

令和 3 (2021) 年度入学試験問題 (前期)

英 語

注 意

1. 合図があるまで表紙をあけないこと。
2. 受験票は机に出しておくこと。

I 以下の英文を読み、問いに答えよ。

The terror that is gripping Americans due to the coronavirus would be familiar to America's founding generation. As Noah Webster (best known today for his monumental American English dictionary published in 1828), then the editor of New York City's first daily newspaper, wrote to a friend in the fall of 1793, "The melancholy accounts received from you and others of the progress of a fatal disease excite compassion in every breast. An alarm is spread over the country."

The disease was the yellow fever, a virus that attacked the liver and kidneys. This American plague, which got its name because the skins of its victims became yellow, swept through the nation's biggest cities a few times between 1793 to 1798. The first outbreak occurred in August of 1793 in Philadelphia, which served as the nation's capital from 1790 to 1800. By the middle of that November, the yellow fever wiped out 5,000 of its 50,000 residents and forced President Washington and his cabinet to flee to a neighboring town. Cool fall temperatures then suddenly stopped this wave of the disease, which, as scientists would determine a century later, was transmitted by mosquitos.⁽¹⁾

About two years later, in 1795, New York City was hit particularly hard. By mid-August, two New Yorkers a day were dying, and all afflicted patients were quarantined* at Bellevue Hospital. As Webster's New York neighbor, Dr. Elihu Smith, noted in his diary in September, "The whole city is in a violent state of alarm on account of the fever. It is the subject of every conversation, at every hour, and in every company." By late November when this outbreak faded out, 730 New Yorkers had died—the equivalent of about 200,000 today, as the city then had a population of about 40,000.

That fall, Webster sprang into action. In late October, he published an advertisement in his newspaper, addressed to the physicians in the cities most affected by the fever over the past three years—Philadelphia, New York, Baltimore, Norfolk and New Haven—which asked them to pass on whatever information that they had gathered from their own practices.⁽²⁾

This ad served as the basis for the world's first scientific survey. As Webster argued, given that "we want evidence of facts," medical professionals needed to work together to understand this public health problem.

About a year later, Webster published his findings in a 250-page book, *A Collection of Papers on the Subject of the Bilious Fevers, Prevalent in the United States for a Few Years Past*, which featured eight chapters authored by experts including Dr. Elihu Smith. Unfortunately, their accounts were short of hard data. Noting that poor immigrants constituted a large percentage of the dead, Smith assumed that "the sudden intermingling of people of various and different habits was a circumstance favoring the occurrence of the disease."⁽³⁾ In contrast, Webster considered that the cause had something to do with urban filthy** environments, arguing that Americans should "pay a double regard to the duties of order, temperance*** and cleanliness." But Webster acknowledged that he still needed to gather more data to reach a definitive conclusion.

In the summer of 1798, the fever came back with a vengeance. By the time frost in early November ended this round of devastation, another 3,400 had died in Philadelphia, 2,000 in New York and 200 in Boston. Included in these totals was New York's Dr. Elihu Smith, who was just twenty-seven. The fever would return periodically throughout the 19th century, but never again with the same lethal intensity.

At the end of 1798, Webster published a follow-up book, *A Brief History of Epidemic and Pestilential Diseases*. The title was a misleading one, as this two-volume book reached over 700 pages. Tracing the history of epidemics, Webster was again forced to conclude that he could not be sure what caused them, observing, "More materials are necessary to enable us to erect a theory of epidemics which shall deserve full confidence." Despite his lack of solid empirical findings, Webster had put the new field of public health on a scientific footing. He had set up a procedure that future medical professionals could follow, which involved gathering as much evidence as possible by pooling together the efforts of numerous experts on the front-lines.⁽⁴⁾ As Dr. William Osler, a giant of late 19th century medicine, observed, Webster's book was "the most important medical work written in this country by a nonprofessional." (出典：Time, 2020 April 4. 一部変更あり)

*quarantine: to keep a person away from others for a certain period of time in order to prevent the disease from spreading

**filthy: very dirty

***temperance: self-control

1. 下線部(1)を和訳せよ。
2. 下線部(2)について、彼がこのような行動をとった目的は何か、50字以内の日本語(句読点を含む)で説明せよ。
3. 下線部(3)を和訳せよ。
4. 下線部(4)を和訳せよ。

II 以下の英文を読み、下線部を和訳せよ。

The accident of birth is a principal source of inequality in America today. American society is dividing into skilled and unskilled, and the roots of this division lie in early childhood experiences. Kids born into disadvantaged environments are at much greater risk of being unskilled, having low lifetime earnings, and facing a range of personal and social troubles, including poor health, teenage pregnancy, and crime. While we celebrate equality of opportunity, we live in a society in which birth is becoming fate.

This powerful impact of birth on life chances is bad for individuals born into disadvantage. And it is bad for American society. We are losing out on the potential contributions of large numbers of our citizens.

It does not have to be this way. With smart social policy, we can stop the polarization between skilled and unskilled. But smart policy needs to be informed by the best available scientific evidence. It requires serious attention to the costs of alternative policies, as well as to their benefits. Close attention to the evidence suggests three large lessons for social policy.

First, life success depends on more than cognitive skills. Non-cognitive characteristics—including physical and mental health, as well as perseverance, attentiveness, motivation, self-confidence, and other socio-emotional qualities are also essential. While public attention tends to focus on cognitive skills, as measured by IQ tests, achievement tests, and tests administered by the Programme for International Student Assessment (PISA)—non-cognitive characteristics also contribute to social success and in fact help to determine scores on the tests that we use to evaluate cognitive achievement.

Second, both cognitive and socio-emotional skills develop in early childhood, and their development depends on the family environment. But family environments in the United States have become worse over the past 40 years. A growing fraction of our children are being born into disadvantaged families, where disadvantage is most basically a matter of the quality of family life and only secondarily measured by the number of parents, their income, and their education levels. And that disadvantage tends to accumulate across generations.

Third, public policy focused on early interventions can improve these troubling results. Contrary to the views of genetic determinists, experimental evidence shows that intervening early can produce positive and lasting effects on children in disadvantaged families. This is consistent with a large amount of non-experimental evidence showing that the absence of supportive family environments harms childhood and adult outcomes. Early interventions can improve cognitive as well as socio-emotional skills. They promote schooling, reduce crime, foster workforce productivity, and reduce teenage pregnancy. And they have much greater economic and social impact than the later interventions that are the focus of conventional public policy debate: reducing pupil-teacher ratios; providing public job training, rehabilitation programs for prisoners, adult literacy programs, and tuition subsidies; and spending on police. In fact, the benefits of later interventions are greatly enhanced by earlier interventions: skill begets* skill; motivation begets motivation.

In short, to promote individual success, greater equality of opportunity, and a healthier society, we need a major shift in social policy toward early intervention, with later interventions designed to reinforce those early efforts. And the interventions should address socio-emotional skills, not just cognitive abilities.

（出典：James Joseph Heckman, *Giving Kids A Fair Chance*, The MIT Press, 2013. 一部変更あり）

*beget: cause something or make it happen

III 下線部を英訳せよ。

人工知能(AI)は、先進国はもとより発展途上国においても、すでに社会の多方面で活用されている。例えば、AIに基づく医学や農業上の助言は、近代的な病院や科学者たちから遠く離れたところに住む人々にも入手可能なものになっている。今日のAIは確かに多くの目的のために役立っているし、このことは未来にはさらにいっそう当てはまるであろう。しかし、他方において、これまで人間が担ってきた職種の減少、コミュニケーションの変容、軍事目的への利用などに見られるように、AIの進化は、人間生活の重要な諸側面を脅かす意図せぬ結果をもたらすことも忘れてはならない。

