2020 (令和 2) 年度 福岡女子大学 一般入試個別学力検査

〔 前期日程試験問題 〕

英語

【90分】

注意事項

- 1 試験開始の合図があるまで、この問題冊子の中を見てはいけません。
- 2 問題は4ページから10ページにあります。問題は全部で**3題**です。
- 3 解答用紙には裏にも解答欄があります。
- 4 試験中に問題冊子の印刷不鮮明、ページの落丁・乱丁および解答用紙の汚れ等に気づいた場合は、手を挙げて監督者に知らせてください。
- 5 試験開始と同時に解答用紙の受験番号欄に受験番号を記入してください。
- 6 試験終了後、問題冊子は持ち帰ってください。

問題 I 次の英文を読み、本文に即して設問に答えなさい。 (*印がついている語句には注があります。)

It was almost a century ago that a remarkable new word was introduced into the English language. In 1923, a play by the *Czech dramatist, Karel Čapek, was performed in English for the first time. Its title was *R.U.R.*, and the word was ^(a)*robot*, based on the Czech word *robota*, which literally means 'forced labour'. In Čapek's play, a factory creates human-like robots in order to use them as slaves, but the robots use their artificial intelligence to realize they are being exploited, so they decide to rebel against their human masters, and succeed in destroying them. This dark story shocked its first audiences, and raised deadly serious questions that are still relevant today. Can we create robots that will do our hard work for us cheaply and safely, or will they eventually become so powerful that they will endanger human existence?

Partly to answer just such questions as these, in 1942 the American science professor and fiction writer, Isaac Asimov, presented what he called the "Three Laws of Robotics". First, "a robot may not injure a human being or, through *inaction, allow a human being to come to harm". Second, "a robot must obey the orders given it by human beings except where such orders would conflict with the First Law". Third, "a robot must protect its own existence as long as such protection does not conflict with the First or Second Laws". These simple laws seem perfectly logical and secure – if only we could be sure that they will be applied at all times, in all circumstances, without fail.

The attractive advantages of robots are all too obvious, and in recent decades, various kinds of useful robots have been stepping down from the pages of science fiction and into our lives. In Japan, for example, industrial robots have long been used to manufacture cars. Ever more sophisticated domestic robots are being developed that can obey spoken orders and clean our homes more efficiently than we can. Others can answer almost any general question and instantly provide us with the information we need. Robot pets, imitating dogs or cats, do not require food and never make a mess. In some restaurants, robots stand at the entrance to welcome customers and direct them to their seats. Miniature robots can be used to perform delicate medical operations that would otherwise be difficult for doctors to carry out. In future, robots may be sent into outer space on missions of discovery that (A).

On the other hand, however, the production of advanced robots brings with it a number of serious risks to human society as we know it. As robots take over jobs that humans used to do, unemployment will inevitably rise. Furthermore, we may become over-dependent on robots, so that we will be helpless without them; and as robots' artificial intelligence (now often called AI) increases, without any emotional or moral awareness, it will become more and more difficult for us to keep them under safe control. Like Čapek and Asimov before them, well-known experts such as the English scientist Stephen Hawking and the South

African businessman Elon Musk have warned us that ^(b)the spread of robots, with AI more powerful than human intelligence, could lead to the end of the human race. Already, military establishments around the world are working on ways to develop super-intelligent robots as weapons that can be sent into battle against humans in the event of war – thus violating Asimov's (B) Law. The result may indeed be the mass destruction of our species.

Faced with these life-threatening challenges, what course of action should we humans take? The trend towards using smart robots for warlike purposes must be stopped by international agreement, as soon as possible. Meanwhile, progress in the development of 'socially beneficial robots should cautiously be encouraged. Robots, properly designed and safely programmed to collaborate with us, under strict control, can continue to make our everyday lives easier and help to serve us in highly positive ways. It seems most likely that the future of humanity will be 'd' a robot-assisted society.

注

Czech チェコの、チェコ語 inaction 何もしないこと

【設問】

- 問1 下線部(a)の語は、チェコ語ではもともとどのような意味だったか。日本語で答えなさい。
- 問2 以下の語を並べ替えて、空欄 (A) を完成させなさい。 danger human in lives place would
- 問3 下線部(b)を日本語に訳しなさい。
- 問4 空欄(B)に入るもっとも適切な語を(ア)~(ウ)から選んで、記号で答えなさい。
 - (ア) First (イ) Second (ウ) Third
- 問5 下線部(c)の例を本文の中から2つみつけて日本語で答えなさい。
- 問6 下線部(d)を実現するための条件としてロボットはどうあるべきだと筆者は最終段落で述べているか。日本語で答えなさい。

問題 I 次の英文を読み、本文に即して設問に答えなさい。 (*印がついている語句には注があります。)

It takes remarkably little for children to develop ^(a)in-group preferences once a difference has been recognized. Bigler ran an experiment in three preschool classrooms, where four- and five-year-olds were lined up and given T-shirts. Half the kids were given blue T-shirts, ^(b)half red. The children wore the shirts for three weeks. During that time, the teachers never mentioned their colors and never again grouped the kids by shirt color. The teachers never referred to the "Blues" or the "Reds." Bigler wanted to see what would happen to the children naturally, once color groupings had been established.

The kids didn't *segregate in their behavior. They played with each other freely at *recess. But when asked which color team was better to belong to, or which team might win a race, they chose their own color. They liked the kids in their own group more and believed they were smarter than the other color. "The Reds never showed hatred for Blues," Bigler observed. "It was more like, 'Blues are fine, but not as good as us." When Reds were asked how many Reds were nice, they'd answer "All of us." Asked how many Blues were nice, "Some." Some of the Blues were mean, and some were *dumb—(A) the Reds.

Bigler's experiment seems to show how children will use whatever you give them to create divisions—seeming to confirm that race becomes an issue only if we make it an issue. So why does Bigler think it's important to talk to children about race, as early as age three?

Her reasoning is that kids are developmentally prone to in-group favoritism; they're going to form these preferences on their own. Children categorize everything from food to toys to people at a young age. However, it takes years before their *cognitive abilities allow them to successfully use more than one attribute to categorize anything. In the meantime, the attribute they rely on is ^(c)that which is the most clearly visible.

Bigler contends that once a child identifies someone as most closely resembling himself, the child likes that person the most. And ^(d)the child extends their shared appearances much further—believing that everything else he likes, those who look similar to him like as well. Anything he doesn't like thus belongs to those who look the least similar to him. The spontaneous tendency to assume your group shares characteristics—such as niceness, or smarts—is called *essentialism*. Kids never think groups are random.

We might imagine we're creating color-blind environments for children, but differences in skin color or hair or weight are like differences in gender—they're plainly visible. We don't have to label them for them to become *salient. (e) Even if no teacher or parent mentions race, kids will use skin color on their own, the same way they use T-shirt colors.

[中略]

Dr. Phyllis Katz, then a professor at the University of Colorado, led one such study—following 100 black children and 100 white children for their first six years. She tested these

children and their parents nine times during those six years, with the first test at six months old.

How do researchers test a six-month-old? It's actually a common test in child development research. They show babies photographs of faces, measuring how long the child's attention remains on the photographs. Looking at a photograph longer does not indicate a preference for that photo, or for that face. Rather, looking longer means the child's brain finds the face to be out of the ordinary; she stares at it longer because her brain is trying to make sense of it. So faces that are familiar actually get shorter visual attention. Children will stare significantly longer at photographs of faces that are a different race from their parents. Race itself has no ethnic meaning, *per se—but children's brains are noticing skin color differences and trying to understand their meaning.

Po Bronson & Ashley Merryman, Nurture Shock

注

segregate 分け隔でする recess 休み時間 dumb(アメリカ英語で)愚かな cognitive 認知の salient 顕著な per se それ自体は

【設問】

- 問1 下線部(a)はどのようなことか。 $(r) \sim (p)$ から選んで、記号で答えなさい。
 - (ア) 集団内にいることを好むこと
 - (イ) 集団内で仲間から好まれること
 - (ウ) 集団内の特定のメンバーを好むこと
- 問2 下線部(b)を、省略されている語を補って完全な英語の文にしなさい。
- 問3 空欄(A)に入るもっとも適切な語句を(ア)~(エ)から選んで、記号で答えなさい。
 - (?) and so were (\land) as well as () but not (\bot) instead of
- 問4 下線部(c)の例を本文の中から1つみつけて日本語で答えなさい。
- 問5 下線部(d)は具体的にはどのようなことか。日本語で答えなさい。
- 問6 下線部(e)を日本語に訳しなさい。
- 問7 最終段落で述べられている実験において、子供が写真を長く見る場合、それ はなぜか。日本語で答えなさい。

問題Ⅲ 以下の文を英語に訳しなさい。

問1 このかばんは見かけよりもずっと重いです。

問2 日に日に太陽の光が増していて、春の訪れを感じます。