２０２５年度
大学院総合情報学研究科
（博士前期課程）
入　学　試　験

Ⅰ　期

英　語

（全系列共通）

注意事項

1．「英語」問題は表紙を除き２ページある。脱落等に気がついた場合には監督者に申し出ること。

2．解答は、解答欄に直接記入すること。

3．受験番号および氏名を全てに明記すること。

4．試験終了後は、この表紙・問題用紙を提出すること。

受験番号						

氏　名	

受験番号［　　　　　　　　］　　　氏名［　　　　　　　　　　　　　　　］

１．次の文章を読んで以下の問いに答えなさい．

　　A group of 11 Japanese and U.S. scientists won the Ig Nobel physiology prize Thursday for finding that many mammals can breathe with their intestines via the anus.

　　Group leader Takanori Takebe, a professor at Tokyo Medical and Dental University, said in remarks about receiving the spoof prize that he hopes (a)the finding can someday help treat people who suffer from respiratory problems. Ig Nobel organizers say the awards are for research that "makes people laugh and then makes them think."

　　The researchers first paid attention to loaches that can breathe through their intestines in low-oxygen environments such as in mud.

　　Through experiments using mice and pigs with respiratory diseases, they found that administering an oxygen-rich liquid in the rectum helped ease symptoms, a result supporting (b)their hypothesis that intestines can exchange oxygen.

　　The team published the study in the journal Med in 2021.

　　Takebe, 37, told Kyodo News, "By nature, some people's lungs do not function properly, especially when they are newborn babies, and I hope the research will develop into an effective treatment method for those who have difficulties receiving artificial respiration."

　　The prizes are organized by the "Annals of Improbable Research" science humor magazine.

　　After four years of the annual ceremony being held online due to the COVID-19 pandemic, the event returned to the Massachusetts Institute of Technology.

　　For 18 consecutive years, a Japanese national has won an Ig Nobel prize.

（出典：The Mainichi "Japan, US scientists win Ig Nobel prize for study on anal breathing" 13 Sep. 2024.）
毎日新聞 2024 年 9 月 13 日（共同通信配信）

設問 1．下線部(a)はどのようなものか．日本語で答えなさい．（10 点）

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設問 2．下線部(b)を支持する結果が得られた実験の方法と実験結果を日本語で具体的に説明しなさい．
（20 点）

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設問 3．研究グループのリーダーは共同通信の取材に何と答えているか？日本語で説明しなさい．（20 点）

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２．次の文を読んで、下の設問に答えなさい。

The Tokyo Game Show kicked off Thursday with a (a)<u>special area</u> showcasing the latest artificial intelligence technology to help develop video games, as the industry grapples with a chronic labor shortage. A record 985 exhibitors from 44 countries and regions are participating this year, displaying their newest titles in one of the world's biggest gaming trade fairs.

One of the key highlights is the AI technology pavilion, where select firms are exhibiting various ways in which the ever-evolving technology can be applied to the development of games.

(b)<u>HechicerIA</u>, a Spain-based AI startup, is showcasing software that instantly converts texts into 3D videos, as it seeks to shorten the time required to develop games. The software can produce appropriate 3D movies by typing in such sentences as "a man approaches a woman in a cabin" and "a man walks in a jungle," sparing game developers the burden of creating such materials from scratch. "We are aiming to achieve an 80 percent reduction in the development cost of games," said Alvaro Saez, the company's CEO, adding the firm's technology is already attracting interest from major gaming companies. The software can "convert scripts into final videos or animation so fast."

(c)<u>Techno-Speech Inc.</u>, a Nagoya-based startup, is demonstrating its technology to create smooth live commentaries for sports games using AI. Its service has already been adopted by Konami Digital Entertainment Co.'s latest baseball game, it said.

Tokyo-based gaming company Drecom Co. has developed a system to automatically generate lines for game characters utilizing AI based on their envisaged personalities and characteristics input beforehand in an effort to increase efficiency in scenario making.

Launched in 1996, the Tokyo Game Show is in league with Germany's Gamescom as a top gaming trade show, particularly in Asia. E3, once a comparable event in the United States, was discontinued last year.

(Based on "Tokyo Game Show showcases latest AI tech in games amid labor shortage", KYODO NEWS, Sep 26, 2024, https://english.kyodonews.net/news/2024/09/955e5279ea19-tokyo-game-show-kicks-off-showcases-latest-ai-tech-in-industry.html) 2024 年 9 月 26 日（共同通信配信）

設問 1　下線部(a) special area では何を解決するためのどのような展示が行われたのか日本語で記述しなさい。（20 点）

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設問 2　下線部(b) HechicerIA はどのような効果が期待されるどのような技術を展示したのか日本語で記述しなさい。（15 点）

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設問 3　下線部(c) Techno-Speech Inc. は何に利用するためのどのような技術を開発したのか日本語で記述しなさい。（15 点）

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