

〔 1 〕 次の英文を読み、設問に答えなさい。(35点)

Contrary to what you might expect, your internal organs are not symmetrical. There are two main reasons for this, says Joseph Yost,<sup>(1)</sup> a developmental biologist. The first is a straightforward packing problem — how to fit everything together in a restricted space. The lungs, for example, have to share space in the chest with the heart and its great blood vessels. To make room, your left lung has two \*lobes and your right has three, and the major airways, the left and right \*bronchi, are tilted at different angles. Therefore, if you manage to inhale a peanut in some bizarre drunken accident at a party, it's<sup>(2)</sup> practically guaranteed to lodge in your right lung.

The second reason is to do with making organs function efficiently, and making sure that they link up to each other properly. Nowhere is this more apparent than in the heart,<sup>(3)</sup> says Nigel Brown, a heart development expert. Researchers in Britain have recently confirmed that the heart's asymmetric design improves blood flow and makes it an extremely efficient pump. In addition, the right side of the heart is smaller than the left, because it collects blood from the body and only has to pump it across to the lungs, while the left side has to pump \*oxygenated blood all the way round the body. So not only does the heart have to be asymmetric itself, it must also be \*plumbed into the lungs and the body the correct way.

If your left-right pattern is completely reversed, there's no problem, because all the organs are reversed with respect to each other. But between there and normality lies dangerous ground. "Anything in between and you're in various degrees of trouble, depending on exactly what's wrong," says Brown.

The most extreme problem is called isomerism. In this condition,<sup>(4)</sup>

the organs are entirely symmetrical, as if you're standing with a mirror placed down the midline of your body. The way your organs are affected depends on which side of your body is being reflected in the mirror. If it's the right side, your \*spleen will be missing and both your lungs will have three lobes. Worst of all, your heart will be symmetrical, too.

\*lobe: (肺などの)葉〔ヨウ〕

\*bronchi: bronchus (気管支)の複数形

\*oxygenated: 酸素を供給された

\*plumb: (血管で)つなぐ

\*spleen: 脾臓〔ヒゾウ〕

問 1. 下線部(1) two main reasons をそれぞれ日本語で述べなさい。

問 2. 下線部(2)を日本語に訳しなさい。

問 3. 下線部(3)を日本語に訳しなさい。

問 4. 下線部(4) isomerism とはどのような状態かを、本文に即して日本語で説明しなさい。

〔 2 〕 次の英文を読み、設問に答えなさい。(35点)

If a social group is a collection of people with some sort of purpose, then a team is a social group with explicit goals that is organized so that different people's abilities complement each other and produce a team who perform at their best in achieving their goals.

'Team' was originally used to refer to a team of animals, usually pulling something. It is important that the team all pull in the same direction and in a co-ordinated manner. A more recent and attractive metaphor is the sports team; a team of people working towards recognized common goals. In a sports team there are recognized roles and clear common goals that, because of the rules of the sport if nothing else, cannot be accomplished alone.

<sup>(1)</sup> Work is rarely like this. For a start, even if your organization has a rule book, the competition is not obliged to use the same rules. The required roles in a workplace team may change quite rapidly. As with groups in general, it is helpful if the team has recognized common goals. These goals are not always explained to new group or team members, or are presented in a very abstract way that makes it unclear what members are supposed to do.

Teams may be formed for particular tasks, disbanding when the task is over. Some companies encourage this sort of flexibility. Or teams may be permanent and work on a number of tasks of different kinds over the years. Long-established teams may come to get along extremely well and work effectively together. However, they may shut out the outside world. Long-established team members may also come to attribute their success to unique personal characteristics. For example, they may regard the charisma of their leader as essential. If key people leave, then the team may no longer function effectively.

Flexible teams, by changing membership and goals regularly, help to prevent these negative characteristics. Their disadvantage is that effective team building can be a lengthy process. Sometimes, the team is just beginning to work really well together when it accomplishes its goals and disbands.

This leads on to another problem. Successful teams may be reluctant to disband. You have probably had the misfortune at one time or another to be forced to work with the colleague or boss from hell (remember one person's hell can be another person's heaven). So, most people find it a great relief and pleasure to find themselves getting along with their team and do not want to disband it.

問 1. 下線部(1)の指す内容を日本語で説明しなさい。説明においては、特に this の指す内容が分かるように述べなさい。

問 2. 下線部(2) these negative characteristics の内容を日本語で説明しなさい。

問 3. 下線部(3)を日本語に訳しなさい。

〔 3 〕 次の日本語の下線部を英語に訳しなさい。(30点)

言語、習慣、文化、伝統などことごとく異なっている欧米人と本当に意志疎通  
(1) をすることはなまやさしいことではないであろう。会話さえできれば、と考える  
のは楽天的でありすぎる。われわれの考えをのべれば、たいていは否定されるで  
あろう。しかし、そこでひるんで気まずく黙ってしまったりしてはいけない。む  
しろ、意見がくい違ったところから伝達ははじまるのである。本当に親しくなる  
(2) のは、はげしい議論をした相手であることも忘れてはなるまい。ただ、はいはい  
と言っているのでは、かえって相手から信頼されない。必要なときには、どんど  
ん反論を出すべきだが、ただ、相手を不快にしないような配慮だけはしたいもの  
である。相手の主張にも耳をかたむけながら、おだやかに、しかし、明確に、自  
分の意見を主張するのは、相手が外国人の場合、とくに難しい。われわれはそう  
いう優雅な反駁の方法をもっと研究しなければならないような気がする。