

前期

理系

2020年度入学試験学力検査問題

外国語

英語

〔経済経営学部：経済経営学科 数理区分，理学部，  
都市環境学部(都市政策科学科 文系区分を除く)，システムデザイン学部 75分〕

答案用紙 2枚

注意

1. 監督員の合図があるまで，問題の内容を見てはいけません。
2. 受験番号及び氏名は，答案用紙の所定欄に必ず記入してください。

(例) 受験番号 1234567X の場合 →

	1	2	3
4	5	6	7   X

3. 解答には黒鉛筆またはシャープペンシルを使用し，必ず配付された答案用紙に記入してください。  
答案用紙には，解答に関係のないことを記入してはいけません。
4. 字数指定の設問で解答欄にマス目が用意されている場合，アルファベット及び数字は，1マスに2字記入しても構いません。
5. 試験中に不鮮明な印刷等に気付いた時は，手をあげて監督員に申し出てください。
6. 答案用紙を切り取ったり，持ち帰ったりしてはいけません。
7. 問題冊子の余白は利用可能ですが，どのページも切り離してはいけません。
8. 問題冊子は，持ち帰ってください。また，試験終了時刻まで退室できません。





1 次の英文を読み、設問に答えなさい。

Science and technology: we tend to think of them as siblings, perhaps even as twins, as parts of STEM (science, technology, engineering, and mathematics). When it comes to the shiniest wonders of the modern world—as the supercomputers in our pockets communicate with satellites—science and technology are indeed hand in glove. For much of human history, though, technology had nothing to do ( a ) science. Many of our most significant inventions are pure tools, with no scientific method behind them. Wheels and wells, cranks and mills and gears and ships' masts, clocks and rudders and crop rotation: all have been crucial to human and economic development, and none <sup>(1)</sup> historically [any / we / of / think / what / had / connection / with] today as science. Some of the most important things we use every day were invented long before the adoption of the scientific method. I love my laptop and my smartphone and my GPS, but the piece of technology I would be most reluctant <sup>(2)</sup> to give up, the one that changed my life from the first day I used it, and that I'm still reliant on every waking hour—am reliant on right now, as I sit typing—dates from the thirteenth century: my glasses. Soap prevented more deaths than penicillin. That's technology, not science.

In *Against the Grain: A Deep History of the Earliest States*, James C. Scott, a professor of political science at Yale, presents a plausible contender for the most important piece of technology in the history of man. It is a technology so old that it predates *Homo sapiens* and instead should be credited ( b ) our ancestor *Homo erectus*. That technology is fire. We have used it in two crucial, defining ways. The first and the most obvious of these is cooking. As Richard Wrangham has argued in his book *Catching Fire*, our ability to [to / from / <sup>(3)</sup> more / energy / us / cook / extract / allows] the food we eat, and also to eat a far wider range of foods. Our closest animal relative, the chimpanzee, has a colon three times as large as ours, because its diet of raw food is so much

harder to digest. The extra caloric value we get from cooked food allowed us to develop our big brains, which absorb roughly a fifth of the energy we consume, as opposed to less than a tenth for most mammals' brains. <sup>(4)</sup> That difference is what has made us the dominant species on the planet.

The other reason fire was central to our history is less obvious to contemporary eyes: we used it to adapt the landscape around us to our purposes. Hunter-gatherers would set fires as they moved, <sup>(5)</sup> to clear terrain and make it ready for fast-growing, prey-attracting new plants. They would also drive animals with fire. They used this technology so much that, Scott thinks, we should date the human-dominated phase of Earth, the so-called Anthropocene, from the time our forebears mastered this new tool.

We don't give the technology of fire enough credit, Scott suggests, because we don't give our ancestors much credit for their ingenuity over the long period—95 percent of human history—during which most of our species were hunter-gatherers. “Why human fire as landscape architecture doesn't register as it ought to in our historical accounts is perhaps that its effects were spread over hundreds of millennia and were accomplished by ‘precivilized’ peoples also known as ‘savages,’” Scott writes. To demonstrate the significance of fire, he points to what we've found in certain caves in southern Africa. The earliest, oldest strata of the caves contain whole skeletons of carnivores and many chewed-up bone fragments of the things they were eating, including us. Then comes the layer from when we discovered fire, and ownership of the caves switches: the human skeletons are whole, and the carnivores are bone fragments. <sup>(6)</sup> Fire is the difference between eating lunch and being lunch.

Anatomically modern humans have been around for roughly 200,000 years. For most of that time, we lived as hunter-gatherers. Then, about 12,000 years ago, came what is generally agreed to be the definitive before-and-after moment in our ascent to planetary dominance: the Neolithic\* Revolution. This was our adoption of, to use Scott's word, a “package” of agricultural innovations, notably

the domestication of animals such as the cow and the pig, and the transition from hunting and gathering to planting and cultivating crops. The most important of these crops have been the cereals—wheat, barley, rice, and corn—that remain the staples of humanity's diet. Cereals allowed population growth and the birth of cities, and, hence, the development of states and the rise of complex societies.

The story told in *Against the Grain* heavily revises this widely held account. Scott's specialty is not early human history. His work has focused ( c ) a critical, peasant's-eye view of state formation; the trajectory\* of his interests can be traced in the titles of his books, from *The Moral Economy of the Peasant* to *The Art of Not Being Governed*. His best-known book, *Seeing Like a State*, has become a touchstone for political scientists, and amounts to a blistering\* critique of central planning and "high modernism," the idea that officials at the center of a state know better than the people they are governing.<sup>(7)</sup> Scott argues that a state's interests and the interests of subjects<sup>(8)</sup> are often not just different but opposite. Stalin's project of farm collectivization\* "served well enough as a means whereby the state could determine cropping patterns, fix real rural wages, appropriate a large share of whatever grain was produced, and politically emasculate\* the countryside"; it also killed many millions of peasants.

Scott's new book extends these ideas into the deep past, and draws ( d ) existing research to argue that ours is not a story of linear progress, that the timeline is much more complicated, and that the causal sequences of the standard version are wrong. He focuses his account on Mesopotamia—roughly speaking, modern-day Iraq—because it is "the heartland of the first 'pristine' states in the world," the term *pristine* here meaning that these states showed no signs of earlier settlements and it was the first time any such social organizations had existed. They were the first states to have written records, and they became a template for other states in the Near East and in Egypt, making them doubly relevant ( e ) later history.

注	*Neolithic	新石器時代の
	*trajectory	軌跡
	*blistering	痛烈な
	*collectivization	集団化
	*emasculate	骨抜きにする

A. 本文の( a )～( e )に入る前置詞一語を、下の選択肢の中から1つずつ選び、ア～カの記号で答えなさい。なお、同じ記号を複数回選んでもよい。

ア at      イ in      ウ of      エ on      オ to      カ with

B. 次の英文は、問題文中にある英単語の意味の説明である。その英単語を、指示した文中の段落より探して答えなさい。

(a) the ability to invent things or solve problems in new ways (第4段落)

(b) a set of ideas or services that are suggested or offered as a group  
(第5段落)

(c) a thing that is used as a model for other similar examples (第7段落)

C. 下線部(1)について、「いずれも歴史的には、今日私たちが科学と考えているものとは無関係であった」という意味になるように[ ]のなかの単語を並べ替え、4番目と6番目の単語を答えなさい。

none historically ( 1 ) ( 2 ) ( 3 ) ( 4 ) ( 5 ) ( 6 )  
( 7 ) ( 8 ) today as science.

D. 下線部(2)“the piece of technology I would be most reluctant to give up”に当たるものが具体的に何であるかを、日本語で答えなさい。

E. 下線部(3)について、「私たちの料理の能力は、食べ物からより多くのエネルギーを抽出することを可能にする」という意味になるように[ ]のなかの単語を並べ替え、4番目と6番目の単語を答えなさい。

our ability to ( 1 ) ( 2 ) ( 3 ) ( 4 ) ( 5 ) ( 6 )  
( 7 ) ( 8 ) the food we eat

F. 下線部(4)“That difference”が指している内容を以下のように説明する場合、カッコ内に入る言葉を日本語で答えなさい。

「人間の脳は消費エネルギーのおよそ(a )を吸収するのに対し、ほとんどの(b )の脳が吸収するのは(c )未満であるという違い」

G. 下線部(5)“to clear terrain”という英語の表現に、文脈における意味が最も近いものを、4つの選択肢から1つ選んでア～エの記号で答えなさい。

ア to an open land                                  イ to open up land  
ウ to a bright land                                  エ to pollute land

H. 下線部(6)は、火の発見がもたらした変化がどのようなものであったことを示唆しているのか。「人間」「肉食獣」という2つの言葉を必ず用いて、日本語で説明しなさい。

I. 下線部(7)を日本語に訳しなさい。

J. 下線部(8)“subjects”という単語に、文脈における意味が最も近いものを、4つの選択肢から1つ選んでア～エの記号で答えなさい。

ア topics                  イ citizens                  ウ titles                  エ officials



K. 以下の文が、本文に述べられた内容と合っているかどうかを考え、それぞれの解答欄に、合っている場合は○、間違っている場合は×を記入しなさい。

- (a) It is widely believed that domesticating animals and cultivating crops led to population growth and the rise of states.
- (b) We have made straightforward progress in our evolution into what we are.
- (c) We do not appreciate the significance of the technology of fire as much as we should.
- (d) *Homo sapiens* were the first in the history of animals to use fire.
- (e) Scott thinks that the Anthropocene started when our ancestors acquired the technology of fire.
- (f) The general consensus is that our status on earth was definitely changed about 12,000 years ago.
- (g) The *pristine* states did not have any written records.
- (h) Whole skeletons of carnivores have been found in the oldest strata of certain caves in southern Africa.





