

九州大学 一般 前期
平成24年度入学試験問題

英 語
英 語 II
リーディング
ライティング

(注 意 事 項)

1. 問題冊子は指示があるまで開かないこと。
2. 問題冊子は13ページ、解答紙は5枚あります。「始め」の合図があったらそれぞれを確認すること。
3. 解答紙それぞれの2箇所を受験番号を記入すること。
4. 解答はすべて解答紙の所定の欄に記入すること。
5. この教科は、200点満点です。なお、経済学部経済工学科については、300点満点に、農学部については、250点満点に換算します。

英

語

英 語 II
リーディング
ライティング

[1] 次の英文を読み、設問に答えなさい。(55点)

We're all fairly good at problem solving. That's the skill we were taught and endlessly drilled on at school. Once we have a problem, we know how to work towards getting a solution. Ah, but finding a problem—there's the problem.

Everyone knows that finding a good problem is the key to research, yet no one teaches us how to do that. Engineering education is based on the presumption that there exists a predefined problem worthy of a solution. If⁽¹⁾ only it were so!

After many years of managing research, I'm still not sure how to find good problems. Often I discovered that good problems were obvious only in retrospect, and even then I was sometimes proved wrong years later. Nonetheless, I did observe that there were some people who regularly found good problems, while others never seemed to be working along fruitful paths. So there must be something to be said about ways to go about this.

Internet pioneer Craig Partridge recently sent around a list of open research problems in communications and networking, as well as a set of criteria for what constitutes a good problem. He offers some sensible⁽²⁾ guidelines for choosing research problems, such as having a reasonable expectation of results, believing that someone will care about your results and that others will be able to build upon them, and ensuring that the problem is indeed open and underexplored.

All of this is easier said than done, however. Given any prospective problem, a search may reveal an abundance of previous work, but much of it will be hard to retrieve. On the other hand, if there is little or no previous work, maybe there's a reason no one is interested in this problem. You need something in between. Moreover, even in defining the problem you need to see a way in, the seed of some solution, and a possible escape path to a lesser result.

Timing is critical. If a good problem area is opened up, everyone rushes in, and soon there are diminishing returns. On unimportant problems, this same group behavior leads to a self-approving circle of papers on a subject of little practical significance. Real progress usually comes from a succession of
(3)
accumulative and progressive results, as opposed to those that feature only variations on a problem's theme.

At Bell Labs, the mathematician Richard Hamming used to divide his fellow researchers into two groups: those who worked behind closed doors and those whose doors were always open. The closed-door people were more focused and worked harder to produce good immediate results, but they failed in the long term.

Today I think we can take the open or closed door as a metaphor for researchers who are actively connected and those who are not. And just as there may be a right amount of networking, there may also be a right amount of reading, as opposed to writing. Hamming observed that some people spent all their time in the library but never produced any original results, while others wrote furiously but were relatively ignorant of the relevant research.

Hamming, who knew many famous scientists and engineers, also remarked on what he saw as a "Nobel Prize effect," where having once
(4)
achieved a famous result, a researcher felt that he or she could work only on great problems, consequently never doing great work again. From small-problem acorns, great trees of research grow.

Like a lot of things in life, it helps to be in the right place at the right time. Sometimes all the good and well-intentioned advice in the world won't help you avoid working on a dead-end problem. I know — I've been there, done that.

問 1. 下線部(1)で筆者が言いたいことを日本語で具体的に説明しなさい。

問 2. 下線部(2) sensible guidelines とは何か, 具体例を 3 つ日本語で述べなさい。

問 3. 下線部(3)を日本語に訳しなさい。

問 4. 下線部(4) “Nobel Prize effect” を日本語で具体的に説明しなさい。

[2] 次の英文を読み、設問に答えなさい。(40点)

Nearly 100 years of linguistics research has been based on the assumption that words are just collections of sounds — an agreed acoustic representation that has little to do with their actual meaning. Yet a series of recent studies challenge this idea. They suggest that we seem instinctively to link certain sounds with particular sensory perceptions. Some words may evoke a round shape. Others might bring to mind a spiky appearance, a bitter taste, or a sense of swift movement.

More than 2000 years ago, Plato recorded a dialogue between two of Socrates's friends, Cratylus and Hermogenes. Hermogenes argued that language is arbitrary and the words people use are purely a matter of convention. Cratylus believed words inherently reflect their meaning — although he seems to have found his insights into language disillusioning: Aristotle says Cratylus eventually became so disenchanted that he gave up speaking entirely.

The Greek philosophers never resolved the issue, but two millennia later a Swiss linguist seemed to have done so. In the 1910s, using an approach based in part on a comparison of different languages, he set out a strong case for the arbitrariness of language. Consider, for instance, the differences between “ox” and “boeuf,” the English and French words for the same animal. With few similarities between these and other such terms, it seemed clear to him that (2).

The world of linguistics was mostly persuaded, but a few people still challenged this conviction. In the 1920s a German psychologist presented subjects with line drawings of two meaningless shapes — one spiky, the other curved — and asked them to label the pictures either “takete” or “baluba.” Most people chose takete for the spiky shape and baluba for the curvy one.

Though he didn't say why this might be, the observation⁽³⁾ strongly suggested that some words really might fit the things they describe better than others. His work, first published in 1929, did not attract much attention, and though others returned to the subject every now and then, their findings were not taken seriously by the mainstream.

The turning point came in 2001, when two American researchers published their investigations into a condition known as synaesthesia,⁽⁴⁾ in which people seem to blend sensory experiences, including certain sounds and certain images. As many as 1 in 20 people have this condition, but the researchers suspected that cross-sensory connections are in fact a feature of the human brain, so that in practice we all experience synaesthesia at least to a limited extent. To explore this idea, they revisited the 1929 research and found that an astonishing 95 percent of average people, and not just synaesthetes, automatically linked two different sensations.

問 1. 下線部(1) this idea の内容を日本語で具体的に説明しなさい。

問 2. 空所(2)に入る最も適切なものを次の(a)~(e)から選び、記号で答えなさい。

- (a) the words ox in English and boeuf in French refer to the same animal
- (b) the sounds of words do not inherently reflect their meanings
- (c) the words ox and boeuf refer to animals of a different species
- (d) understanding words in one language positively transfers to comprehension in another
- (e) Cratylus must have been correct all along

問 3. 下線部(3) the observation の内容を日本語で具体的に説明しなさい。

問 4. 下線部(4) synaesthesia とはどのような状態か、日本語で具体的に説明しなさい。

[3] 次の英文を読み、設問に答えなさい。(55点)

The Internet has made it much easier — and more entertaining — to slack off at the office. In a widely cited survey from 2005, people said that the Net was their favorite way to waste time at work. Businesses have responded by trying, in various ways, to restrict access. One study found that half of all companies block access to Facebook and Twitter. Other companies cut off online shopping sites and YouTube. And many companies have an “acceptable use policy,” making it clear that when you’re supposed to be finishing your business reports you should not be watching that excellent new video of a dog howling along to its own piano-playing.

Fair enough, you might say. However, plenty of new research suggests that forcing Internet-addicted employees to *go cold turkey may make them less productive, not more. ⁽¹⁾ A new study, done at the University of Copenhagen, asked participants to perform a simple task — watch videos of people passing balls and count the number of passes. But first they were presented with a distraction. One group of participants had a funny video come up on their screens; the rest saw a message telling them that a funny video was available if they clicked a button, but they were told not to watch it. After ten minutes, during which people in the second group could hear those in the first laughing at the video, everyone set to the task of counting the number of passes. And the curious result was that those who hadn’t watched the comedy video made significantly more mistakes than those who had. You might have thought that those who had spent the previous ten minutes laughing would become distracted and careless. Instead, ⁽²⁾ it was the act of following company policy and not clicking that button that hindered people’s ability to focus and concentrate.

The basic idea here is that for most people willpower is a limited resource: if we spend lots of energy controlling our impulses in one area, it becomes

harder to control our impulses in others. Or, as the psychologist Roy Baumeister puts it, willpower is like a muscle: overuse temporarily exhausts it. The implication is that asking people to regulate their behavior without interruption may very well make them less focused and less effective.

So what should companies do? They could just remove the temptation entirely and shut down access to most Web sites. After all, if the people in the Copenhagen experiment hadn't known there was a video they could have been watching, they would presumably have counted the passes just fine. There are companies that try to do this,⁽³⁾ but it creates a tyrannical work environment, and, besides, the spread of smartphones renders such a policy increasingly unenforceable. A more interesting solution, proposed by the Copenhagen experimenters, would be to create "Internet breaks," allowing workers to periodically spend a few minutes online. This may sound like a solution straight out of *Oscar Wilde, who said, "The only way to get rid of temptation is to yield to it." But it's actually a logical evolution of one of the great inventions of the twentieth century: the coffee break. In the nineteenth century, letting wage-earners stand around drinking coffee would have seemed⁽⁴⁾ outrageous. But, in the early nineteen-hundreds, a company introduced the idea of short breaks in the workday, and by mid-century it had become an accepted office custom. The basic insight — that giving people some relief from difficult tasks, along with the chance to let their minds wander, will make them more productive — remains true. Sometimes, it turns out, ((5)).

*go cold turkey: stop suddenly and completely

*Oscar Wilde (1854–1900): an Irish playwright, poet, and novelist

問 1. 下線部(1) A new study の実験結果を 40 字以内の日本語で具体的に説明しなさい。ただし、句読点も字数に含む。

問 2. 下線部(2)を日本語に訳しなさい。

問 3. 下線部(3) this の表す内容を日本語で具体的に説明しなさい。

問 4. 下線部(4)を日本語に訳しなさい。

問 5. 空所(5)に入る最も適切なものを次の(a)~(e)から選び、記号で答えなさい。

- (a) the use of smartphones creates a tyrannical work environment
- (b) success comes only through devotion to the task at hand
- (c) to achieve greatness in life, we must also do things which we do not enjoy
- (d) you have to take your eye off the target in order to hit it
- (e) the Internet is a wasteful distraction in the work place

- [4] 次の英文を読み, “sugar tax” に対する賛否を明確にして, あなたの意見を 100~120 語程度の英文で述べなさい。その際, あなたの見解の具体的な根拠を示すこと。なお, 句読点は語数に含まない。(25 点)

There is little disagreement that our modern eating habits have been linked to a variety of health and weight-related problems, and are one of the leading causes of preventable deaths worldwide. In an action to counter this situation, many governments around the world have considered introducing a “sugar tax.” This tax would be placed on highly sugar-sweetened drinks and foods, such as soda, ice cream, doughnuts, and other processed snacks.

〔5〕 次の文の下線部を英語に訳しなさい。(25点)

学生時代をふりかえってみて、「もっとああしておけばよかったな」と思っていることが、私にもいくつもある。「もっと(貧乏)旅行をしておけばよかったな」とか、「いろいろな人たちに、思い切って会いにいけばよかった」など。そのときは「そのうちいつかは、できるだろう」と高をくくっていたのだが、実際はそうもいかない。思ったときに行動に移さない限り、だいたいのことは、後々に叶いはしない。

そんな少なくない後悔のなかでも、最近とみに思うのは「もっといろいろな古典⁽¹⁾に触れておけばよかった」ということだ。古典といっても、必ずしも文学や芸術などの作品に限らない。映画でも、音楽でも、落語でも、芸能でも、なんでもかまわない。若いうちに、目からでも、耳からでもいい、古典というものに触れておくことは、将来、必ず良い影響を及ぼすと思うのだ。

私はそれほど読書好きの子どもではなかった。もっと正直に言えば、本を読むのはどちらかというと億劫でたまらなかった。テレビのほうが何倍も好きだった。だからだろう、ずっと国語は苦手科目。そんな私が、今ごろになって、古典が大事と痛感するようになったのは、どうしてなのか。それは、いつからか日本にすっかり定着した「わかりやすさ」ブームと関連している。わかりやすいという基準や価値観が支配的である世間へのささやかな反抗である。

古典というのは、だいたいわかりにくいものだ。わかりにくければ、すべてが⁽²⁾古典になるというのでは無論ないが、すぐにすべてが理解できる古典など、ないように思う。単純明快な理解を拒絶する、多様さや複雑さを内包するエネルギーをたたえている作品だからこそ、古典になるのだ。

41

英語 英語Ⅱ
リーディング
ライティング

平成24年度入学試験問題

受験番号

受験番号

解答紙

(5枚のうち1枚目)

41

[1] (55点)

[1]の採点

問 1. (12点)

問 2. (15点)

① _____

② _____

③ _____

問 3. (16点)

問 4. (12点)

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42

英語 英語Ⅱ
リーディング
ライティング

平成24年度入学試験問題

受験番号
[] [] [] [] [] []

受験番号
[] [] [] [] [] []

解答紙

(5枚のうち2枚目)

42

[2] (40点)

[2]の採点

[] []

問 1. (12点) _____

問 2. (6点) _____

問 3. (10点) _____

問 4. (12点) _____

44

英語 英語Ⅱ
リーディング
ライティング

平成24年度入学試験問題

受験番号

受験番号

解答紙

(5枚のうち4枚目)

44

[4] (25点)

Blank writing area with horizontal lines.

[4]の採点

Scoring box with two columns.

45

英語 英語Ⅱ
リーディング
ライティング

平成24年度入学試験問題

受験番号

受験番号

解答紙

(5枚のうち5枚目)

45

[5] (25点)

[5]の採点

問1. (10点) _____

問2. (15点) _____

採点欄