平成24年度前期日程入学試験学力検査問題

平成24年2月25日

外　国　語(英語)

志望学部	試験科目	試験時間
経済学部，理学部，医学部保健学科，歯学部，薬学部，工学部，農学部	英語	10：00～11：40 (100分)
文学部，教育学部，法学部，医学部医学科	英語，ドイツ語，フランス語のうちから1科目選択	

・ドイツ語，フランス語の問題冊子は，出願時に，それぞれの科目を希望した者に配付します。

注　意　事　項

1. 試験開始の合図があるまで，この問題冊子，解答用紙を開いてはいけない。
2. この問題冊子は，12ページである。問題冊子の白紙のページや問題の余白は草案のために使用してよい。なお，ページの脱落，印刷不鮮明の箇所などがあった場合には申し出ること。
3. 解答は，必ず黒鉛筆(シャープペンシルも可)で記入し，ボールペン・万年筆などを使用してはいけない。
4. 解答用紙の受験記号番号欄(1枚につき2か所)には，忘れずに受験票と同じ受験記号番号をはっきりと判読できるように記入すること。
5. 解答は，必ず解答用紙の指定された箇所に記入すること。
6. 解答用紙を持ち帰ってはいけない。
7. 試験終了後，この問題冊子は持ち帰ること。

◇M4(780—31)

◇M4(780—32)

◇M41(780—38)

I 次の英文を読み，下の問いに答えなさい。

It's the single most famous story of scientific discovery: in 1666, Isaac Newton was walking in his garden outside Cambridge, England — he was avoiding the city because of the *plague — when he saw an apple fall from a tree. The fruit fell straight to the earth, as if tugged by an invisible force. (Subsequent versions of the story had the apple hitting Newton on the head.) This ordinary observation led Newton to devise the concept of universal gravitation, which explained everything from the falling apple to the orbit of the moon.

There is something appealing about such narratives. They reduce the scientific process to a moment of sudden inspiration: there is no sweat or toil, just a new idea, produced by a genius. Everybody knows that things fall — it took Newton to explain why.

Unfortunately, the story of the apple is almost certainly false; *Voltaire probably made it up. Even if Newton started thinking about gravity in 1666, it took him years of painstaking work before he understood it. He filled entire notebooks with his rough ideas and spent weeks recording the exact movements of a *pendulum. The discovery of gravity, in other words, wasn't a flash of insight — it required decades of effort, which is one of the reasons Newton didn't publish his theory until 1687, in the *"Principia."

Although biographers have long celebrated Newton's intellect — he also pioneered *calculus — it's clear that his achievements aren't solely a byproduct of his piercing intelligence. Newton also had an astonishing ability to persist in the face of obstacles, to stick with the same puzzling mystery — why did the apple fall, but the moon remain in the sky? — until he found the answer.

In recent years, psychologists have come up with a term to describe this mental trait: grit. (A) Although the idea itself isn't new — "Genius is 1 percent inspiration and 99 percent perspiration," Thomas Edison famously remarked —

the researchers are quick to point out that grit isn't simply about the willingness to work hard. Instead, it's about setting a specific long-term goal and doing whatever it takes until the goal has been reached. It's always much easier to give up, but people with grit can keep going.

While stories of grit have long been associated with self-help manuals and life coaches — Samuel Smiles, the author of the influential Victorian text "Self-Help" preached the virtue of perseverance — these new scientific studies rely on new techniques for reliably measuring grit in individuals. As a result, they're able to compare the relative importance of grit, intelligence, and innate talent when it comes to determining lifetime achievement. (B) Although this field of study is only a few years old, it's already made important progress toward identifying the mental traits that allow some people to accomplish their goals, while others struggle and quit. Grit, it turns out, is an essential (and often overlooked) component of success.

"I'd bet that there isn't a single highly successful person who hasn't depended on grit," says Angela Duckworth, a psychologist at the University of Pennsylvania who helped pioneer the study of grit. "Nobody is (①) (②) not to (③) to (④) hard, and that's (⑤) grit (⑥) you to do."

The hope among scientists is that a better understanding of grit will allow educators to teach the skill in schools and lead to a generation of grittier children. Parents, of course, have a big role to play as well, since there's evidence that even casual comments — such as how a child is praised — can significantly influence the manner in which kids respond to challenges. And it's not just educators and parents who are interested in grit: the United States Army has supported much of the research, as it searches for new methods of identifying who is best suited for the stress of the battlefield.

The new focus on grit is part of a larger scientific attempt to study the personality traits that best predict achievement in the real world. (C) While researchers have long focused on measurements of intelligence, such as the IQ

test, as the crucial marker of future success, these scientists point out that most of the variation in individual achievement has nothing to do with being smart. Instead, it largely depends on personality traits such as grit and conscientiousness. It's not that intelligence isn't really important — Newton was clearly a genius — but that having a high IQ is not nearly enough.

(Adapted from Jonah Lehrer, "The Truth About Grit")

注 *plague 疫病(ペスト) *Voltaire ヴォルテール(フランスの啓蒙思想家)
*pendulum 振り子 *"Principia" 『プリンキピア』(ニュートンの主著)
*calculus 微分積分学

問 1 下線部(A)はどのような資質か，日本語で説明しなさい。

問 2 下線部(B)を日本語に訳しなさい。

問 3 下線部(C)を日本語に訳しなさい。

問 4 本文中の空欄①～⑥に入れるのに適切な語を，次の(ア)～(カ)から選び，記号で答えなさい。ただし，同じものを重複して選んではいけません。

(ア) what	(イ) have	(ウ) work
(エ) enough	(オ) talented	(カ) allows

II 次の(a)～(c)は，アメリカのある大学で開講している新入生向け授業のうちの，3つの科目名とその講義概要です。それらを読み，下の問いに答えなさい。

(a) History

Emphasizing declassified files from World War II and published interpretations, this seminar will address a seemingly simple set of questions. Why did the United States drop atomic bombs on Japanese cities in August 1945? Were there viable alternatives, and, if so, why were they not pursued? What did the 1945 use of atomic bombs mean then and later? These questions will lead us to ask how postwar interpreters, including World War II officials, explained and justified or criticized the bombings, and why. Using approaches from history, international relations, American studies, political science, and ethics, we will investigate these questions and their answers; the underlying conceptions; and the roles of evidence, logic, models of explanation, ethical values, and cultural/social influences in the continuing dialogue on the atomic bomb. We will analyze the issues from multiple perspectives, asking why and how various answers were developed, examined, and reformulated; why certain facts were accepted or rejected in this process; and how the atomic bombings have been understood.

(b) Materials Science and Engineering

Japanese technology has been regarded as leading the world in many areas (e.g., microelectronics, consumer electronics, steel). On the other hand, many innovations originate in the West, particularly in the United States (e.g., microprocessors, computers). This course explores the role the research laboratory plays in typical Japanese companies, and examines the importance of innovation versus product development. We will study the structure of a Japanese company from the perspective of Japanese society. This will lead us to examine the underlying philosophy of the research environment, the expectations placed on individual researchers to achieve company goals, and possible changes in the lifetime employment system. Recently, the great American research laboratories (e.g., Bell Labs, IBM Research) have been

closed down in favor of more practical development. Some Japanese companies, by contrast, have invested in research institutions while maintaining their product-development laboratories. As the Japanese economy experiences recession, the balance of these philosophies is being reconsidered. Local representatives of Japanese companies, such as Sony and NEC, will be invited to class to help us learn about the attitudes of Japanese researchers and the relationship between Japanese companies and Japanese society.

(C) Music

North American taiko, taken here to refer to the performance-ensemble drumming using the taiko, or Japanese drum, is a newcomer to the American music scene. Emergence of the first North American taiko groups coincided with increased activism in the Japanese American community, and to some it is symbolic of Japanese American identity. To others, North American taiko is associated with Japanese American Buddhism, and to yet others, taiko is a performance art rooted in Japan. In this course, we will explore the musical, cultural, historical, and political perspectives of taiko through drumming (hands-on experience), readings, class discussion, and workshops. With taiko as the focal point, we will learn about Japanese music and Japanese American history, and explore relations between performance, cultural expression, community, and identity. No prior experience with taiko is necessary. The instructors for this course are faculty co-advisors for our university's taiko group and have been invited presenters at the North American taiko conference.

(Adapted from *Introductory Seminars: Course Catalog (2010-2011)*, Stanford University)

問 1　あなたが，これら 3 つの科目の中から 1 つを選んで受講するとします。その科目の記号を書き，選んだ理由を英語で説明しなさい(解答欄の行数内で答えること)。

問 2　選択しなかった 2 つの科目の記号とその内容を，それぞれ簡潔に日本語で要約しなさい(解答欄の行数内で答えること)。

Ⅲ 次の英文は，学生と先生の対話です。この対話を読み，下の問いに英語で答えなさい。

KEIKO: Excuse me, Professor Smith. May I ask you a question?

SMITH: Sure. How can I help?

KEIKO: Well, it's about the essay for your English class. I am researching facts for my essay on nuclear energy, and I have found a great website. Yet, in class you told us to use material from the library instead of the Internet. What should I do?

SMITH: Well, I didn't say it was forbidden to use the Internet, but I did advise students that the library is better because it's more focused.

KEIKO: Really? How come?

SMITH: The books in the library have been chosen carefully to be most useful for students taking classes. Also, the librarians are trained to help you find books and other sources, so they can help you find the material that you need.

KEIKO: OK, but surely the Internet has much more material to choose from?

SMITH: True, but library sources are generally more reliable. Published books and academic journals are usually checked by experts before they are published to see if they are accurate or do not contain misleading information. It's called "peer-review." On the other hand, material on the Internet can be written by anybody, so may not be so reliable.

KEIKO: I see. It's just that I've found a blog that has lots of facts about my topic. Does that sound OK?

SMITH: Oh, that might be a problem. A blog is a personal website, a bit like a diary, isn't it? So you must be very careful to check if it's reliable. You'd better see who is the author and make sure you know where they are getting their facts.

KEIKO: Oh, right. It's all so complicated!

SMITH: It takes a bit of time, but really it's what serious readers do all the time when they study. We have to think carefully about what we are reading, who wrote it, and why. So I am not going to stop you using a blog for your essay, but you must be able to explain to me why you think it is a good idea to use it.

Question 1: Why does Keiko want to use the Internet for her essay?

Question 2: Do you agree with Professor Smith's advice to use the library instead of the Internet? Give reasons for your answer.

Ⅳ　次の文章を読み，下線部(A), (B)を英語に訳しなさい。

通訳をする場合，とくに逐次通訳の場合は，通訳者の要約能力が欠かせない。もちろん，勝手に短くしたり省略したりなど編集することは許されないのだが，(A)発言をひたすらすべて訳せばよいかといえば，そうではない。だらだらと長いだけで，かえってわかりにくい結果になる。理想的には，通訳者自身が内容を十二分に理解したうえで自分なりに分析し，対象言語の論理構成にある程度合わせる形で要領よく，かつ過不足なく提示することである。

それがうまくいくと，通訳を通して聞いたことを忘れるくらい，スムーズに相手の話を理解できる。(B)通訳者にその能力が欠けていると，たしかに訳してはいるのだが，意味不明だったり，発言者がいったい何をいいたいのかわからなかったりする。

（鳥飼玖美子『歴史をかえた誤訳』より）