令和7年度入学者選抜学力検査問題(前期日程)

外 国 語

英

宝石

(注 意)

- 1. 問題冊子は指示があるまで開かないこと。
- 2. 問題冊子は9ページ,解答用紙は2枚である。 指示があってから確認し,乱丁,落丁,印刷不鮮明の箇所 等がある場合は,ただちに試験監督者に申し出ること。
- 3. 解答はすべて解答用紙の指定の箇所に記入すること。 指定箇所以外に記入された解答は採点の対象としない。
- 4. 解答用紙は持ち帰ってはならないが、問題冊子は必ず持ち帰ること。

〔 Ⅰ 〕 次の英文を読んで,以下の設問に答えよ。

A broad group of Artificial Intelligence (AI) experts recently released a brief public statement warning of "the risk of extinction" from AI." There are many different ways in which AIs might become serious dangers to humanity, and the exact nature of the risks is still debated, but imagine a Chief Executive Officer (CEO*) who acquires an AI assistant. They begin by giving it simple, low-level tasks, like drafting emails and suggesting purchases. As the AI improves over time, it progressively becomes much better at these things than their employees. So the AI gets "promoted." Rather than drafting emails, it now has full control of the inbox*. Rather than suggesting purchases, it's eventually allowed to access bank accounts and buy things automatically.

At first, the CEO carefully monitors the work, but as months go by without error, the AI receives less supervision and more independence in the name of efficiency. It occurs to the CEO that since the AI is so good at these tasks, it should take on a wider range of responsibilities: "design the next model in a product line," "plan a new advertising campaign," or "take advantage of security weaknesses in a rival's computer systems." The CEO observes how businesses with more restricted use of AIs are falling behind, and is further encouraged to hand over more power to the AI with less supervision. Eventually, even the CEO's role is largely in name only. The economy is run by autonomous* AI corporations, and humanity realizes too late that we've lost control.

The good news is that we can decide (a) the AI will be like. The bad news is that Darwin's* laws do too. Though we think of natural selection* as a biological phenomenon, its principles guide much more, from economies to technologies. The evolutionary* biologist* Richard Lewontin proposed that natural selection will take hold in any environment where three conditions are present: 1) there are differences between individuals, 2) characteristics are passed on to future generations, and 3) the fittest variants* reproduce more successfully.

In the biological field, evolution is a slow process. For humans, it takes nine

months to create the next generation and around 20 years to produce adults. But scientists have observed significant evolutionary changes in species with rapid reproduction* rates, like fruit flies*, in fewer than 10 generations. Without being restricted by biology, AIs could modify themselves—and therefore evolve—even faster than fruit flies do.

There are three reasons this should worry us. The first is that selection effects make AIs difficult to control. Whereas AI researchers* once spoke of "designing" AIs, they now speak of "steering" them. Moreover, we are slowly losing our control as we let AIs teach themselves and increasingly act in ways that even we do not fully understand.

Second, evolution tends to produce selfish behavior. Competition without morals among AIs may select for features that are not desired. AIs that successfully gain influence and provide economic value will become dominant, replacing AIs that act in a more narrow and limited manner, even if this comes at the cost of reducing safety measures. As an example, most businesses follow laws, but in situations where stealing trade secrets is highly profitable and difficult to detect, a business that engages in such selfish behavior will most likely defeat its more principled rivals.

The third reason is that evolutionary pressure will likely provide AIs with behaviors that promote self-protection. Skeptics* of AI risks often ask, "Couldn't we just turn the AI off?" There are a variety of practical challenges here. The AI could be combined with vital infrastructure*, like the internet. When added to these critical systems, the cost of turning them off may prove too high for us to accept since we would become dependent on them. AIs could become rooted in our world in ways that we can't easily reverse. But natural selection poses a more fundamental barrier: we will select against AIs that are easy to turn off, and we will come to depend on AIs that we are less likely to turn off.

Strong economic and competitive pressures to adopt the systems that are most effective mean that humans are encouraged to give more and more power to AI systems that cannot be reliably controlled, putting us on a road toward being replaced as the earth's dominant species. There are no easy solutions to our difficult situation.

A possible starting point would be to address the remarkable lack of regulation of the AI industry, which currently operates with little supervision, much of the research taking place in the dark. We need research on AI safety to progress as quickly as research on improving AI abilities. There aren't many market incentives for this, so governments should offer sufficient financial support as soon as possible.

The future of humanity is closely connected to the progress of AI. It is therefore disturbing to realize that natural selection may have more influence on it than we do. However, as of now, we are still in command. Now is the time to take this threat seriously. Once we hand over control, we won't get it back.

出典: Dan Hendrycks, "Survival of the Fittest." (*Time*, June 12, 2023). 上の英文は、抜粋の上、一部を変更している。

^{*}extinction 絶滅

^{*}CEO 最高経営責任者

^{*}inbox (電子メールの)受信トレイ

^{*}autonomous 自律した

^{*}Darwin チャールズ・ダーウィン(1809-1882)。英国の博物学者で「進化論」の 提唱者。

^{*}natural selection 自然淘汰

^{*}evolutionary 進化の

^{*}biologist 生物学者

^{*}variant バリアント(同一種の生物集団の中に見られる遺伝的変異の総体)

^{*}reproduction 繁殖

^{*}fruit fly ミバエ(ハエ目ミバエ科に属するハエの総称)

^{*}researcher 研究者

^{*}skeptic 懐疑論者, 疑い深い人

^{*}infrastructure 生活の基盤となる設備

- 問 1 空欄(a)に入る語として適切なものを下の 1 ~ 5 の中から一つ選び**番号** で答えよ。
 - 1. when
 - 2. whether
 - 3. that
 - 4. what
 - 5. why
- 問 2 下線部(1)の "three reasons" が表す三点の内容をそれぞれ日本語で簡潔に述べよ。
- 問 3 下線部(2)の "a more fundamental barrier" が表す内容を日本語で簡潔に述べよ。
- 問 4 下線部(3)を和訳せよ。
- 問 5 次の1~7のうち、本文の内容と**合致する**ものを二つ選び番号で答えよ。
 - 1. AI が進化すると、CEO や他の従業員よりも重要な役割を果たす可能性がある。
 - 2. 自然淘汰はあくまで生物学的現象であり、その原理を経済に当てはめるのは難しい。
 - 3. 進化生物学者の Richard Lewontin は、個体間に違いがあることを自然淘汰が成立する唯一の条件として挙げた。
 - 4. AI は人間よりも速く進化できるが、ミバエほど速く進化できるわけではない。
 - 5. インターネットなどに組み込まれている AI を止めるのは、コストがかかりすぎて難しいこともある。
 - 6. 効率を求めることが AI の進化を推し進めるわけではない。
 - 7. AI 業界の著しい規制不足に対処するため、政府だけでなく民間企業も財政支援をすべきである。

[Ⅱ] 次の英文を読んで、以下の設問に答えよ。

In and of itself, anxiety is not deadly*. Quite the contrary: being able to feel anxious shows that our fight-or-flight* system is in operation, which indicates that our brain and senses are functioning properly. Once we accept that anxiety is a normal, although uncomfortable, part of life, we can use it for our personal growth. Here are three ways anxiety can help you.

If you want to build emotional strength, you need to face some degree of mental stress. Of course, tragic events and abuse tend to cause more harm than good, but the experience of occasional anxiety and tension substantially increases your emotional strength. For example, an extremely effective treatment for anxiety is exposure therapy*, which involves directly and regularly confronting one's fears in reasonable and increasing doses over time. With the help of a doctor, individuals with phobias* to anything from snakes or spiders to heights or medical procedures gradually encounter that which makes them anxious. As they exercise their emotional strength — voluntarily and bravely — they become less sensitive to their anxiety, and its effects decrease. In my medical practice, I have treated hundreds of patients with exposure therapy, and in many instances, individuals emerge not only less anxious, but also with greater strength of character in general. In one particularly remarkable case, I helped a young woman overcome a severe case of hypochondriasis* with this method. Years later, when her newborn child had a serious health problem requiring major surgery, she handled the situation with incredible strength and calm.

Humans are social creatures. The No.1 sign of happiness in late life is not financial success or fame but the quality of our relationships. Clinical science* has identified that sharing our anxieties with our loved ones is one of the most effective strategy to build connection. When my patients learn to open up and share their anxieties with their partners, they almost always report a greater sense of affection. Even in the most secure relationships, we naturally feel some

anxiety sometimes about whether the love we receive is truly genuine. As relationship expert Sue Johnson teaches, when we embrace and express our need for connection during challenging moments (for example, "I'm having a hard time right now and could really use your support"), it produces greater connection and turns our anxiety into love.

From time to time, all of us find ourselves at the end of our rope*. Our responsibilities pile up, our resources break down, and we just don't have enough time to get everything done. We feel uncomfortably anxious most, if not all, of the time. Many times, when my patients are overwhelmed, they tend to take on more demands. Surprisingly, they take on additional projects at work, volunteer for community service, and provide additional support to their friends. It's easier to avoid thinking about how overwhelmed we feel — and pretend that everything is OK — when we're focused on work. But working harder, faster, and longer hours when one is already exhausted can create persisting stress, which has been associated with heart disease, cancer, and stroke, as well as numerous less severe medical conditions. When we feel genuinely overwhelmed and anxious because of stress, it's our body's way of telling us to reflect and restore the correct balance. Everyone has his or her own limit. When we notice what our body is telling us and acknowledge that we are not perfect, we emerge more focused and healthier overall — and also less stressed and anxious.

Anxiety can be a healthy emotion that is a helpful aspect of human life. It can develop emotional connection when we convey our naked feelings to others. And in the form of stress, it can serve as an internal barometer* to remain balanced and healthy. It's about time we start putting it to good use.

出典: David H. Rosmarin, "The Case for Anxiety." (*Time*, November 6, 2023). 上の英文は、抜粋の上、一部を変更している。

- *deadly 致命的な
- *fight-or-flight 闘争・逃走(反応)
- *exposure therapy 暴露療法
- *phobia 恐怖症
- *hypochondriasis 病気不安症
- *clinical science 臨床科学
- *at the end of one's rope 限界に達して
- *barometer (変化を示す)徴候
- 問 1 下線部(1)を和訳せよ。
- 問2 下線部(2)を和訳せよ。
- 問3 下線部(3)が具体的に意味する内容を日本語で簡潔に述べよ。
- 間 4 下線部(4)~(7)の中から文法上の誤りを一つ選び番号で答えよ。
 - (4) strategy
 - (5) done
 - (6) thinking
 - (7) exhausted
- 問 5 次の1~7のうち、本文の内容と**合致するもの**を二つ選び番号で答えよ。
 - 1. 不安は私たちの脳が正常に機能していないことを示している。
 - 2. 他人が不安に思っていることに耳を傾けることで治療効果が期待できる。
 - 3. 人はしばしば孤独を好むものだ。
 - 4. 人は人生の節目に最も不安に駆られる傾向がある。
 - 5. 過度の不安から仕事や他者とのかかわりを増やす人もいる。
 - 6. 不安からストレスが生じるわけではない。
 - 7. 自分の不完全さを認めることで不安が和らぐこともある。

「Ⅲ」 下線部を英訳せよ。

私たちはいま途方もない変化のただなかにいるが、それに対して準備ができている人はほとんどいない。その変化は、正しく理解した人には大きな恩恵をもたらす半面、目を背けて準備を怠った人には不幸の種になる。グローバル化の進展とテクノロジーの進化がそうだったように、それは私たちの生き方と働き方を様変わりさせるだろう。その大きな変化とは、長寿化の進行である。

出典: リンダ・グラットン, アンドリュー・スコット著, 池村千秋訳『LIFE SHIFT — 100 年時代の人生戦略』(東洋経済新報社, 2016 年)

[**IV**] 以下の英文を読んで、英語で答えよ。

Is it necessary for each senior high school student to have his or her own personal computer* for education?

Give at least one reason for your opinion. Your answer should be more than 40 words.

*personal computer (公費または私費負担による)ノートパソコンやタブレット 端末。スマートフォンや携帯電話は含まない。

