平成 29 年 度

医 学 科

外 国 語(英語)

注意事項

- 1. 問題は1頁から13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。

Hiroshima: I had family members among the dead

By George Takei

Barack Obama became the first US president ever to visit Hiroshima last Friday—the site where the first atomic bomb, deployed by the United States to end the second world war, laid waste to the entire city and killed more than 70,000 people instantly before another 70,000 died agonizing, lingering deaths over the next two months.

I had family members among the dead in Hiroshima — my mother's sister and her five-year-old child, whose bodies were found in a canal, burned nearly beyond recognition by the blast.

At the time, the Allied populaces celebrated the news, for this meant the war would soon be over, and millions of soldiers and civilians would (1)* be spared a prolonged and bloody conflict. But with the peace that followed came a deeper understanding of what we had unleashed, and that humanity had entered a new and dangerous era where the fate of not just a city but all of civilization lay at stake.

The day of the attack, my family and I were incarcerated in Tule Lake segregation camp in California. Japanese Americans from the west coast had been incarcerated by the US government in internment camps shortly after Pearl Harbor was bombed by Japan. In the camp, we had heard rumors and reports of the bombing and word spread quickly.

We had no access to any official information because camp authorities had cut off all news from outside. My mother was hysterical with anxiety for her Hiroshima relatives, not knowing whether they were alive or dead. Her family had returned to that very city from the US (2)* prior to the war.

We did not know whether to believe the rumors, for how could a single bomb have wiped out the entire population? As the truth became clearer, we were filled with dread and grief. The bombing was supposed to have been catastrophically horrific.

My mother was so tortured by anguish of the unknown that my father suggested we should consider our relatives dead. Yet <u>①ironically</u>, we also understood that this could mean our own liberation, and that a terrible price had been paid for our own freedom.

Over seven decades have since passed. Obama's visit bears historical significance, not as any gesture of regret, but as an acknowledgement of the horrors of nuclear weapons. There are survivors from that attack, some still suffering the long-term effects of radiation. They are called the *hibakusha*, and they have dedicated their lives to ensuring that no one anywhere ever suffers their fate again.

One of the most poignant moments of the president's trip occurred when one of them—Shigeaki Mori, who is my age, 79 years old—embraced Obama, saying simply: "Today was the best day that was given by America." For me personally and many others, the acknowledgment of the suffering held deep meaning and we are grateful for it.

Some also wonder whether, before we undertake any further soul-searching over the bomb, formal apologies should be issued—for the terrible attack at Pearl Harbor that began the war for the US, and for the atomic bombs that ended it.

I hope we might at least agree that it is a sorrowful thing whenever any innocents die in war. Like that of the *hibakusha*, our focus might instead best be directed forward, in the hopes that atomic weapons truly become a thing of the past.

I share Obama's call for a nuclear-free world. This must, however, mean more than lofty words. Whether the answer to nonproliferation is tougher

sanctions or deeper engagement will be hotly debated, but in either case we must ^{(3)*}pledge to work closely with other powers, to reduce not only the number of weapons in our arsenals, but also the numbers of states bearing or seeking to bear them.

I thus cannot help but fear a recent proposal by Donald Trump that Japan, South Korea and Saudi Arabia should join the nuclear club and arm themselves with such weapons. I agree with those who predict this would take us closer to the brink of their use, for with each new club member comes unknown and potentially unmitigatable risks.

I recently returned to Hiroshima, a place I visit often. Seeing the modern city that arose from the ashes of the bomb reminded me once again of how humankind's technological prowess has advanced over these seven decades, even while our penchant for warfare and for mightier weapons to wage it continues unabated. Without a '4'* commitment to peace and diplomacy, and to concerted and real action, we risk repeating the horror on a scale unimagined.

Let us then honor the dead of the Hiroshima bombing and the dream of the *hibakusha* by renewing our efforts, working together as we must towards disarmament and a world without nuclear weapons.

The Guardian, 30 May 2016 (with changes)

Notes

incarcerated: confined or imprisoned

poignant: evoking a keen sense of sadness

nonproliferation: the limiting of the number of nuclear weapons in the world

prowess: great skill at doing something

penchant: a special liking for something

unabated: without becoming weaker

unmitigatable: unable to take any action to make less severe

医学科3

♦M1 (322-4)

- 設問 1 *印のついた語句は、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. *be spared
 (a) apply
 (b) avoid
 (C) afford
 (d) approve
 - 2. *prior to
 - (a) ahead of
 - (b) along with
 - (C) subsequent to
 - (d) at the beginning of
 - 3. *pledge
 - (a) agree
 - (b) desire
 - (C) promise
 - (d) anticipate
 - 4. *commitment
 - (a) decision
 - (b) obligation
 - (c) dedication
 - (d) suggestion

設問 2 なぜ著者は下線部①のように述べたのか、本文の内容にしたがって説明しなさい。

設問 3 著者は大統領の広島訪問についてどのように考えているか、本文の内容に したがって説明しなさい。

設問 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) The author was born in Hiroshima but now lives in America.
- (b) Some people consider that formal apologies should be issued for the attack on Pearl Harbor.
- (C) More than 140,000 people died within 2 months after the attacks with two atomic bombs.
- (d) The author's family were already incarcerated in a segregation camp when Pearl Harbor was bombed by Japan.
- (e) The author does not agree with those who propose that Japan should arm themselves with nuclear weapons.
- (f) The author's family could not obtain any official information about their relatives in Hiroshima for a certain period of time after the attack.
- (g) The sight of the modern city of Hiroshima rising from the ashes convinced the author of the painful necessity to develop mightier weapons.

<パート2> (配点率30%)

Reading A

Read the passage, then follow the instructions below.

Anxiety and physical illness

Understanding and treating anxiety can often improve the outcome of chronic disease.

With headlines warning us of international terrorism, global warming, and economic slowdown, we're all likely to be a little more (①) these days. As an everyday emotion, anxiety—the "fight or flight" response—can be a good thing, prompting us to take extra (②). But when anxiety persists in the absence of a need to fight or flee, it can not only interfere with our daily lives but also (③) our physical health. Evidence suggests that people with anxiety disorders are at greater risk for developing a number of chronic medical conditions. They may also have more severe (④) and a greater risk of death when they become ill.

Anxiety is a reaction to stress that has both (⑤) and physical features. The feeling is thought to arise in the amygdala, a brain region that governs many intense emotional responses. As neurotransmitters carry the impulse to the sympathetic nervous system, heart and breathing rates increase, muscles (⑥), and blood flow is diverted from the abdominal organs to the brain. In the short term, anxiety (⑦) us to confront a crisis by putting the body on alert. But its physical effects can be counterproductive, causing light-headedness, nausea, diarrhea, and frequent urination. And when it persists, anxiety can take a toll on our mental and physical health.

Research on the physiology of anxiety-related illness is still young, but there's growing evidence of mutual influence between emotions and physical functioning. Yet anxiety often goes (\otimes) as a source of other disorders, such as substance abuse or physical addiction, that can result from attempts to (\otimes) feelings of anxiety. And it's often overlooked in the myriad symptoms of chronic conditions like irritable bowel syndrome (IBS) or migraine headache.

Nearly two-thirds of the estimated 57 million adults with anxiety disorders are women. What people with these disorders have in common is (①) fear or distress that interferes with daily life. Anxiety also plays a role in somatoform disorders, which are (①) by physical symptoms such as pain, nausea, weakness, or dizziness that have no apparent physical cause. Somatoform disorders include hypochondriasis, body dysmorphic disorder, pain disorder, and conversion disorder.

Anxiety has now been (②) in several chronic physical illnesses, including heart disease, chronic respiratory disorders, and gastrointestinal conditions. When people with these disorders have untreated anxiety, the disease itself is more difficult to treat, their physical symptoms often become worse, and in some cases they die sooner.

Therapies that have been successful in treating anxiety disorders are now being used to ease the symptoms of chronic gastrointestinal and respiratory diseases. These therapies may have an important role in (③) and treating heart disease.

With cognitive-behavioral therapy, the cognitive component helps people identify and avoid thoughts that (4) anxiety, and the behavioral part helps them learn how to react differently to anxiety-provoking situations. The specifics of the treatment depend on the type of anxiety. For example, patients with generalized anxiety disorder or panic disorder may be asked to examine their lives for (5) and patterns that foster a sense of dread. They may also be taught relaxation techniques to (6) anxiety. Patients with OCD characterized by excessive washing may be asked to dirty their hands and wait with a therapist for increasingly longer intervals before cleaning up.

Psychodynamic psychotherapy addresses anxiety which is often triggered by a deep-seated emotional conflict or a traumatic experience. In the first randomized controlled clinical trial comparing relaxation therapy to psychodynamic psychotherapy (focused talk therapy), clinician-researchers at Columbia University in New York found that panic-disorder patients treated with psychodynamic therapy had (①) fewer symptoms and functioned better socially than those who underwent relaxation therapy (American Journal of Psychiatry, February 2007). Nearly three-quarters of the psychotherapy group responded to treatment compared with only 39% of the relaxation-therapy group.

Medications alone are less ([®]) than psychotherapy over the long term; they may also have unpleasant side effects and interact with other medications. Still, they can be helpful when used in ([®]) with psychotherapy. The most commonly used types of drugs include anti-anxiety drugs, antidepressants, and beta blockers.

About 30% of people with anxiety disorders go through life untreated. If you think you might fall into this category — or if you have IBS, asthma, COPD, or heart disease and haven't been evaluated for anxiety — you may want to (②) your primary care clinician. You may also want to talk to your clinician if you have pain, dizziness, insomnia, or other symptoms that persist after physical causes have been ruled out. Keep in mind that all symptoms are real — and treatable — whether they originate in the body or the brain.

Retrieved from

http://www.health.harvard.edu/staying-healthy/anxiety_and_physical_illness (with changes)

Notes

sympathetic nervous system: a part of the nervous system that serves to accelerate the heart rate, constrict blood vessels, and raise blood pressure somatoform disorders: a psychological disorder where symptoms cannot be fully explained by any underlying general medical or neurologic condition hypochondriasis: a term which describes people who strongly believe they have a serious or life-threatening illness despite having no, or only mild, symptoms

dysmorphic disorder: a mental disorder characterized by a strong belief that you have a defect in your appearance

respiratory: relating to or affecting the organs of breathing

gastrointestinal: relating to the stomach and the intestines

OCD: obsessive compulsive disorder

antidepressants: medications used to treat abnormal feelings of sadness

Use the following words to complete the text.

| anxious | characterized | combination | consult | diminish |
|-----------|---------------|---------------|--------------|---------------|
| effective | generate | habits | implicated | precautions |
| prepares | preventing | psychological | quell | significantly |
| symptoms | tense | undermine | unidentified | unwarranted |

Reading B

Read the passage, then answer the following questions in English.

Drinking alcohol makes us happy, but not for long

By Honor Whiteman

"Eat, drink, and be merry," so the saying goes. But according to a new study, when it comes to alcohol consumption, you're unlikely to be merry for long. That after-work drink may put a smile on your face, but alcohol is unlikely to lead to long-term happiness, say researchers.

Study leader Dr. Ben Bamburg Geiger, from the University of Kent in the United Kingdom, found that while drinking alcohol makes us momentarily happy, it fails to offer long-term life satisfaction and well-being. The researchers recently published their findings in the journal *Social Science & Medicine*.

It is no surprise that alcohol use is associated with reduced well-being. According to the National Institute on Alcohol Abuse and Alcoholism (NIAAA), alcohol use is the fourth leading preventable cause of death in the United States, responsible for around 88,000 deaths each year.

Dr. Bamburg Geiger and colleagues note, however, that drinking alcohol is also deemed a source of pleasure. Many of us enjoy a drink after a hard day's work, for example, or when socializing with friends.

But does having a drink or two really make us happy? This is what the team wanted to find out.

To reach their findings, Dr. Bamburg Geiger and colleagues analyzed data from the British Cohort 1970 Study (BCS 70), alongside data gathered from a smartphone application.

The cohort study involved 17,000 babies born in a single week in 1970, who

were regularly assessed between the ages of 30-42.

The alcohol consumption of participants was assessed using the question: "In the last 7 days, how much [drink] have you had?"

The question was adjusted to account for beer, wine, spirits, fortified wines, and alcopops.

Subjects' life satisfaction was monitored through a questionnaire that asked them to rate how satisfied they are with their life so far on a scale of 0 to 10, with 0 being "completely dissatisfied."

For the smartphone-based assessment, the team analyzed data gathered from an iPhone application called "Mappiness," which forms part of a project from the London School of Economics. The app "beeps" anonymous users randomly twice a day — between the hours of 8 am and 10 pm — and asks them how happy they are in that exact moment, as well as who they are with and what they are doing; drinking alcohol is one of the options available for selection.

The researchers assessed the responses of more than 31,000 users from the U.K. between 2010-2013. From their analysis of the cohort data, the researchers found there was "no significant relationship" between changing drinking levels over time and life satisfaction.

Among people who developed drinking problems, however, the team identified a reduction in life satisfaction. From the smartphone-based analysis, the researchers found that people who consume alcohol are largely happier "in the moment," but over time, their happiness fades. The team says both analyses accounted for participant illness and other factors that may influence the link between alcohol and happiness.

The researchers say their findings are unable to make definitive conclusions about how alcohol consumption impacts happiness. However, they say the results provide evidence on how alcohol use may positively and negatively impact well-being — something they believe has not been considered by governments when putting together alcohol regulation policies. The authors add: "Simple

accounts of the well-being impacts of alcohol policies are therefore likely to be misleading. Policymakers must consider the complexity of different policy impacts on different conceptions of 'well-being,' over different time periods, and among different types of drinkers."

The team hopes the findings encourage further research into the link between alcohol use and happiness and well-being, as a means to better informing alcohol policies.

Retrieved from

http://www.medicalnewstoday.com/articles/310019.php (with changes)

Note

alcopops: a ready-mixed drink that resembles a soft drink but contains alcohol

- 1. What are the two types of data the researchers used for their study?
- 2. In this article, what have the researchers found about alcohol consumption?

<パート3> (配点率30%)

Write an essay on the following topic.

Your essay should:

- 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. be written on each line but leave a one-line space between each paragraph.

Do not double-space your essay.

In your essay, your ideas should be clearly expressed.

Many medical students find the six-year study program both challenging and stressful. One student was heard to say, "My performance throughout the year is really good. But when my exams approach I start feeling so frustrated and under stress." Describe how you feel the stress of studying and give some examples of what you do to relieve your stress.