## 令和5年度 秋田県立衛生看護学院 看護科一般入学試験問題

## コミュニケーション英語 Ⅰ・Ⅱ

## 解答は解答用紙に記入すること。

問1 以下の英文を読み、その内容に沿って**英文内に使用されている数字または英単語を適する形を 用いて**次の各間に答えなさい。 ( ) 内には**一語を**使用すること。

Recently, there has been a lot of interest in 3D printing technology. Such printers construct 3-dimensional (3D) objects by putting materials on a flat surface. Typical materials are plastics, liquids or powder.

The first 3D printer that could print food was created in Cornell University in 2005. It has several cartridges that are inserted into the printer. The speed and direction of the cartridges are controlled by software. This is how it works. First, food is turned into a paste using a blender. Raw ingredients are typically fish, spinach, broccoli, and chicken. The paste is loaded into the cartridges, which are usually transparent, and printed layer by layer onto a flat surface. Lasers are used to heat the food.

One of the first and most important applications of the system was in space when Russian astronauts successfully printed meat. In space, preparing food can be difficult because of the lack of refrigeration. Crews generally eat processed food in packages. As space voyages get longer, long-life foods are needed. With 3D printing, food can be stored in powder form and can last for several years. The powder is combined with sugar and oil to make nutritious foods that are printed layer by layer. It is also possible to use alternative ingredients such as insects, grasses, and seeds.

Hospitals and nursing homes are interested in 3D printed foods because they are suitable for patients who have trouble swallowing food. 3D printed foods are made from paste and are easy to eat. The food is nutritious and also attractive to look at. It can be made into various shapes. It is possible to reduce the amount of sugar, and to add calcium and vitamin D. 3D printed foods can be adapted to the needs of a particular patient, which was difficult in the hospital kitchen.

At present, 3D printing technology can only produce food in small quantities. Despite this, companies are interested in using this technology in restaurants, hotels, or on larger manufacturing scales. The long-term goal is to produce burgers, pizzas, and sandwiches on industrial scales.

There is a lot of interest in 3D printing. Food Ink, the world's first 3D printing pop-up restaurant, was set up in a trendy part of London in 2016. The restaurant not only had food made using 3D technology, but also chairs, plates, cups, and cutlery created using 3D printing. Customers at the restaurant were satisfied with the food. They said that it tasted like real food and did not have an artificial taste.

注) raw: 原料の ingredient: 材料 layer: 層

nutritious : 栄養価の高い alternative : 代わりの

1 Question: Why are 3D printed foods beneficial in space?

Answer: Because one of the main ingredients is food ( ① ), 3D printed foods can

(2) for a long time.

2 Question: Why do 3D printed foods draw attention from hospitals and nursing homes?

Answer: Because they can meet the ( ③ ) for many patients by offering a wide

variety of ( 4 ) and nutritional balance.

3 Question: What was special about the 3D printing restaurant "Food Ink" in London?

Answer: Chairs, plates, cups, and cutlery as well as food ( ⑤ ) made using 3D technology.

問2 以下の英文を読んで、その内容に沿って次の各間に**日本語で**答えなさい。解答は**主語と述語を 備えた文の形で**書きなさい。

Does a person have the right to choose to "die with dignity"? This question has been discussed for thousands of years. As far back as the time of the ancient Greeks, sick patients would speak to a doctor, and, if terminally ill, they would often, with the help of the doctor, have themselves put to death rather than live in endless pain. The word euthanasia itself is Greek, and means "a good death."

If we want to understand the recent history of euthanasia and assisted suicide, we should be familiar with the name Dr. Jack Kevorkian, sometimes called Dr. Death. When Kevorkian's mother was terminally ill, it took her a long time to die. His mother's slow and painful death affected Kevorkian deeply. She had wanted to die, but killing herself would have been against the law. This inspired Kevorkian to take action. In the 1990s, he made doctor assisted suicide a public issue. He wanted to change the law, and make assisted suicide legal. Kevorkian was a doctor from the US state of Michigan who assisted the deaths of those who were terminally ill—people who called on him to help them die. To do this, Kevorkian invented two different "suicide machines." The "Thanatron," or "machine of death" in Greek, allows the patient to pull a lever that then injects drugs into the body. The patient falls asleep and in a few minutes the heart stops. With the "Mercitron," or "machine of mercy" in Greek, the patient wears a face mask that is attached to a can of gas. The patient starts the gas, breathes it in, and then dies in about 10 minutes. Kevorkian claimed that his machines were "dignified, humane, and painless, and the patient can do it in the comfort of their own home at any time they want."

Using his machines, Kevorkian assisted the deaths of over 130 people. During the 1990s, he was arrested and put on trial many times, but juries always found him not guilty, perhaps because they felt that he was doing a wanted service rather than committing a crime. Kevorkian wanted to gather a lot of support for this cause. In 1998, on an American TV news program, Kevorkian helped end the life of a patient with Lou Gehrig's disease. The patient had difficulty breathing, could not move, knew what he was doing, and wanted to die. But because his assisted suicide took place right on television for all the world to see, Kevorkian was arrested, tried, found guilty, and sent to jail in 1999.

Because of recent medical advances, this issue has become very real, and many people have very strong feelings about it. Most people feel sorry for those dying patients who live under such heartbreaking conditions as endless pain, who cannot care for themselves in even the most basic way. And most people understand why such patients want to control their own deaths.

Many people support assisted suicide. There are mainly two reasons for that. First of all, why should we have to put up with physical and psychological suffering when there is no hope of recovery? In addition, there are very realistic financial worries. Putting a terminally ill person on life support for a long time is very expensive, and can lead a family to serious financial problems. They want to protect one's dignity when they are dying.

There are also those who oppose assisted suicide. They believe that any kind of killing is wrong, that it is important to respect human life. Medical doctors feel that it is impossible to assist in suicides and, at the same time, to follow the Hippocratic Oath, a pledge doctors make to do no harm. Some people also hope that by some miracle, the patient will be healed and recover.

Most people do not allow assisted suicide. In 2013 only the states of Oregon, Washington, Vermont, and Montana permitted it. It was almost legal in California, Hawaii, Michigan, and other states. Since 2002, there have been laws allowing euthanasia in the Netherlands, in Belgium, and sometimes in Switzerland. Assisted suicide is illegal in most countries, though this is changing. It is being debated in England, Canada, Australia, Spain, France, Hungary, Italy, and New Zealand, and the trend seems to be to allow it and make it legal.

注) dignity : 尊厳 humane : 人道にかなった

jury : 陪審員 the Hippocratic Oath : ヒポクラテスの宣誓

- 1 130人以上の自殺ほう助をしてきた Dr. Jack Kevorkian は、何度も裁判で無罪になりましたが、その理由は何だと推測されていますか。詳しく説明しなさい。
- 2 Dr. Jack Kevorkian が、何故 1999 年に有罪判決を受けたか説明しなさい。
- 3 安楽死賛成派の人たちは、治る見込みのない病気による身体的・精神的な苦痛の除去の他 に、どのような理由で安楽死に賛成していると考えられますか。詳しく説明しなさい。

## 問3 以下の文を与えられた単語を用いて、一文で英語に訳しなさい。

- 1 彼女は何度も行ったことがあるので、難なくその病院を見つけた。 (no trouble を用いて)
- 2 彼はその機械を発明しただけでなく、多くの人に無料で使わせてくれた。 (for free と allow を用いて)
- 3 彼女はすべての生徒と親しくなるのに長い時間がかかった。 (took と familiar を用いて)
- 問4 我々は尊厳死の権利を持つ (have the right to die with dignity) べきだと思いますか。70 語から 100 語程度の**英文で**説明しなさい。

次の観点から採点を行います。

- (1) 語数制限(最低語数)を満たしているかどうか。
- (2) 質問に対する答えになっているかどうか。
- (3) 内容を説明するための適切な具体例が使われているかどうか。
- (4) 自分の言葉で表現しているかどうか。(長文の内容をコピーしていないかどうか)
- (5) 正確な文法と適切な語彙が使われているかどうか。