virtual reality therapy leads to significant behavior change in real-life situations.

Virtual reality exposure therapy is also being used to (①) treat people with *posttraumatic stress disorder (PTSD), particularly people who have experienced combat trauma. Virtual reality (②) a person to experience the scenario again in a safe and controlled way using interactive computer-generated environments that can be modified to look like aspects of the trauma memory. The virtual exposure helps the person activate the memory so that it can be revisited and emotionally processed leading to reduced anxiety and related symptoms.

The University of Southern California Institute for Creative Technologies has built upon technology originally (③) for the X-Box game to create a series of virtual military scenarios, such as a Middle-Eastern themed city and desert road (④). The simulation uses a head mounted display and can include 3D audio, vibrations and smells. The presentation is controlled by the clinician who is in audio (⑤) with the patient.

(16) to the Defense Health Agency, this type of therapy may help improve access to care for service members who might (17) avoid treatment due to stigma.

Researchers are also using virtual reality in job interview training for people with severe mental illness and people with *autism. These groups of people have very low employment rates and the job interview often presents a major barrier to (®) employment. Research so far is (⑨). One study of individuals with severe mental illness found that virtual reality job interview training lead to increased job offers and less time searching for employment. A study of

individuals with high-functioning autism found that those completing virtual reality job interview training were more likely to have a job offer for a competitive position (20) to those without the training.

Source (with changes)

https://www.psychiatry.org/news-room/apa-blogs/apa-blog/2017/02/virtual-reality-expanding-use-in-mental-health-treatment

Notes

phobia: a strong unreasonable fear of something

posttraumatic stress disorder (PTSD): a mental illness which can develop after a very bad experience such as a plane crash

autism: a mental condition that makes people unable to communicate properly or to form relationships

設問 1: Use the following words to best complete the text. Use each word once. Use a capital letter if necessary.

according	advantages	allows	compared
competitive	conducted	contact	developed
environments	familiar	help	increasingly
involves	offers	otherwise	participants
promising	sessions	treatment	variety

設問 2: Answer the following questions in English in complete sentences and in your own words.

- 1. What is virtual reality therapy and how does it treat people with mental illness?
- 2. According to the article, virtual reality therapy has several benefits. What two benefits do you think are most important?

<パート3> (配点率30%)

Write an essay on the following topic.

Your essay should be written in your own words and:

- 1. be a minimum of 150 words in English,
- 2. be written using paragraph form,
- 3. have a minimum of three paragraphs,
- 4. have a clear introduction, body and conclusion,
- 5. leave a one-line space between each paragraph.

Do not double-space your essay; write on every line.

In your essay, your ideas should be clearly expressed.

Topic: If you were to change one thing about society, what would it be? Please explain your reasoning for this.