北海道大学　前期　医学部 歯学部

H—27　Ⓐ

英　　語

12：30～14：00

解　答　上　の　注　意

1. 試験開始の合図があるまで，この問題紙を開いてはならない。
2. 問題紙は 16 ページある。
3. 解答用紙は | 解答用紙番号 / 英語 0—1 | と | 解答用紙番号 / 英語 0—2 | の 2 枚である。
4. 解答用紙は 2 枚とも必ず提出せよ。
5. **受験番号および座席番号(上下 2 箇所)は，監督者の指示に従って，すべての解答用紙の指定された箇所に必ず記入せよ。**
6. 解答はすべて解答用紙の指定された欄に記入せよ。
7. 必要以外のことを解答用紙に書いてはならない。
8. 問題紙の余白は下書きに使用してもさしつかえない。

1 次の英文を読んで，設問に答えなさい。

Comedies are popular on television. Examples include such programs as "Friends" and "The Simpsons." One reason that these television comedies are funny is because they use an effective mix of jokes. One kind of joke in these television comedies is called a "running gag." A running gag is a funny situation or line of dialog that happens repeatedly in a comedy. This repetition can take place within a single episode, from one episode to the next, or both.

Running gags actually (1) started to be used prior to the widespread adoption of television, in radio comedies during the "golden age" of radio. This era lasted from around the 1930s until the 1950s. One of the most popular of these shows was called "Fibber McGee and Molly." This radio comedy was about a husband and a wife and was especially famous for one running gag. In this running gag, when the husband, Fibber McGee, opened his closet to find something, many things would fall out every time. The audience could know that these things were about to fall out because Fibber would announce in a loud voice that he was about to open his closet. Obviously, given that this was a radio comedy, the audience could only hear what was happening. When Fibber opened his closet, a variety of loud sounds could be heard as if many different types of objects were falling to the floor. The fact that people could only hear what was happening was an advantage (2) rather than a limitation. The power of the imagination increased the effectiveness of this particular gag.

Although television comedies became more popular than those on the radio during the 1950s, they continued to use many of the same techniques as their radio predecessors. One of these was the running gag. Some good examples can be found in a 1970s television comedy called "Happy Days," a very popular show about a group of friends in high school. This television comedy used many running gags with most of them being about one of the main characters, a young man by the name of Arthur Fonzerelli. He was a very cool individual who wore a leather coat and rode a powerful motorcycle. The running gags

used in this television comedy were often connected to his reputation for being cool. For example, when he passed a mirror, he would take his comb out of his pocket to touch up his hair. But when he looked at himself in the mirror, he put his comb back quickly every time because he thought he was perfect. (3)It was as if no further improvement to his appearance could be made; he was so cool that not even a single hair was ever out of place. Also, looking in the mirror, he would put his thumbs in the pockets of his pants like a model posing for the cover of a magazine. This body language made it funnier because he looked very confident and proud of himself. In another running gag, he could fix broken toasters or cars just by tapping on them briefly or simply by snapping his fingers. This also demonstrated his cool personality and was funnier because of (4)its impossibility. It was as if a person could be so cool that they could even influence machines.

(5)Running gags seem to work for different reasons. First, they are very humorous. They also work because people like familiar things. People can feel satisfied when something happens predictably, thus meeting their expectations. The running gags presented here occurred repeatedly in a number of episodes of these programs. Of course, if the same running gags are used too much, they run the risk of becoming boring. For this reason people who write television comedies have to be careful not to rely upon them too extensively.

問 1　下線部(1)の語が使われている理由を，(A)～(D)の中から選び，記号で答えなさい。

(A) Television was very popular from the 1930s to the 1950s.

(B) The "golden age" of radio lasted 20 years rather than continuing to the present.

(C) Readers may be surprised to learn that running gags started in radio comedies.

(D) Both the Fibber McGee and the Happy Days running gags are surprisingly similar.

問 2　下線部(2)は，何が，どういう理由で，an advantage なのかを日本語で説明しなさい。

問 3　下線部(3)を日本語に訳しなさい。

問 4　下線部(4)の語句は何があり得ないのか，日本語で説明しなさい。

問 5　下線部(5)の文において，その「理由」として最も適切なものを，(A)～(D)から選び，記号で答えなさい。

(A) They are cool and frightening at the same time.

(B) They combine our love of funny events with the comfort of predictability.

(C) They are packed with the kind of sounds one hears when many things fall to the floor.

(D) They avoid the risk of becoming boring by changing the writers.

問 6　本文の内容と<u>一致するもの</u>を，(A)～(G)から 3 つ選び，記号で答えなさい。

(A) Television comedy writers borrowed the idea of running gags from radio comedies.

(B) The increasing popularity of radio has negatively impacted the popularity of television.

(C) A running gag can be defined as a joke or a humorous situation that is repeated.

(D) The television show called "Happy Days" was responsible for the decline of radio comedies.

(E) The very thing that makes running gags effective — repetition — can also make them lose their effectiveness.

(F) Running gags are no longer an important part of comedies.

(G) Arthur Fonzerelli in the television comedy "Happy Days" was a fashion model.

問題は次ページに続く

2 次の英文を読んで，設問に答えなさい。

Fifty years ago, it would have been considered science fiction to talk about booking a flight to space, but it is now becoming a reality. Virgin Galactic, the first ever company to offer public flights to the outer edge of the earth's atmosphere, is already open for business. Despite this impressive advance, it is still tempting to view the space tourism business as having no real effect on society in general. However, this new era of commercial travel may have a wider impact than we might have at first imagined.

One immediate effect will be that the enormous funds required for the research and development of spacecraft will no longer be coming solely from taxpayers. Justifying the spending of billions of taxpayers' dollars on government space programs has always been a struggle for national leaders. (1) The introduction of commercial space flight will shift the focus (a) abstract claims of advancing humanity (b) the more concrete demands of customer satisfaction. This could be a significant development considering the amount of private sector money that could be invested in space technology and travel in the future. As a result, we could start to see a whole range of benefits.

One such benefit could be related to the commercial flight industry in general. The ability to repeat consistently a large number of flights to the edge of our atmosphere could open the door for a radical development in air travel. If next-generation jets were capable of leaving and re-entering the atmosphere, it may even one day be possible to fly from Japan to the United Kingdom in a couple of hours. If research relating to space tourism were to have (2) this kind of impact on the way we travel, then it would be hard to deny that the implications would be huge.

(3) It is also likely that this increase in private investment will result in a large increase in the number of skilled workers that will be required, as well as

the development of new areas of research. There could well be a lasting impact on the field of engineering. Another result could be the significant expansion of the list of career options that are currently available to university graduates within this field and other related areas.

There may also be a more gradual, abstract effect (4) that in time could prove to be the most important of all. Commercial space flight could subtly shift the way we view the world. It is possible that as more and more key figures in our society are exposed to the vastness of space, there could be a gradual weakening of the sense of national boundaries. Koichi Wakata, a recent commander of the International Space Station, observed in an interview how his experience in space produced a "change in scope as the days pass". He talked about how he went from taking pictures of his hometown to taking pictures of Japan, then Asia, and finally "our planet in general".

There is, however, one problem with these points: they depend on the assumption that this bold, new venture will be successful. There is one simple but important factor that could have a serious negative impact on the possibility of such success. News of an automobile accident hardly affects our desire to use cars because there are so many on our roads, but news of a flight disaster often disturbs us more. The unfolding story of Malaysia Airlines Flight 370's disappearance, ((5) c), still has the power to discourage future passengers in a way that a car accident could not. Any vehicle or craft can encounter problems, and spacecraft are arguably the most complex craft in existence, operating in the most challenging environment. Imagine what effect it will have on space tourism if just one of those commercial flights ends in disaster.

It may be difficult to deny that space tourism could well have a significant impact on our lives in many different ways, but this new venture may also be dangerously fragile. One of the most well known of the Greek myths is the story of Icarus. His father constructs wings that allow him to fly, but he

warns his son not to fly too close to the Sun. Icarus ignores the warning and ends up falling to his death. Perhaps the greatest attraction of commercial space flight will always be its principal weakness: it is offering us the possibility of flying too high.

問 1 下線部(1)で，空欄（ a ）と（ b ）に入る適切な英語をそれぞれ1語記入しなさい。

問 2 下線部(2)が指す内容を日本語で答えなさい。

問 3 下線部(3)を日本語に訳しなさい。

問 4 下線部(4)が指す内容として最も適切なものを，(A)～(D)の中から1つ選び，記号で答えなさい。

(A) Commercial space flight would increase the sense of national borders.

(B) Leaders in our society would get in touch with the vastness of space.

(C) There could be a change in the way our leaders look at the world.

(D) A commander of the International Space Station could take pictures of the solar system.

問 5 下線部(5)で，空欄（ c ）に入る最も適切な語句を次の(A)～(E)から選び，記号で答えなさい。

(A) for example　(B) in addition　(C) in contrast

(D) however　(E) moreover

問 6　本文の内容と<u>一致しないもの</u>を，(A)~(F)から 2 つ選び，記号で答えなさい。

(A) There has been a remarkable advancement in space tourism, which is likely to influence our society more than what we originally thought.

(B) Government leaders have to justify the spending of a large amount of taxpayers' money to introduce commercial space flight.

(C) People will begin to invest in the research and development of space technology and travel, which will require enormous amounts of money.

(D) With the advancement of the commercial flight industry, the way we travel across the globe could undergo a drastic change.

(E) The space travel business could be viewed as high-risk; one fatal accident may be enough to make future passengers very cautious of space flights.

(F) The story of Icarus implies that commercial space flight will not be worth the enormous funds required for its development.

3 Read the following passage.

Suzanne lives with her five children in what many would describe as one of the rougher neighborhoods in West Bromwich, Birmingham. Just like any other British family, she makes sure each morning that her three sons and two daughters are up early and prepares breakfast for them. However, the difference is that she doesn't then send them off to school. Instead, she sits down with them and teaches them in the home using teaching materials that she has bought from a Christian organization.

Homeschooling can be defined as educating one's children at home rather than sending them to a public or private school. These children may still occasionally visit a school in order to take particular exams or attend homeschooling conferences and workshops, but the majority of their day-to-day education takes place in the home.

Historically, homeschooling was very common due to the high cost of sending children to schools or hiring tutors. School attendance became widespread in the eighteenth century, and as a result the popularity of homeschooling began to decline. However, in the last forty years it is once again gaining in popularity in many countries, including the United Kingdom and the United States.

In a homeschooling situation, it is often the mother that is in charge of the children's education. Despite the added responsibility of teaching as well as taking care of the children, these mothers are often strong believers in its benefits. Their motivations for withdrawing their children from schools can include reasons relating to a particular religious faith or dissatisfaction with the quality of mainstream education. Studies have confirmed that homeschooled children often achieve higher grades in exams than other children, even in cases involving unqualified parents.

In Japan, homeschooling remains a very complex issue. There are many

legal difficulties that parents face when deciding whether to withdraw their children from school.

Answer questions A to C **in English**. You may use words and ideas from the text, but you **must not** copy complete sentences.

Question A

Complete the following sentence.

This passage implies that homeschooled children may avoid social isolation by means of _____.

Question B

What are the two reasons in the text for parents' withdrawing their children from school? Complete the following sentence.

Some parents decide to homeschool because they _____ _____, or because they _____ _____.

Question C

Some people may argue that homeschooling should be encouraged in Japan. Write 70 — 100 words which argue **against** that idea. Include at least two reasons that support your argument.

4 Read a transcript of the radio program. Then read the passage that mentions the key points raised in the program. The passage contains 12 blanks. For each blank, from among 4 phrases choose the best word or phrase that matches what was stated or implied in the program. Write on your answer sheet the letter A, B, C, or D corresponding to your choice.

Hugel: Welcome to National Science Radio. I'm your host Rick Hugel. On today's show, we have three experts in ecology: Dr Bruce Lowerre is an ant scientist, Dr Jared Bernstein is a squid biologist, and Dr Christina Grandbois is an ecological economist. Let's start with the definition of ecology. Dr Grandbois?

Grandbois: Each and every organism interacts with other living and non-living things. Ecology studies the relationship between life forms and their environment.

Hugel: We're part of that, right?

Grandbois: Humans have a strong impact on the planet. One way ecologists measure the impact of a given species is to measure their biomass, that is, the total weight of all individuals of the species. I'd like to invite Dr Lowerre and Dr Bernstein to guess the biomass of all squid and ants on earth relative to that of humans. Dr Lowerre?

Lowerre: Wow. I know nothing about squid. I'll take a wild guess. Half?

Bernstein: Ha-ha. But I shouldn't laugh when I've got no clue either. I'd say 10 percent.

Grandbois: The correct answer is that probably the biomass of humans, squid, and ants are roughly the same. I say *probably* because we're never sure exactly.

Hugel: Never sure because. . . ?

Lowerre: We don't know how many individuals there are.

Bernstein: Or how many species there are. We're discovering something all the time.

Lowerre: Which reminds me. I heard they found a giant squid in New Zealand, and built a museum for it?

Bernstein: That was for a colossal squid. They're different species. They both live in the deep, dark ocean, and have eyes the size of basketballs. The colossal squid is almost twice as heavy as the giant squid.

Hugel: And the total weight of all squid on the planet equals that of all humans on earth?

Bernstein: That's right. And squid biomass is rising, because the oceans are warmer, and more plankton are growing. But I didn't know that for every one of us, there are enough ants that weigh the same.

Lowerre: For an average person, there are 20 billion of them. Ants and other social insects such as termites, wasps, and bees together make up about 75 percent of all insect biomass. They're successful and diversified. Do you know how many queens there are in an ant nest?

Hugel: Isn't there just one?

Lowerre: Yes and no. Some nests have no queen. You see, ant nests don't necessarily begin with a lone queen digging a hole and laying eggs. Sometimes, a large group of worker ants decide to move out and find a new home. The group may wait several months before they get a new queen, perhaps adopting a queen that drops by for a visit.

Grandbois: So the worker ants work without a queen? I wouldn't work when my boss wasn't looking!

Hugel: Ha-ha! Me neither. So the fable about the ant and the grasshopper is true?

Lowerre: Ants aren't as industrious as we suppose they are. Some ants are lazy, just like us. In fact, almost every species has inactive individuals. Lions rest for 80 percent of the day. Ants too.

Bernstein: But if nobody worked, wouldn't the community die?

Lowerre: The colony — that's what ant communities are called — has both hard-working and lazy ants. Somebody did an experiment. They color-coded each ant, watched them, and separated the hard workers from the lazies. Imagine what happened.

Hugel: The hard workers thrived and the lazies died.

Lowerre: After being separated, some of the hard workers became lazy, and some of the lazies started to work. Both colonies turned out the same!

Hugel: That's fascinating. But going back to squid, Dr Bernstein, wouldn't a huge squid feed an army?

Bernstein: I wish. Giant and colossal squid are thrown back to sea. There's no market for them.

Hugel: Then why catch them in the first place?

Grandbois: I might be able to answer that. Fishermen are searching for fish in the deep sea because we've overfished the shallow waters.

Bernstein: Yes. The lack of natural enemies allows the squid population to grow. But overall, we're running out of fish.

Grandbois: Fish are getting smaller too. Tourists who go to Florida to fish take pictures of the biggest ones they catch. Pictures taken in the 50s show lots of long, fat fish, some as big as you. But the fish in the pictures taken in the last several years are baby-sized. The future doesn't look too bright.

Hugel: Thank you, professors. On next week's program, we'll talk about medieval medicine. Thanks for listening to National Science Radio.

Ecologists study how organisms interact with their environment. A species' biomass (the total weight of the species) indicates to what extent that species dominates its ecosystem. The total biomass for most species is (1) known. Based on current estimates, human biomass is (2) that of squid and ants.

American fishermen are enjoying squid catches larger than ever. Part of the increase is due to higher water temperatures. Another cause is the decrease in (3) squid.

The (4) of large fish in surface waters is graphically documented in historic photographs of fish caught off the coast of Florida by vacationers. These pictures presumably depict the largest specimens. Fish the size of grown men were (5) in the 1950s. Today, tourists are (6) baby-sized fish.

More evidence regarding fish populations is found in the higher frequency of giant squid and colossal squid being netted by fishing vessels. Catching huge squid is doubly (7): first, they are commercially (8), and second, the fact that they are being caught shows that fishermen are casting nets (9) than ever before.

Ants, termites, wasps, and bees are social insects. Social insects may account for about 75 percent of all insect biomass.

The number of ant queens per nest varies across and within species. Some nests are started by a solitary queen, with all workers being her daughters. Other nests start when several hundred workers move out of their original nest. They may spend some time before (10) a new queen.

Worker ants do not necessarily work hard. In one experiment, scientists marked each ant with a different (11) and observed them. The scientists found that some ants rested almost all the time. When the lazy ants were placed in a separate group, some of them started (12).

1. (A) clearly (B) vaguely (C) widely (D) logically	2. (A) equal to (B) greater than (C) incomparable with (D) less than
3. (A) natural enemies of (B) diseases of (C) competition among (D) market for	4. (A) beauty (B) growth (C) loss (D) value
5. (A) affordable (B) costly (C) not uncommon (D) unheard of	6. (A) ashamed of (B) disappointed with (C) shocked by (D) proud of
7. (A) beneficial (B) unfortunate (C) promising (D) expected	8. (A) upscale (B) unexplored (C) worthless (D) improving
9. (A) wider (B) longer (C) shallower (D) deeper	10. (A) producing (B) capturing (C) replacing (D) accepting
11. (A) color (B) bar code (C) label (D) key	12. (A) dying (B) working (C) fighting (D) sleeping