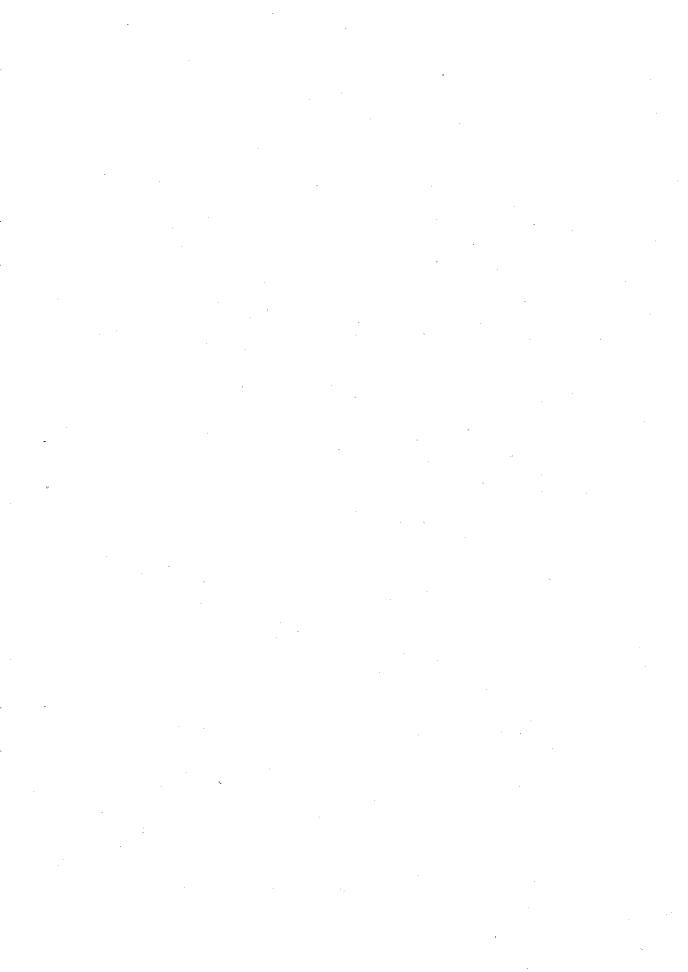
E 6 英 語

この冊子は、英語の問題で1ページより13ページまであります。

〔注 意〕

- (1) 試験開始の指示があるまで、この冊子を開いてはいけません。
- (2) 監督者から受験番号等記入の指示があったら、解答用紙に受験番号と氏名を記入 してください。また、解答用マークシートに受験番号と氏名を記入し、さらに受験 番号をマークしてください。
- (3) 解答は、所定の解答用紙に記入したもの及び解答用マークシートにマークしたものだけが採点されます。
- (4) 解答用マークシートについて
 - ① 解答用マークシートは、絶対に折り曲げてはいけません。
 - ② マークには黒鉛筆(HBまたはB)を使用してください。 指定の黒鉛筆以外でマークした場合、採点できないことがあります。
 - ③ 誤ってマークした場合は、消しゴムで丁寧に消し、消しくずを完全に取り除いたうえ、新たにマークしてください。
 - ④ 解答欄のマークは、横1行について1箇所に限ります。2箇所以上マークすると採点されません。あいまいなマークは無効となるので、はっきりマークしてください。
 - ⑤ 解答用マークシートに記載されている解答上の注意事項を,必ず読んでから解答してください。
- (5) 試験開始の指示があったら、初めに問題冊子のページ数を確認してください。 ページの落丁・乱丁、印刷不鮮明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。
- (6) 問題冊子は、試験終了後、持ち帰ってください。





1 イギリスの大学における一般教養科目(liberal arts)の教育に関する次の英文を 読み、設問に答えなさい。なお、*印を付した語には本文末尾に注が与えられて いるので参考にしなさい。 (60点)

Until very recently, students in Britain who wanted to study more than one or two subjects at college received some blunt advice: "Go west" — to the United States or Canada, where the classical tradition of a broad-based humanistic* education has long flourished in liberal arts colleges. Despite their European origins, the liberal arts have been in continual retreat on the Continent, edged out by programs devoted to a single discipline like economics or history.

In Britain, the more traditional private schools have carried on the classical approach—many still require students to study both Latin and ancient Greek—but the British system, too, is one of relentlessly (1) focus. Students, who may take a dozen different subjects at age 14, are expected to filter down to just three or four by age 16 in preparation for applying to study a single subject at university.

There are a few ('7): Students studying natural sciences at Cambridge or Durham University are allowed to take courses across the sciences in their first two years before choosing one for their final-year exams. Oxford offers a number of joint honors degrees allowing students to combine two disciplines, like history and economics or philosophy and physics. The University of Edinburgh offers a similar program combining law and a number of other disciplines.

But anyone who wanted to study both the arts and the sciences, or to take courses across a range of disciplines, had to leave the country, until now. This past autumn, King's College London and University College London both admitted their first cohort* of undergraduates to new programs in the liberal arts. The University of Exeter is set to begin offering a similar program next autumn. (オ) are the University of Birmingham and the University of

Kent in Canterbury, whose courses will each take four years to complete, making them even more like a U.S. undergraduate degree.

Aaron Rosen, deputy director of the liberal arts program at King's, said the resemblance was entirely intentional. "All of us who teach on the program here are either American or people who have an American component in our own education," said Dr. Rosen, who did his undergraduate studies at Bowdoin College in his native Maine and then (†) a master's and a doctorate from Cambridge in theology. A specialist in Jewish art, a field he said "most people would say doesn't exist," Dr. Rosen said his colleagues' familiarity with the American system "gives us the opportunity to correct some of the flaws that are endemic* in the U.S."

The liberal arts in the United States, he said, "got drunk on their own eccentricity." "When I was at Bowdoin it seemed like the departments competed to offer the most narrow, irrelevant courses," he said. "This gives us a chance to dial it back to fundamentals."

Each year, all students on the King's College program will be required to take one core course—the first one, which looks at London itself, combining history, literature, art and geography, is to be taught by Dr. Rosen. Students will also be required to study a modern language, to choose a major at the end of their first year and to spend part of their second year abroad.

"There are trade-offs with the traditional single-subject approach in terms of the number of courses you can take," said James E. Bjork, head of King's College's liberal arts program. But Dr. Bjork, who teaches European history, said that "we think it makes you a better historian, for example, if you spend three years having done other things than just history. (¬)."

For Carl Gombrich, who directs the University College London program, a broader perspective is second nature. With degrees in mathematics, physics and philosophy, he was an opera singer before becoming an academic. He is also the grandson of Ernst Gombrich, the art historian whose work he cites as the inspiration for his efforts to reach across disciplines. "My grandfather was

a brilliant psychologist. Yet he never took an exam in psychology. Instead he said, '(>).' He was a classic interdisciplinarian."

At University College London, core courses, including modules* on quantitative methods, approaches to knowledge, language and qualitative thinking, form half the program. "We teach all our students the tools of coding. We teach them all how to understand and use statistics," Dr. Gombrich said. The other half of core courses is devoted to major pathways: cultures, health and the environment, sciences and engineering, and societies.

Perhaps most audacious* is the University College London program's ambition to bridge the chasm* dividing what the writer C. P. Snow once described as "the two cultures" of science and the humanities.

All applicants will be required to have A-levels, the single-subject exams that serve for both high school graduation and university admissions, in both the humanities and in math or a science. All British universities require A-levels in at least three subjects. Students who study a science as their major will have to study a humanities minor, and vice versa*. "We're determined to be just as science-y as we are arts-y," Dr. Gombrich said. Graduates will receive a bachelor of arts and sciences degree.

"We've taken a big risk," Dr. Gombrich said, acknowledging that defenders of the traditional single-subject approach might argue the new program lacks depth.

"But that's a rather British view of what depth is," he said. "If you study psychology, half your courses might be on topics you're not interested in. Wouldn't it be better to do a module on child health, or linguistics or embryology*?"

So far both programs seem popular. "We've exceeded our expected applications by 25 percent," Dr. Gombrich said, adding that applications for next year were up by a further 10 percent.

Dr. Gombrich said he would know the program was a success if, at the end of their three years, liberal arts students did as well or better on their

final subject exams as University College London students taking a single subject. And if that calls into question the whole British model, the university's president, Malcolm Grant, said he did not mind.

"I've always felt it was a mistake to make students specialize at such a young age," he said in an interview. "At 15, how many people know they want to be scientists — or lawyers?"

"This program combines the best of the British model, where you progress from year to year, with the fairly significant amount of choice you have in America," Dr. Grant said. "If we can continue to attract the smartest students, as we have done in the first year, I think this will become the principal mode of entry into this university," he said.

注: humanistic 人文学の; cohort 集団; endemic 特有の; modules 履修単位; audacious 大胆な; chasm 大きな隔たり; vice versa 逆もまた同じ; embryology 発生学

- (1) 下線部(ア)の表す内容としてもっとも適切なものを次の1~4から選び、解答 用マークシートにマークしなさい。
 - 1 A liberal education has been considered inferior to a science-based education in Europe.
 - 2 Education in the humanities has been advanced in European countries.
 - 3 The presence of liberal arts has been diminished in European countries.
 - 4 Topics about a humanistic education have been discussed again and again in Europe.
- (2) 空所(イ)に入るもっとも適切な語を次の1~4から選び、**解答用マーク** シートにマークしなさい。
 - 1 limited 2 narrowing 3 strict 4 tight
- (3) 空所(ウ)に入るもっとも適切な語を次の1~4から選び、解答用マークシートにマークしなさい。
 - 1 exceptions 2 extensions 3 possibilities 4 restrictions

- (4) 下線部(工)の表す内容としてもっとも適切なものを次の1~4から選び、**解答** 用マークシートにマークしなさい。
 - 1 Britain had no place to try experiments across several areas on campus at the same time.
 - 2 Education programs in Britain were tightly connected to programs in other countries.
 - 3 If students wanted to take more than one subject, studying abroad was a basic requirement to get a degree.
 - 4 The British education system had a curriculum that gave too much weight to specialization for students to gain a broader education.
- (5) 空所(オ)に入るもっとも適切な語を次の1~4から選び、**解答用マーク**シートにマークしなさい。

1 Little 2 Only 3 So 4 There

- (6) 下線部(力)に関して、どのような意味において entirely intentional であるのか。 本文の内容に即して具体的にまとめ、解答用紙に日本語で記入しなさい。
- (7) 空所(+)に入るもっとも適切な語を次の $1 \sim 4$ から選び、解答用マークシートにマークしなさい。

1 accepted 2 awarded 3 earned 4 offered

- (8) 下線部(ク)の表す内容としてもっとも適切なものを次の1~4から選び、**解答** 用マークシートにマークしなさい。
 - 1 A liberal education in the U.S. was blind to its unusual curriculum.
 - 2 Education in the humanities in the U.S. was passionately devoted to being unique.
 - 3 Liberal arts in the U.S. were made up of a great number of specific subjects.
 - 4 Universities in the U.S. were proud that they strove to revise a liberal education in an orthodox way.

- (9) 下線部(ケ)の表す内容としてもっとも適切なものを次の1~4から選び, 解答 用マークシートにマークしなさい。
 - 1 A liberal education in the U.S. enables us to understand basic principles of educational administration.
 - 2 Liberal arts courses can return to focusing on basic general content.
 - 3 Universities in the U.S. call for an explanation of why liberal arts are absolutely essential.
 - 4 We realize that a humanistic education in the U.S. is formed depending crucially on an elementary educational system.
- (10) 空所(コ)を補うのにもっともふさわしい英文を完成させ、その番号を上から順に**解答用マークシート**にマークしなさい。なお、文頭の文字も小文字にしてある。

1 and 2 a sense of 3 gives you 4 it

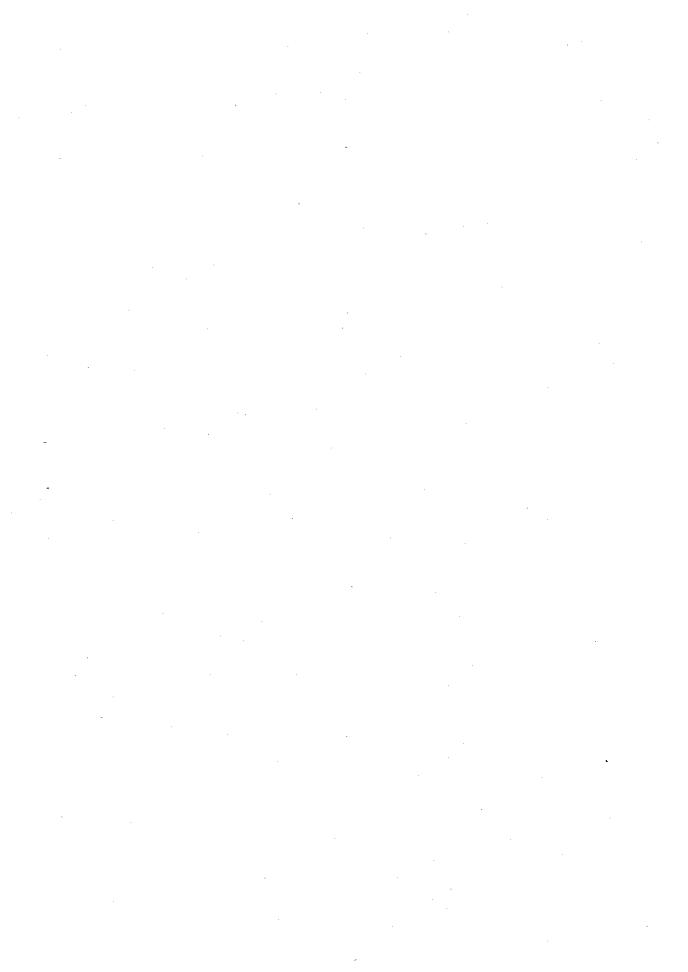
5 to a subject 6 what isn't 7 what's unique

- (11) 下線部(サ)の表す内容としてもっとも適切なものを次の1~4から選び, 解答 用マークシートにマークしなさい。
 - 1 Excellent prospects help him understand the natural world.
 - 2 For him, there is another world that is based on fortune-telling.
 - 3 He thinks that to acquire a deeper knowledge of a specific subject is the most important thing.
 - 4 His wider outlook comes easily.
- (12) 空所(シ)を補うのにもっともふさわしい英文を完成させ、その番号を上から順に**解答用マークシート**にマークしなさい。なお、文頭の文字も小文字にしてある。

1 about 2 how 3 let 4 perceive things

5 think 6 us 7 we

- (13) 下線部(ス)について、プログラムの成功が分かる条件を本文の内容に即して具体的にまとめ、解答用紙に日本語で記入しなさい。
- (14) 下線部(七)の if が表す意味および用法としてもっとも適切なものを次の $1 \sim 4$ から選び、解答用マークシートにマークしなさい。
 - 1 Even if I am wrong, you are at least not absolutely right.
 - 2 If I did not write it down, I would forget it.
 - 3 If that is the case, I will not press the matter.
 - 4 She asked if it was true.
- (15) 本文の内容と一致するものには1を,一致しないものには2をそれぞれ**解答** 用マークシートにマークしなさい。
 - 1 It was not until recent years that the focus of education was on the liberal arts in Europe.
 - 2 Some claim that education with a single discipline promotes an advanced knowledge.
 - 3 The liberal arts in Britain are no more refined than those in the U.S.
 - 4 University College London is a pioneer in the field of a liberal education in that it combines science with culture.



Read the following interview transcript between philosopher Sam Harris and researcher Kate Darling, and answer the questions that follow. Notes are given at the end of the transcript on the words marked with *. (40 点)

Sam: Let me properly introduce today's guest. Kate Darling is a leading expert in robot ethics. She's a researcher at the Massachusetts Institute of Technology (MIT) Media Lab, where she explores the emotional connection between people and life-like machines and seeks to influence technology design and public policy. Kate, thanks for coming.

Kate: I'm delighted to be here.

Sam: I first learned of you in a *New Yorker* article on robot ethics, and this is an area that almost doesn't exist. (A)?

Kate: Well, robot ethics is a new field, and it sounds like science fiction. However, about five-and-a-half years ago I started working at the media lab at MIT where there are a bunch of roboticists. We started talking and because of my background in policy, I was coming up with questions that they hadn't quite encountered before and we realized together there were some questions worth exploring.

Sam: Aside from the question about (**B**), which is a long way away, you focus on a far more immediate issue in human-robot relationships, which is related to the idea of the way we treat robots.

Kate: Robots are super interesting because they combine physicality and movement in a way that we will automatically project intent onto. It's so interesting to see people treat even the simplest robots like they have agency even if it's totally clear to them that it's just a machine. I think there's a biological piece to it that's even deeper and really fascinating to me. One of the things that we've noticed is that people will have empathy for robots and be really (1) when asked to destroy a robot or do something mean to it.

Sam: (C)? Obviously, it is an artificial situation to hand people a robot

that is cute and then tell them to mistreat it, but there are robots being used—(D) that you're giving to people with dementia*? Also, does such contact with these surrogates* for affection pose any ethical concern, or is it just if it works on any level then it is intrinsically good?

Kate: Well, intuitively, it's a little creepy* when you first hear that we're using these baby seal robots with dementia patients and we're giving them the sense that they're nurturing this thing that isn't alive. However, if you look at what these robots are intended to replace, which is animal therapy, it's interesting to see that they can have a similar effect, and no one complains about animal therapy for dementia patients. With the baby seal robot, if we can use that as an alternative to medicine for calming distressed people, I'm really not so sure that that's an (I) use of robots.

Sam: It's interesting because there's this basic fact where any system that seems to behave autonomously—doesn't have to be humanoid; it begins to kindle our sense that we are in a relationship to another which we can find cute; or whatever we feel about it, it pushes our intuition in the direction of "this thing is a being" in its own right. I believe you have a story about how a land mine* robot that was spider-like, could no longer be used because it was getting its legs blown off and this was thought to be disturbing even though we're talking about a robot that isn't even close to being the sort of thing you would expect people to attribute consciousness to.

Kate: Yes, and then of course with design you can really start influencing that, right?

Sam: (E)? What's here now and what do you know about that's immediately on the horizon?

Kate: Well, we've had robots for a long time, but robots have mostly been in factories, in manufacturing lines and assembly lines*, behind the scenes.

Now we are seeing robots creep into all of these new areas, such as the

military, hospitals, transportation systems, and even households. I think we're just seeing an increase of robots coming into areas of our lives where we are actually going to be interacting with them in all sorts of different fields and areas.

Sam: So (ク)?

Kate: I don't think there is any clear line to distinguish these robots. It is helpful to think about this in terms of the effect they have on people.
Depending on (F) people will become emotionally attached to that as well. That's happened. By the way, we don't even have a universal definition of what a robot is.

Sam: Some of the robots I picture on an assembly line are either fixed in place with arms that are constantly moving and picking things up, or they're moving on tracks, but they're not roving around in 360 degrees of freedom. I trust that there are other robots that do that in industry as well.

Kate: That's a very good point. One question is, you know, is the inside of a dishwasher a robot? (G)? It's basically what the factory robots are doing and we call those robots but we don't call the dishwasher a robot.

Sam: There's just this continuum of machines with greater and greater independence from human control and greater complexity of their routines and there's no clear stopping point.

Kate: That's right. (\exists) , the more people will attribute agency to them, and possibly become attached to them.

Sam: Well listen, thank you Kate. I love talking about this and these issues are obviously not going away so when things get more interesting, I hope to get you back on the podcast and we can figure out what to do about it.

Kate: That would be fun. Thank you so much Sam.

注: dementia 認知症; surrogate 代わりになる物; creepy ぞっとする; land mine 地雷; assembly lines 流れ作業列

- (1) Which of the following best fits into the blanks from (A) to (G)? Select the number of the best answer for each and mark your answer on the mark sheet. Note that the initial letter is not capitalized even if the answer comes at the beginning of the sentence.
 - 1 are there more robots in society than most of us realize
 - 2 could you tell us how you got into this
 - 3 does this pose any ethical concern
 - 4 how a factory robot is designed
 - 5 isn't it like a baby seal robot
 - 6 is that movement autonomous enough
 - 7 whether one day robots will become conscious
- (2) For the underlined word in (7), which of the following is closest in meaning? Select the number of the best answer and mark your answer on the mark sheet.
 - 1 control of physicality and movement
 - 2 freedom of choice and actions
 - 3 power of calculating and imitating
 - 4 regulation of feelings and empathy
- (3) Which of the following best fits into the blank in (1)? Select the number of the best answer and mark your answer on the mark sheet.
 - 1 uncomfortable

2 understandable

3 unemotional

4 unexpected

- (4) For the underlined word in (ウ), which of the following underlined words is closest in meaning and usage? Select the number of the best answer and mark your answer on the mark sheet.
 - 1 It's a mean trick to play on someone.
 - 2 I want to buy her something really special, if you know what I mean.
 - 3 She walked briskly through the mean and dirty streets.
 - 4 The mean annual rainfall was 852 mm.

- (5) Which of the following best fits into the blank in (I)? Select the number of the best answer and mark your answer on the mark sheet.
 - 1 accurate 2 effective 3 instant 4 unethical
- (6) For the underlined clause in (4), which of the following is closest in meaning? Select the number of the best answer and mark your answer on the mark sheet.
 - 1 We gravitate towards empathizing with these robots as a moral obligation.
 - 2 We instinctively feel that it is a conscious entity regardless of outside influences.
 - 3 We naturally believe that these things should have rights.
 - 4 We sense that such beings will continue in the correct direction.
- (7) For the underlined phrase in (力), which of the following is closest in meaning? Select the number of the best answer and mark your answer on the mark sheet.
 - 1 at hand
 - 2 at the equator
 - 3 not a far distance away
 - 4 outside the scope
- (8) For the underlined phrase in (‡), which of the following is closest in meaning? Select the number of the best answer and mark your answer on the mark sheet.
 - 1 eventually fill or cover a place
 - 2 gradually come into use without being realized
 - 3 grow or climb up along a particular place
 - 4 move slowly and quietly

(9) For the blank in (2), arrange the following in the right order so that the meaning matches the content, and mark your answer on the mark sheet. Note that each choice can be used only one time.

1 classes

2 is

3 of robots

4 the boundary between

5 these different

6 what

- (10) For the underlined sentence in (7), what is implied about robots? Select the number of the best answer and mark your answer on the mark sheet.
 - 1 A dishwasher isn't a robot because it is a self-contained unit.
 - 2 Autonomous movement has no bearing on what makes something like a robot.
 - 3 Factory robots are considered more "robot-like" than dishwashers because they do more important work.
 - 4 The way in which we define and label robots is inconsistent and unclear.
- (11) For the blank in (¬), arrange the following in the right order so that the meaning matches the content, and write your answer on the answer sheet. Note that one additional word must be added to complete the part.

 [and / autonomous / complex / become / more / they]
- (12) Which of the following best describes the attitudes the speakers express about the future of robotics? Select the number of the best answer and mark your answer on the mark sheet.
 - 1 inquisitive and interested
 - 2 optimistic and assured
 - 3 shocked and dismayed
 - 4 uneasy and disturbed

