

1 次の文章を読んで、各問に答えなさい。

*DeepMind's AlphaGo is largely self-taught—it was shown the basic rules of Go and then it spent time looking at millions of games and playing against itself, coming up with moves that *astounded professional players and its creators.

British Airways' computers were not so smart. The company says its problems began when there was a *power surge at a data center at Heathrow Airport in London. ①That shouldn't have been more than a temporary problem—in fact one expert told me it should not have even set the lights *blinking at the data center—but it seems to have (②) a chain reaction which took out the entire system. That meant the sea of complex data about passengers, baggage and aircraft movements was effectively frozen—and ③(to / 48 hours / took / unfreeze / it / it) and get the airline working again.

Any major organization is likely to have both a backup system to switch to when things go wrong and a disaster recovery plan, which should be rehearsed on a regular basis. But in British Airways' case neither appears to have worked as it should. The trade unions blame cost-cutting and the fact that British Airways *outsourced much of its IT operation to India last year. The bosses deny that and say they are now clear what went wrong—but so far, have been unable to give an explanation that seems satisfactory to people with expertise in how data centers and major IT operations work.

But what is clear is that ever more areas of our lives are dependent on vast computer systems, often now controlled in data centers owned by companies like Amazon and Microsoft. These systems have become ④essential to industries from banking to travel to healthcare and they are helping them become more efficient—sometimes by getting much of the work done in countries like India where costs are lower. They are also making life better in all sorts of ways—just think of how *time-consuming it used to be to book a flight or apply for a place at university and how much paper was involved. But now we are beginning to find out just how helpless we feel when, for whatever reason, the computers fail.

This week a letter to the Guardian newspaper warned that the modern world was “dangerously ⑤(on / reliance / by / the Internet / exposed / this) and new technology”. The correspondent continued “there are old-time civil servants left alive to turn back the clock and take away our dangerous dependence on modern technology.” Somehow, though, I don't see ⑥this happening. Airlines are not going to scrap the computers and identify passengers on a paper list before they climb aboard.

In fact, computers will (⑦) more and more functions once restricted to humans, most of them far more useful than a game of Go. And ⑧that means that at home, at work and at play we will have to get used to seeing our lives disrupted when those clever machines suffer the occasional nervous breakdown.

(Adapted from <https://www.bbc.com/news/technology-40124772>)

[注] *DeepMind's AlphaGo ディープマインド社のゲームソフト「アルファ碁」 *astound ひどく驚かせる

*power surge 電力の急激な増大 *blinking 明滅する *outsource 外部委託する *time-consuming 時間がかかる

- 問1 下線部 ① の意味に最も近いものを選び、その記号を書きなさい。
(ア) それは一時的問題以上にはなっていなかっただろう。
(イ) それは一時的問題にすぎなかったはずだ。
(ウ) それは現代的問題以上にすべきではなかった。
(エ) それは現代的問題にすぎなかったはずだ。
- 問2 ② の () 内に入れる語句として、文脈に合わないものを1つ選び、その記号を書きなさい。
(ア) caused
(イ) triggered
(ウ) brought about
(エ) resulted from
- 問3 下線部 ③ と ⑤ の () 内の語句を文意に合うように並べ替えなさい。
- 問4 下線部 ④ の意味として最も適切なものを下記より1つ選び、その記号を書きなさい。
(ア) substantial (イ) intrinsic (ウ) crucial
(エ) sensitive (オ) respectful
- 問5 下線部 ⑥ とはどのようなことか、本文にそって具体的に日本語で答えなさい。
- 問6 ⑦ の () 内に入れるのに最も適切なものを1つ選び、その記号を書きなさい。
(ア) take off
(イ) take down
(ウ) take over
(エ) take back
- 問7 下線部 ⑧ を和訳しなさい。

- 2 次の文章中の ① ～ ⑤ に最も適切なものを下記の (ア) ～ (オ) から1つずつ選び、その記号を書きなさい。

I love Yellowstone National Park. I (①), followed the footsteps of Romans, looked up at the Leaning Tower of Pisa, experienced volcanoes from afar and close up, and touched glaciers. Yet I return to Yellowstone again and again, gazing at waterfalls and lakes but (②) *geysers, mud pots and *fumaroles.

These colors draw me in. They are produced by millions and millions of tightly packed bacterial cells *enmeshed in a *slimy matrix. Although individual bacteria are not visible to the naked eye, in this slime they (③) or “biofilms.” Through a microscope these films show remarkable three-dimensional structure, with microbes glued onto one another to form many levels of *filaments, (④).

To me, they look like cities of slime, a pulsing metropolis with blocks and skyscrapers and streets that (⑤). And you’ve seen biofilms, too: they form the thick and slimy buildup in your drains and the stubborn rings around your bathtub.

(Adapted from http://www.nikkei-science.com/201803_068.html)

[注] *geyser 間欠泉 *fumarole 噴気孔 *enmeshed まとわれた *slimy matrix ゼリー状の基質
*filaments 繊維状細胞

- (ア) especially at the vivid rainbow colors of many of the park’s hot springs,
(イ) winding pathways and features resembling tiny towers
(ウ) have visited countries as far east as Japan
(エ) are busier than major avenues in Tokyo or New York
(オ) form easily seen communities referred to as microbial mats,

3 次の下線部の意味に最も近い語句を (ア) ~ (エ) から 1 つ選び、その記号を書きなさい。

問 1 We should call on all countries to cut their carbon emissions.

- | | |
|---------------|-------------|
| (ア) order | (イ) request |
| (ウ) encourage | (エ) forbid |

問 2 He decided to get rid of all the scrapbooks in his study.

- | | |
|-------------|------------|
| (ア) tear | (イ) submit |
| (ウ) discard | (エ) buy |

問 3 She traveled in Paris once in a while.

- | | |
|------------------|------------------|
| (ア) occasionally | (イ) for pleasure |
| (ウ) frequently | (エ) on business |

問 4 Ken has a good command of English.

- | | |
|----------------|---------------|
| (ア) order | (イ) ability |
| (ウ) expression | (エ) utterance |

問 5 I am tired of his boasts.

- | | |
|---------------------|--------------------|
| (ア) disappointed at | (イ) exhausted from |
| (ウ) perplexed at | (エ) bored with |

4 日本文に合うように () に入る最も適切な語句を (ア) ~ (エ) から 1 つ選び、その記号を書きなさい

問 1 「すみません、ただいま話し中です」と受付係が言った。

“Sorry, (),” a receptionist said.

- (ア) the line is crowded now
- (イ) the line is heavy now
- (ウ) the line is interrupted now
- (エ) the line is busy now

問 2 ナンシーは「バスに乗ると車酔いします。避けようがありません」と言った。

Nancy said, “I get carsick on a bus. ().”

- (ア) I can't help it
- (イ) I can't stand it
- (ウ) I can't prove it
- (エ) I can't understand it

問 3 「受賞おめでとう」とビルが言ってくれた。

“(),” Bill said to me.

- (ア) Congratulations for your prize
- (イ) Congratulations on your prize
- (ウ) Congratulation in your prize
- (エ) Congratulation with your prize

問 4 「6時きっかりに起きなさい」とお母さんが言った。

My mother said, “().”

- (ア) Get up at six sharply
- (イ) Get up at six on the dot
- (ウ) Wake up at six on the line
- (エ) Wake up at six just the same

問 5 ルーシーは「本当にありがとうございます」と言った。

Lucy said, “().”

- (ア) I really appreciated you
- (イ) I really appreciated it
- (ウ) I really appreciate it
- (エ) I really appreciate for you