

2019 年度 科学技術英語特論・演習 定期試験

注意：解答用紙は2枚あります。それぞれに学籍番号と氏名を記入してください。

問題1

次の文章は"Scientists Report 'Dating' Progress between Rare Frog and Mate"と題した記事で、5つのパラグラフから構成されている。この英文に関する以下の問に、原文に則して日本語で答えなさい。(直訳でなくてよいが、原文の内容を十分に踏まえて書くこと。また、固有名詞などは原語のままでもよい。)

Scientists say two rare water frogs had a long-awaited first "date" and showed signs of mating, which could help save the species. The two are critically endangered Sehuencas water frogs, native to Bolivia. The male, named Romeo, was considered the last known living member of the species when he was collected from the wild 11 years ago. But that changed in January, when researchers announced that five additional Sehuencas water frogs had been found.

Bolivia has a large number of amphibian species. But 22 percent of them - including 10 of 14 kinds of water frogs - face serious threats of disappearing from the planet. Experts blame several causes for the decrease in numbers, including destruction of habitat, the introduction of non-native species, climate change and a deadly disease called chytridiomycosis.

Among the five newly discovered frogs were three females, one of which was identified as a possible ideal partner for Romeo. Scientists named her Juliet. After months of observation at the natural history museum, officials confirmed that Juliet was free of disease. Then, on March 1, she and Romeo were put into a tank that was new to both of them. After more observation, museum officials decided to move Juliet into Romeo's former tank. They believed the move would improve conditions for mating.

Museum officials say one of the first hopeful signs was a change in Romeo's calling behavior. He had not been heard making calling sounds since the end of 2017. But he started making the noises again shortly after the pair got moved into Romeo's tank. Although there are signs that Romeo is interested in mating, museum officials say he still has some things to learn. The museum reports that so far, he has gotten himself in the correct mating position only a few times for a few minutes.

The mating process involves the male frog holding the female in a certain way, long enough to fertilize her eggs. Generally, mating can only be successful when both frogs stay in position for weeks, or even months. But wildlife experts admit they know very little about the reproductive behavior of this species.

species – n. group of plants or animals that share similar characteristics

fertilize – v. to cause an egg to start to develop into a young animal or baby by combining it with a male cell

(Science & Technology, Voice of America Learning English 2019年4月7日の放送原稿より抜粋)

- (1) ロミオとはどのようなカエルであると述べているのか、説明しなさい。
- (2) ボリビアの両生類が絶滅の危機に直面している理由について説明しなさい。
- (3) 博物館の研究者は、ロミオとジュリエットを交尾させるためにどのようなことしたのか、説明しなさい。
- (4) ロミオがジュリエットと交尾する兆候としてどのような行為が見られるのか、説明しなさい。
- (5) このカエルの交尾の過程はどのようなものであると考えられているのか、説明しなさい。

授業科目名	担当者名	開講曜日	金曜日 2 講時	理工学研究科 電子情報学専攻	氏名	学籍番号	採点
科学技術英語特論・演習	小堀他	実施日	8月2日 2 講時	年		T M	

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問題 2

Answer the following questions in English using more than 50 but less than 100 words for each question.

(1) Describe your research activities.

(2) What kind of practical use is expected when your research is completed ?

(3) How is your research related with the important challenges in this century (global warming, food crisis, population explosion, energy depletion, digital divide, etc.) ? If you cannot answer the question, you may describe one of these challenges.

授 業 科 目 名	担 当 者 名	開 講 曜 時	金 曜 日 2 講 時	理 工 学 研 究 科 電 子 情 報 学 専 攻	氏 名	学 籍 番 号	採 点
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