

次の英文を読んで、あとの問に答えよ。

The deep ocean is a world of constant darkness, ^(1a)a place so vast and mysterious that much of it remains unexplored. ^(1b)Yet, within these completely dark deeps exist an amazing display of light, not from the sun, but from life itself. ^(1c)This phenomenon, known as bioluminescence, is the production and release of light by a living organism. While fireflies might be the most familiar example, ^(1d)the deep sea is where this natural light is most common, ^(1e)with an estimated 80% of its creatures capable of creating their own light.

The process behind this living light is a wonder of biochemistry. It's a chemical reaction, not a physical one like in a light bulb. A molecule called luciferin reacts with oxygen, helped by an enzyme named luciferase, to produce light. ^(2a)This process is very efficient, generating light with very little heat, that is why it's often called "cold light." Land creatures like fireflies use this ability mainly for *mating signals, and ^(2b)a vast number of marine organisms are, too, although they have adapted it for a wider variety of uses that are important for survival in their challenging environment.

In the competitive world of the deep sea, light is a powerful tool. Some fish, like the anglerfish, use a glowing lure to attract unsuspecting prey into their waiting jaws. Other creatures use sudden flashes of light to surprise and escape predators. ⁽³⁾Furthermore, the complex light patterns certain species of squid have something to communicate with one another represent a complex language we are only just beginning to understand. This visual communication is very important in a world where sound and smell may be less effective.

I remember watching a documentary with a friend who is also very interested in marine biology. As a jellyfish glowed with a beautiful blue light, lighting up the deep darkness around it, he turned to me. "It isn't ordinary, is it? Life found a way to create its own light in complete darkness!" he remarked, his eyes wide with wonder. I was equally fascinated. "4" I responded. "It makes you realize how much we still have to learn about our own planet." It's a humbling reminder that even without sunlight, life not only survives but thrives in the most creative ways imaginable.

*mating signals 求愛の合図

問 1

下線部(1a)～(1e)の中に、誤りを含むものが一つある。それを選び、記号で答えよ。

問 2

下線部(2a)および(2b)は、それぞれ原文から一語置き換えられた語があるために、誤ったものとなっている。(2a)と(2b)のそれぞれに関して、置き換えられた後の語と、元の正しい語を答えよ。

問 3

下線部(3)には、取り除くべき語が 1 語ある。その取り除くべき語とその直後の語を指摘せよ。

問 4

空所" 4 "に入れるのに、最も適当なものを以下の選択肢から一つ選び、記号で答えよ。

- ア Yes, the wonders of living creatures are beyond my imagination.
- イ No, I can't believe living things have evolved so miraculously.
- ウ I think it is. What organisms have come up with is nothing but a wonder.
- エ So do I, and it is amazing that life has invented such a wonderful way.