

平成16年9月期論文博士外国語試験
問題・解答用紙

(日本人) 1/2

受験番号

論

(論文博士)

Read the following sentences and answer the questions below in Japanese.

Francis Crick, 88, discoverer of DNA's secrets

Francis Crick, who in 1953 burst into a Cambridge pub and announced that he had found the secret of life, died on 28 July 2004 of colon cancer.

The secret, of course, was the double helical structure of DNA, and its discovery earned Crick the Noble Prize, which he shared in 1962 with James Watson and Maurice Wilkins. But the accomplishment was just the start of a brilliant and varied career. Over the next 25 years, Crick's contributions to molecular biology, including the discovery of DNA transcription and amino acid coding, laid the foundation for understanding the genetics of inheritance.

In 1977, Crick left Cambridge for the Salk Institute for Biological Studies in San Diego, where he turned to his other intellectual passion, the study of the human brain. His work there gave credence to a then-radical theory—that consciousness is generated by the firing of neurons.

Just as secret of heredity lay in a structure, so did he seek gold once more — consciousness, this time — in brain structure. He always sorted through problems to find those that could be formulated as crisp questions, just as now he defined what properties he thought brain structures involved in consciousness should have, and then browsed through possibilities to find answers. And he was really interested in qualia — how subjective feelings arise — but settled for a question that he thought could be answered, what neural structures and activities are required for consciousness.

A true theoretician and visionary, Crick was heralded by colleagues for his intellectual rigor and fearlessness in the face of controversial ideas. As he once said, "a man who is right every time is not likely to do very much."

1. Explain the secret of life.
2. Explain then-radical theory.
3. Explain "a man who is right every time is not likely to do very much."
4. What is your opinion on future progress of molecular biology?

平成16年9月期論文博士外国語試験

受験番号

問題・解答用紙

(日本人) $\frac{2}{2}$

論

平成16年9月期論文博士外国語試験
問題・解答用紙 (日本人)

受験番号

1/2

問 パラグラフ A) から F) よりなる文章を読み、以下の設問に答えなさい。

A) I live in northern Tochigi Prefecture, in the Nasu highlands, just a 20-minute drive from the Shikanoyu hot spring. Several times a year, I take advantage of the short distance and spend some time immersed in the spa's smelly, milk-white waters, which are laden with sulfur compounds and other minerals. The strong "rotten egg" odor and the horrific taste of the waters leave no doubt that this is a very genuine mineral spa. Despite the smell, and the cramped conditions, most people love a soak in those waters as a way to relax and unwind.

B) Much to their dismay, many people have learned recently that the hot springs they had bathed in were not, in fact, mineral springs. Rather, they were just heated tap water, despite signs to the contrary. In some cases, chemicals were even being added to the heated tap water by hotel staff to simulate a natural mineral spa. The authorities have taken action and are warning such places to properly identify their waters.

C) However, should the customers have been worried about water composition in the first place? Off course, soaking in hot water can help ease muscle and joint pain by boosting circulation and certain types of spring may improve some skin conditions. But many of the claims about the medicinal benefits of hot springs go (): For example, the Web site for the spas in Nasu mentions, among other things, that the waters can help cure chronic diarrhea, gastrointestinal disorders, tuberculosis, cerebrovascular diseases, hydrogen intoxication (whatever that is) and "female health problems."

D) Frankly, I'm quite skeptical that any of that is true. There is simply no solid scientific evidence that soaking in a mineral hot spring is any more beneficial for internal ailments like these than soaking in the bathtub at home. But it's almost impossible to make a fair study of this because hot springs tend to be located in gorgeous areas and have extensive facilities that provide a pleasurable and relaxing experience regardless of what's in the water. One is completely refreshed, both mentally and physically. It's hard not to believe that you're getting better somehow when you sit in one.

E) For centuries, people around the world have believed in the medicinal properties of hot springs. For most people, however, the water compositions of the spa that they are soaking have not been a serious issue. People may have been smartly and even scientifically taking advantage of the placebo effect, believing "unconsciously" in its actually medicinal properties.

F) Even if you're feeling great already, why not find some time this week to hit a local spa and unwind from any stress in your life? Just make sure you take any posted claims about water content or health benefits with a grain of salt!

平成16年9月期論文博士外国語試験
問題・解答用紙 (日本人)

受験番号

論

2/2

設問1. パラグラフAの a very genuine mineral spa に、対応する語句と、対立する語句を、それぞれパラグラフBの中から抜き出して記せ。

(1) 対応する語句:

(2) 対立する語句:

設問2. パラグラフCの () に挿入する語句として最も適切なのはどれか。○をつけよ。

- () much better
- () much clearer
- () much farther
- () much longer
- () much shorter
- () much worse

設問3. パラグラフDに it's almost impossible to make a fair study of this とあるが、その理由として考えられる要因を2つ挙げよ。

設問4. パラグラフEの its は何を指しているか。対応する語句をパラグラフEの中から抜き出して記せ。

設問5. 次のパラグラフを挿入するとすれば何処が適切か。適切なものに○をつけよ。

This is related to the placebo effect, a well-documented medical phenomenon. Give a sick person a sugar pill, but tell them it's a powerful medicine. More often than not, they'll tell you the next day that they feel better. Also, any physician can tell you that a patient's state of mind is also very important to treating disease. So in that regard, a daily trip to soak for an hour in a "rotenburo" surrounded by gorgeous mountains or overlooking the ocean is no doubt a prescription that would help just about any sick person feel better!

- () Aの前
- () AとBの間
- () BとCの間
- () CとDの間
- () DとEの間
- () EとFの間
- () Fの後

設問6. この文章で著者が述べようとしていることを100文字以内(「、」「。」も含める)で要約しなさい。