E—1

平成19年度入学者選抜学力検査問題

英　　語

注　意　事　項

1. この冊子は，監督者から解答を始めるよう合図があるまで開いてはいけません。
2. 解答は解答用紙に書きなさい。解答用紙は3枚です。監督者から解答を始めるよう合図があったら，3枚とも，まず最初に解答用紙の上部の所定欄に受験番号と座席番号を，また，下部の所定欄には座席番号をそれぞれ必ず記入しなさい。
3. 英語を選択科目として届け出た者のみが解答しなさい。それ以外の者が解答すると失格となります。
4. この冊子は全部で9頁からなります。落丁，乱丁または印刷の不備なものがあったら申し出てください。
5. 解答用紙は，記入の有無にかかわらず，持ち帰ってはいけません。
6. この冊子は持ち帰ってかまいません。

1 次の文章を読み，下の設問(問1～7)に答えなさい。＊の付いている語句には本文の後ろに注があります。

Modern science can explain a great deal about the world we live in. But there are also numerous facts that have not been explained by science, or at least not explained fully. The origin of life is one such example. We know that about 4 billion years ago, *molecules with the ability to make copies of themselves appeared in the *primeval soup, and life evolved from there. But we do not understand how these *self-replicating molecules got there in the first place. (1) Another example is the fact that *autistic children tend to have very good memories. Numerous studies of autistic children have confirmed this fact, but as yet nobody has succeeded in explaining it.

Many people believe that in the end, science will be able to explain facts of this sort. This is quite a reasonable view. Molecular biologists are working hard on the problem of the origin of life, and only a pessimist would say they will never solve it. Of course, the problem is not easy, because it is very hard to know what conditions on earth 4 billion years ago were like. But nonetheless, there is no reason to think that the origin of life will never be explained. Similarly for the exceptional memories of autistic children. (2) The science of memory is still in its infancy, and much remains to be discovered about the *neurological basis of autism. Obviously we cannot guarantee that the explanation will eventually be found. But given the number of explanatory successes that modern science has already attained, many people can expect that many of today's unexplained facts will eventually be explained too.

But does this mean that science can in principle explain everything? Or are there some phenomena that must forever escape scientific explanation? This is not an easy question to answer. On the one hand, it seems arrogant to assert that science can explain everything. ((3)), it seems short-sighted to assert that any particular phenomenon can never be explained scientifically.

For science changes and develops very fast, and a phenomenon that looks completely inexplicable from the perspective of today's science may be easily explained tomorrow.

According to some philosophers, there is a purely logical reason why science will never be able to explain everything. For in order to explain something, whatever it is, we need to think of something else. But what explains the second thing? To illustrate, recall that Newton explained a diverse range of phenomena using his law of gravity. But what explains the law of gravity itself? If someone asks *why* all bodies exert a gravitational force on each other, what should we tell them? Newton had no answer to this question. In Newtonian science the law of gravity was a fundamental principle: it explained other things, but could not itself be explained. The moral can be generalized. (4) However much the science of the future can explain, the explanations it gives will have to make use of certain fundamental laws and principles. Since nothing can explain itself, it follows that at least some of these laws and principles will themselves remain unexplained.

Whatever one makes of this argument, it is undeniably very abstract. However, some philosophers have made concrete suggestions about phenomena that they think science can never explain. One example is consciousness — the distinguishing feature of thinking, feeling creatures such as ourselves and other higher animals. Much research into the nature of consciousness has been and continues to be done, by brain scientists, psychologists, and others. But a number of recent philosophers claim that there is something essentially mysterious about the phenomenon of consciousness that no amount of scientific investigation can eliminate.

What are the grounds for (5) this view? The basic argument is that conscious experiences are fundamentally unlike anything else in the world, in that they have a 'subjective aspect'. The scientific study of the brain can certainly tell us which brain processes are connected with which conscious experiences, but

it doesn't tell us *why* experiences with distinctive subjective 'feels' should result from the purely physical goings-on in the brain. Hence consciousness, or at least one important aspect of it, is scientifically inexplicable. However, even if it is true that brain science as currently practiced cannot explain the subjective aspect of conscious experience, can we not imagine the emergence of a radically different type of brain science, with radically different explanatory techniques, that *does* explain why our experiences feel the way they do? There is a long tradition of philosophers trying to tell scientists what is and isn't possible, and later scientific developments have often proved the philosophers wrong. Only time will tell whether (6) the same fate awaits those who argue that consciousness must always escape scientific explanation.

(注)

molecule	分子
primeval soup	原始スープ(地球上に生命を誕生させた有機物の混合溶液)
self-replicating	自己再生する
autistic	自閉症の
neurological	神経学的な

問 1　下線部(1)の文はどのようなことを示すための例ですか。その内容を日本語で答えなさい。

問 2　下線部(2)の文を日本語に直しなさい。

問 3　(3)の空欄の中に文脈に合った適切な語句(4語)を書き入れなさい。

問 4　下線部(4)の文を日本語に直しなさい。

問 5　下線部(5)の this view とは具体的にどういうことですか。その内容の示されている箇所の最初の2語と最後の2語を文中より抜き出しなさい。

問 6　下線部(6)の the same fate とは具体的にどういうことですか。その内容を日本語で答えなさい。

問 7　この英文の表題としてもっとも適切なものを次から選び，その記号を書きなさい。

(a) Fundamental laws and principles in modern science
(b) Newtonian science and modern science
(c) The scientific study of the brain
(d) Can science explain everything?
(e) Is consciousness scientifically inexplicable?

2 次の文章を読み，下の設問(問1～8)に答えなさい。＊の付いている語句には本文の後ろに注があります。

"Why can't a woman be more like a man?" mused Henry Higgins in *My Fair Lady*. Future generations might ask why a man can't be more like a woman. In rich countries, girls now do better at school than boys, more women are getting university degrees than men are and females are filling most new jobs. Probably women are now the most powerful engine of global growth.

In 1950 only one-third of American women of working age had a paid job. Today two-thirds do(1), and women make up almost half of America's workforce. Since 1950 men's employment rate has gone down by 12 percentage points, to 77 %. In fact, almost everywhere more women are employed and the percentage of men with jobs has fallen — although in Italy and Japan, women's share of jobs is still 40 % or less.

The increase in female employment in developed countries has been aided by a big shift in the type of jobs on offer. Manufacturing work, traditionally a male area, has declined, while jobs in services have expanded. This has reduced the demand for manual labor and made the sexes more equal(2).

In the (develop)(3) world, too, more women now have paid jobs. In the emerging East Asian economies, for every 100 men in the labor force there are now 83 women, higher even than the average in *OECD countries. Women have been particularly important to the success of Asia's export industries, typically (account)(4) for 60–80 % of jobs in many export sectors, such as textiles and clothing.

Of course, it is not necessarily right to talk of women's "entry" into the workforce. Besides formal employment, women have always worked in the home, looking after children, cleaning or cooking, but because this is unpaid, it is not counted in the official statistics. To some extent(5), the increase in female

paid employment has meant fewer hours of unpaid housework. However, much less time has been spent on housework, because of the increased productivity afforded by dishwashers, washing machines and so on.

Nevertheless, most working women are still responsible for most of the chores in their homes. In developed economies, women produce just under 40 % of official *GDP. But if the worth of housework is added, then women probably produce slightly more than half of total output.

The increase in female employment has also accounted for a large part of global growth in recent decades. GDP growth can come from three sources: employing more people, using more capital per worker, or an increase in the productivity of labor and capital due to new technology. Since 1970 women have filled two new jobs for every one taken by a man. The employment of extra women has not only added more to GDP than new jobs for men but has also given more than either capital investment or increased productivity. Analyze the world's economic growth in a different way and another surprising (6) conclusion emerges: over the past decade or so, the increased employment of women in developed economies has contributed much more to global growth than China has.

Women are becoming more important in the global marketplace not just as workers, but also as consumers, managers and investors. Women have traditionally done most of the household shopping, but now they have more money of their own to spend. Surveys suggest that women make perhaps 80 % of consumers' buying decisions — from health care and homes to furniture and food.

Women's share of the workforce has a limit. In America it has already slowed down. But there will still be a lot of chances for women to become more productive as they make better use of their qualifications. At school, girls consistently get better grades, and in most developed countries well over half of all university degrees are now being awarded to women. In America

140 women enter higher education each year for every 100 men; in Sweden the number is as high as 150. (There are, however, only 90 female Japanese students for every 100 males.)

In years to come better educated women will take more of the top jobs. At present, for example, in Britain more women than men train as doctors and lawyers, but relatively few are leading surgeons or partners in law firms. The main reason why women still get paid less on average than men is not that they are paid less for the same jobs but that they tend not to climb so far up the career ladder, or they choose lower-paid occupations, such as nursing and teaching. This pattern is likely to change.

(注)

OECD　経済協力開発機構(先進国から成る国際機関で，経済成長・発展途上国援助・通商拡大を主要目的とする)

GDP　国内総生産

問 1　下線部(1)の do は何を表していますか。英語で言い換えなさい。

問 2　下線部(2)のような状態になった背景にはどのような事情がありますか。日本語で答えなさい。

問 3　(3)のかっこの中の動詞を文脈に合った適切な形に直しなさい。

問 4　(4)のかっこの中の動詞を文脈に合った適切な形に直しなさい。

問 5　下線部(5)の文を日本語に直しなさい。

問 6　下線部(6)の another surprising conclusion とは具体的にどういうことですか。その内容を日本語で答えなさい。

問 7　下線部(7)の数字は何を表していますか。日本語で説明しなさい。

問 8　下線部(8)のような状況を生み出している主な理由は何ですか。日本語で答えなさい。

3 次の文章を読み，下線部(1)～(3)に適切な英文を書き入れて，物語を完成させなさい。

A photographer for a national magazine was asked to get photos of a great forest fire. When he arrived, he realized that the smoke at the scene was so thick that (1)＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿. So he frantically called his office and requested permission to rent a plane and take photos from the air. His request was approved and arrangements were made.

"A plane will be waiting for you at the airport," he was told.

He arrived at the small rural airport and, sure enough, (2)＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿. He jumped in with his equipment and shouted, "Let's go! Let's go!" The pilot swung the plane into the wind and soon they were in the air.

The photographer said, "Fly over the fire!"

"Why?" asked the pilot.

"Because (3)＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿! I'm a photographer, and photographers take pictures!" said the photographer angrily.

After a long pause the pilot said, "You mean you're not the flight instructor?"