

第1問 次の英文の空所に入れるのに最も適当な語を、それぞれ(A)~(J)の中から1つずつ選び、その記号を解答欄に記入しなさい。

Many people think of virtual reality (VR) as a toy. However, to many professionals today, VR is not a (1). It is one of their most important tools. In fact, VR has become as important to some professionals as a *stethoscope is to a doctor or scissors are to a hairdresser.

Let's start with (2) doctors use VR. VR is used in many ways in medicine. With one VR tool, doctors can practice difficult operations before they (3) them on real people. For example, in 2001 doctors in Singapore used a VR tool to plan a very complex and dangerous operation. Twin baby girls were born (4) their heads joined together. The doctors operated to (5) them. The operation was a success, mostly because the doctors were able to perform the operation (6) before they tried it on their real patients.

VR is also very useful for architects. They use it to (7) virtual model homes. "By bringing the *floor plans to (8), buyers get a better understanding of what it would be (9) to actually live in this house," says Mitchell C. Hochberg, president and CEO of Spectrum Skanska, a company that designs and builds homes. Such virtual tours are much cheaper to make than real model homes. Hochberg calls the VR tours "our single most important marketing (10)."

(出典) Lynn Bonesteel. *Real Reading 3*. Pearson Education ESL, 2010.

(注) stethoscope 聴診器 floor plan 平面図

- | | | | |
|---------------|------------|-------------|--------------|
| (A) like | (B) with | (C) tool | (D) game |
| (E) life | (F) create | (G) perform | (H) separate |
| (I) virtually | (J) how | | |

大学一般入学試験問題

用紙に記入すること)

第2問 次の問1～問3に答えなさい。

問1 次の1～10の英文の空所に入れるのに最も適当なものを、それぞれ(A)～(D)の中から1つずつ選び、その記号を解答欄に記入しなさい。

1. Young people tend to () about what they look like.
(A) insist (B) attend (C) persuade (D) worry
2. I dislike having my photo taken. I feel extremely ().
(A) embarrassing (B) embarrassed
(C) to embarrass (D) embarrassment
3. Watch out! The ladder isn't very ().
(A) shaky (B) humid (C) complex (D) stable
4. I'm so sorry. I didn't remember () my identification card with me.
(A) bringing (B) having brought
(C) to bring (D) to have brought
5. () the truth, I would have told you about it.
(A) If I knew (B) If I had known
(C) Were I known (D) Should I know
6. There are many foreign teachers in our university, but () of them come from Asia.
(A) none (B) neither (C) nobody (D) not
7. Have you got used () Thai food yet?
(A) eat (B) eating (C) to eat (D) to eating
8. People in that region are longing () peace and security.
(A) for (B) over (C) about (D) out
9. I can't use Twitter or Facebook, () such a complicated application as this one.
(A) much less (B) still more (C) by far (D) above all
10. It's you who are to blame. You () have accessed that website.
(A) mustn't (B) can't (C) shouldn't (D) wouldn't

問2 次の1～5の対話文の空所に入れるのに最も適当なものを、それぞれ(A)～(D)の中から1つずつ選び、その記号を解答欄に記入しなさい。

1. Woman: Shall we go out for lunch now?

Man : Great. What would you like to eat, sushi, tempura, soba..?

Woman: ()

- (A) Take it easy. (B) You can say it again.
(C) They sure are. (D) Anything will do.

2. Host : Thank you for coming all the way in this rain.

Guest: Thanks for inviting me. What a fantastic house you have!

Host : ()

- (A) I wish you would. (B) By all means.
(C) We're very happy with it. (D) I really mean it.

3. Student: Can I ask a favor of you, sir?

Teacher: Sure. ()

Student: I'd like you to check my college application.

- (A) What are you writing it for?
(B) How can I help you?
(C) Who on earth suggested to you?
(D) How nice of you!

4. Boy: () You look depressed today.

Girl: My little dog died last night.

Boy: Oh, that's too bad.

- (A) What happened?
(B) What do you do?
(C) How did you do it?
(D) How dare you say such a thing?

5. Salesperson: These are new models.

Customer : Which do you recommend, this mountain bike or that ordinary one?

Salesperson: I think ()

- (A) time will tell. (B) I can.
(C) it all depends. (D) I can't agree with you more.

問3 次の1～5の語の下線部と同じ発音になるものを、それぞれ(A)～(D)の中から1つずつ選び、その記号を解答欄に記入しなさい。

1. peasant

- (A) steady (B) peak (C) reveal (D) sweet

2. lovable

- (A) adapt (B) adopt (C) load (D) country

3. abroad

- (A) boast (B) coast (C) routine (D) ought

4. calendar

- (A) culture (B) sandwich (C) dominate (D) heart

5. cinema

- (A) sheet (B) pick (C) sanitary (D) cubic

第3問 次の1～3の文の()内の①～⑦の語を意味が通るように並べかえ、2番目、4番目、6番目に来る語の番号のみを答えなさい。

1. It (①will / ②little / ③whether / ④she / ⑤makes / ⑥come / ⑦difference) or not.
2. She (①of / ②to / ③taken / ④no / ⑤have / ⑥seems / ⑦notice) my advice at all.
3. The environment (①in / ②up / ③has / ④made / ⑤grew / ⑥him / ⑦he) what he is today.

第4問 次の英文を読み、下の各問に答えなさい。

The field of *molecular genetics is progressing at a rapid pace, with our ability to manipulate genes and understand the complex processes involved in genetics ⁽¹⁾ developing (a) almost a daily basis. Understandably, people have fears about this powerful technology and are worried that we may use it in ways to change our humanity. In particular, gene therapy is one aspect of molecular genetics that is causing a lot of concern.

Gene therapy is defined (b) a way of curing or preventing disease by changing the behavior of a person's genes. Currently, gene therapy is still in its early stages, with most of it still experimental. There are actually two types of gene therapy: *somatic and *germline. Somatic gene therapy targets genes in the body cells. In this way, the genome of the *recipient is changed, but this change is not passed onto the next generation. For example, experimental trials in treating *cystic fibrosis treat the genes only in the cells of the lungs, and, consequently, the patient's children would still be (c) ⁽²⁾ risk for the disease.

In germline gene therapy, genetic changes are made to *reproductive cells. The egg or *sperm cells of the patient are genetically changed with the goal of passing on these changes to children. In practice, this would mean changing the *fertilized egg so that the genetic changes would be copied into every cell of the future adult, including the reproductive cells. In fact, germline genetic engineering is not being actively investigated in humans or even large animals at this point. Thus far, the procedures are still too risky ⁽³⁾ and underdeveloped. Experimentation has occurred with mice where genes are added or deleted and the effects have been observed to help better understand gene functions.

Many people falsely assume that germline genetic engineering is already performed with regularity, due to news reports of genetic manipulation. But ⁽⁴⁾

医科大学一般入学試験問題

答用紙に記入すること)

which in itself does not alter any genes, but copies them. Furthermore, even in the field of somatic gene therapy, many factors have prevented researchers (d) developing successful gene therapy techniques.

(出典) Barbara Graber, Peggy Babcock and Kayang Gagiano. *Reading for the Real World 3*. Compass Publishing Japan, 2009.

(注) molecular genetics 分子遺伝学 somatic 体細胞による

germline 生殖細胞による recipient 受け取る人

cystic fibrosis 嚢胞性繊維症〔遺伝性の肺の病気〕

reproductive cells 生殖細胞 sperm 精子 fertilized egg 受精卵

問1 下線部(1)~(4)の語句の意味として最も適当なものを、それぞれ(A)~(D)の中から1つずつ選び、その記号を解答欄に記入しなさい。

- | | |
|---------------------|-----------------|
| (1) (A) destroy | (B) control |
| (C) compare | (D) consume |
| (2) (A) for example | (B) to be sure |
| (C) on the contrary | (D) as a result |
| (3) (A) come by | (B) looked into |
| (C) put aside | (D) taken off |
| (4) (A) because of | (B) in spite of |
| (C) regardless of | (D) thanks for |

問2 空所 (a) ~ (d) に入れるのに最も適当なものを、それぞれ(ア)~

(キ)の中から1つずつ選び、その記号を解答欄に記入しなさい。

- | | | | |
|--------|--------|----------|----------|
| (ア) as | (イ) at | (ウ) for | (エ) from |
| (オ) on | (カ) to | (キ) with | |

問3 本文の内容に合うように、次の(1)~(3)の英文の空所を完成させるのに最も適当なものを、それぞれ(A)~(D)の中から1つずつ選び、その記号を解答欄に記入しなさい。

(1) People are afraid that molecular genetics _____.

- (A) will become more and more complex
- (B) is no longer very useful
- (C) may change the way we are
- (D) might have a negative influence on gene therapy

(2) In somatic gene therapy, _____.

- (A) the benefits of the therapy will not be inherited by children
- (B) the benefits of the therapy is only seen in the lungs
- (C) the patient tends to suffer from other kinds of diseases
- (D) the patient might be troubled by its side effects

(3) Germline gene therapy _____.

- (A) will not change any genes at all
- (B) is quite different from cloning
- (C) has been performed more often than somatic gene therapy
- (D) is much easier to develop than somatic gene therapy